

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

FORM 10-K

(Mark one)

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

For the fiscal year ended December 31, 2018

or

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

Commission File Number: 001-16503

Willis Towers Watson 

WILLIS TOWERS WATSON PUBLIC LIMITED COMPANY

(Exact name of registrant as specified in its charter)

Ireland

(Jurisdiction of incorporation or organization)

98-0352587

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

c/o Willis Group Limited

51 Lime Street, London EC3M 7DQ, England

(Address of principal executive offices)

(011) 44-20-3124-6000

(Registrant's telephone number, including area code)

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

Title of each Class
Ordinary Shares, nominal value \$0.000304635 per share

Name of each exchange on which registered
NASDAQ Global Select Market

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

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

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

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

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

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

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

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

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

The aggregate market value of the voting common equity held by non-affiliates of the Registrant, computed by reference to the last reported price at which the Registrant's common equity was sold on June 30, 2018 (the last day of the Registrant's most recently completed second quarter) was \$19,734,737,970.

As of February 22, 2019, there were outstanding 129,101,873 ordinary shares, nominal value \$0.000304635 per share, of the Registrant.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of Part III will be incorporated by reference in accordance with Instruction G(3) to Form 10-K no later than 120 days after the end of the Company's fiscal year.

WILLIS TOWERS WATSON
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For the year ended December 31, 2018

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Certain Definitions

The following definitions apply throughout this annual report unless the context requires otherwise:

‘We’, ‘Us’, ‘Company’, ‘Willis Towers Watson’, ‘Our’, ‘Willis Towers Watson plc’ or ‘WTW’	Willis Towers Watson Public Limited Company, a company organized under the laws of Ireland, and its subsidiaries
‘shares’	The ordinary shares of Willis Towers Watson Public Limited Company, nominal value \$0.000304635 per share
‘Legacy Willis’ or ‘Willis’	Willis Group Holdings Public Limited Company and its subsidiaries, predecessor to Willis Towers Watson, prior to the Merger
‘Legacy Towers Watson’ or ‘Towers Watson’	Towers Watson & Co. and its subsidiaries
‘Merger’	Merger of Willis Group Holdings Public Limited Company and Towers Watson & Co. pursuant to the Agreement and Plan of Merger, dated June 29, 2015, as amended on November 19, 2015, and completed on January 4, 2016
‘Gras Savoye’	GS & Cie Groupe SAS
‘Miller’	Miller Insurance Services LLP and its subsidiaries
‘U.S.’	United States
‘U.K.’	United Kingdom
‘Brexit’	The United Kingdom’s exit from the European Union on March 29, 2019
‘E.U.’ or ‘E.U. 27’	European Union or European Union 27 (the number of member countries following the United Kingdom’s exit)
‘U.S. GAAP’	United States Generally Accepted Accounting Principles
‘FASB’	Financial Accounting Standards Board
‘ASU’	Accounting Standards Update
‘ASC’	Accounting Standards Codification

Disclaimer Regarding Forward-looking Statements

We have included in this document 'forward-looking statements' within the meaning of Section 27A of the Securities Act of 1933, and Section 21E of the Securities Exchange Act of 1934, which are intended to be covered by the safe harbors created by those laws. These forward-looking statements include information about possible or assumed future results of our operations. All statements, other than statements of historical facts, that address activities, events or developments that we expect or anticipate may occur in the future, including such things as our outlook, future capital expenditures, future share repurchases, growth in revenue, the impact of changes to tax laws on our financial results, existing and evolving business strategies and planned acquisitions, competitive strengths, goals, the benefits of new initiatives, growth of our business and operations, our ability to meet our financial guidance, and plans and references to future successes, including our future financial and operating results, objectives, expectations and intentions are forward-looking statements. Also, when we use words such as 'may,' 'will,' 'would,' 'anticipate,' 'believe,' 'estimate,' 'expect,' 'intend,' 'plan,' 'probably,' or similar expressions, we are making forward-looking statements. Such statements are based upon the current beliefs and expectations of the Company's management and are subject to significant risks and uncertainties. Actual results may differ from those set forth in the forward-looking statements. All forward-looking disclosure is speculative by its nature.

A number of risks and uncertainties that could cause actual results to differ materially from the results reflected in these forward-looking statements are identified under Risk Factors in Item 1A of this Annual Report on Form 10-K. These statements are based on assumptions that may not come true and are subject to significant risks and uncertainties.

Although we believe that the assumptions underlying our forward-looking statements are reasonable, any of these assumptions, and therefore also the forward-looking statements based on these assumptions, could themselves prove to be inaccurate. In light of the significant uncertainties inherent in the forward-looking statements included in this Annual Report on Form 10-K, our inclusion of this information is not a representation or guarantee by us that our objectives and plans will be achieved.

Our forward-looking statements speak only as of the date made and we will not update these forward-looking statements unless the securities laws require us to do so. In light of these risks, uncertainties and assumptions, the forward-looking events discussed in this document may not occur, and we caution you against unduly relying on these forward-looking statements.

PART I.

ITEM 1. BUSINESS

The Company

Willis Towers Watson plc was formed upon completion of the Merger on January 4, 2016, pursuant to the Agreement and Plan of Merger dated June 29, 2015, as amended on November 19, 2015 (the 'Merger Agreement'), between Legacy Willis, Legacy Towers Watson, and Citadel Merger Sub, Inc., a wholly-owned subsidiary of Willis formed for the purpose of facilitating this transaction ('Merger Sub'). Pursuant to the Merger Agreement, Merger Sub merged with and into Towers Watson with Towers Watson continuing as the surviving corporation and a wholly-owned subsidiary of Willis.

Immediately following the Merger, Legacy Willis effected (i) a consolidation (i.e., a reverse stock split under Irish law) of Willis ordinary shares whereby every 2.6490 Legacy Willis ordinary shares were consolidated into one Willis Towers Watson ordinary share (the 'Consolidation') and (ii) an amendment to its Constitution and other organizational documents to change its name from Willis Group Holdings Public Limited Company to Willis Towers Watson Public Limited Company.

We trace our history to 1828, and are a leading global advisory, broking and solutions company that helps clients around the world turn risk into a path for growth. We provide a comprehensive offering of services and solutions to clients across four business segments: Human Capital and Benefits; Corporate Risk and Broking; Investment, Risk and Reinsurance; and Benefits Delivery and Administration.

Our clients operate on a global and local scale in a multitude of businesses and industries throughout the world and generally range in size from large, major multinational corporations to middle-market domestic and international companies. Our clients include many of the world's leading corporations, including approximately 92% of the FTSE 100, 89% of the Fortune 1000, and 86% of the Fortune Global 500 companies. We also advise the majority of the world's leading insurance companies. We work with major corporations, emerging growth companies, governmental agencies and not-for-profit institutions in a wide variety of industries, with many of our client relationships spanning decades. No one client accounted for a significant concentration of revenue in each of the years ended December 31, 2018, 2017 and 2016. We place insurance with more than 2,500 insurance carriers, none of which individually accounted for a significant concentration of the total premiums we placed on behalf of our clients in 2018, 2017 or 2016.

Available Information

The Company files annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission (the 'SEC'). The SEC maintains a website that contains annual, quarterly and current reports, proxy statements and other information that issuers (including Willis Towers Watson) file electronically with the SEC. The SEC's website is www.sec.gov.

The Company makes available, free of charge through our website, www.willistowerswatson.com, our Annual Report on Form 10-K, our quarterly reports on Form 10-Q, our proxy statement, current reports on Form 8-K and Forms 3, 4, and 5 filed on behalf of directors and executive officers, as well as any amendments to those reports filed or furnished pursuant to the Securities Exchange Act of 1934 (the 'Exchange Act') as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. Unless specifically incorporated by reference, information on our website is not a part of this Form 10-K.

The Company's Corporate Governance Guidelines, Audit Committee Charter, Risk Committee Charter, Compensation Committee Charter, and Corporate Governance & Nominating Committee Charter are available on our website, www.willistowerswatson.com, in the Investor Relations section, or upon request. Requests for copies of these documents should be directed in writing to the Company Secretary c/o Office of General Counsel, Willis Towers Watson Public Limited Company, Brookfield Place, 200 Liberty Street, New York, NY 10281.

General Information

Willis Towers Watson is a leading global advisory, broking and solutions company that helps clients around the world turn risk into a path for growth. Willis Towers Watson has more than 43,000 employees and services clients in more than 140 countries. We design and deliver solutions that manage risk, optimize benefits, cultivate talent, and expand the power of capital to protect and strengthen institutions and individuals. We believe our unique perspective allows us to see the critical intersections between talent, assets and ideas - the dynamic formula that drives business performance.

We offer our clients a broad range of services to help them to identify and control their risks, and to enhance business performance by improving their ability to attract, retain and engage a talented workforce. Our risk control services range from strategic risk consulting (including providing actuarial analysis), to a variety of due diligence services, to the provision of practical on-site risk control services (such as health and safety or property loss control consulting), as well as analytical and advisory services (such as hazard modeling and reinsurance optimization studies). We assist clients in planning how to manage incidents or crises when they occur. These services include contingency planning, security audits and product tampering plans. We help our clients enhance their business performance by delivering consulting services, technology and solutions that help them anticipate, identify and capitalize on emerging opportunities in human capital management as well as offer investment advice to help them develop disciplined and efficient strategies to meet their investment goals.

As an insurance broker, we act as an intermediary between our clients and insurance carriers by advising our clients on their risk management requirements, helping them to determine the best means of managing risk and negotiating and placing insurance with insurance carriers through our global distribution network. We operate a private Medicare exchange in the U.S. Through this exchange and those for active employees, we help our clients move to a more sustainable economic model by capping and controlling the costs associated with healthcare benefits.

We are not an insurance company, and therefore we do not underwrite insurable risks for our own account.

We derive the majority of our revenue from either commissions or fees for brokerage or consulting services. We do not determine the insurance premiums on which our commissions are generally based. Commission levels generally follow the same trend as premium levels as they are derived from a percentage of the premiums paid by the insureds. Fluctuations in these premiums charged by the insurance carriers can therefore have a direct and potentially material impact on our results of operations. Our fees for consulting services are spread across a variety of complementary businesses that generally remain steady during times of uncertainty. We have some businesses, such as our health and benefits and administration businesses, which can be counter cyclical during the early period of a significant economic change.

Our colleagues serve a diverse base of clients ranging in size from large, major multinational corporations to middle-market companies in a variety of industries, public institutions, and individual clients. Many of our client relationships span decades. We work with established corporations, emerging growth companies, governmental agencies and not-for-profit institutions in a wide variety of industries.

We believe we are one of only a few global advisory, broking and solutions companies in the world possessing the global operating presence, broad product expertise and extensive distribution network necessary to effectively meet the global needs of many of our clients.

Business Strategy

Willis Towers Watson sees that a unified approach to people and risk can be a path to growth for our clients. Our integrated teams bring together our understanding of risk strategies and market analytics. This helps clients around the world to achieve their objectives.

We operate in attractive markets - both growing and mature - with a diversified platform across geographies, industries, segments and lines of business. We aim to be the premier advisory, broking and solutions company of choice. We design and deliver solutions that manage risk, optimize benefits, cultivate talent, and expand the power of capital to protect and strengthen institutions and individuals. We also help organizations improve performance through effective people, risk and financial management by focusing on providing human capital and financial consulting services.

We believe we can achieve this by:

- Delivering a powerful client proposition with an integrated global platform. Our combined offerings provide comprehensive advice, analytics, specialty capabilities and solutions covering benefits, benefits delivery solutions, brokerage and advisory, risk and capital management, and talent and rewards;
- Leveraging our combined distribution strength and global footprint to enhance market penetration and provide a platform for further innovation; and

- Underpinning this growth through continuous operational improvement initiatives that help make us more effective and efficient and drive cost savings. We do this by:
 - continuing to modernize the way we run our business to better serve our clients, enabling the skills of our staff, and lowering our costs of doing business;
 - making the necessary changes to our processes, our IT, our real estate and our workforce locations; and
 - targeting and delivering identified, highly achievable cost savings.

We care as much about how we work as we do about the impact that we make. This means commitment to shared values, a framework that guides how we run our business and serve clients.

Through these strategies we aim to accelerate revenue, cash flow, earnings before interest, taxes, depreciation and amortization ('EBITDA'), and earnings growth, and generate compelling returns for investors, by delivering tangible growth in revenue and capitalizing on the identified cost savings.

Principal Services

We manage our business across four integrated reportable operating segments: Human Capital and Benefits; Corporate Risk and Broking; Investment, Risk and Reinsurance; and Benefits Delivery and Administration. Below are the percentages of revenue generated by each segment for each of the years ended December 31, 2018, 2017 and 2016.

	Year ended December 31,		
	2018	2017 (i)	2016 (i)
Human Capital and Benefits	38%	39%	40%
Corporate Risk and Broking	34%	34%	33%
Investment, Risk and Reinsurance	19%	18%	19%
Benefits Delivery and Administration	9%	9%	8%

(i) Beginning in 2018, we made certain changes that affect our segment results. These changes include the realignment of certain businesses within our segments, as well as changes to certain allocation methodologies to better reflect the ongoing nature of our businesses. The prior period comparatives reflected in the tables above have been retrospectively adjusted to reflect our current segment presentation. See Note 5 — Segment Information within Item 8 in this Annual Report on Form 10-K for a further discussion of these changes.

The number of employees by segment as of the year ended December 31, 2018 is approximated below:

	December 31, 2018
Human Capital and Benefits	14,100
Corporate Risk and Broking	13,600
Investment, Risk and Reinsurance	3,700
Benefits Delivery and Administration	4,000
Corporate and Other	7,900
Total Employees	43,300

Human Capital and Benefits

The Willis Towers Watson Human Capital & Benefits ('HCB') segment provides an array of advice, broking, solutions and software for employee benefit plans, the human resources ('HR') organizations and management teams of our clients.

HCB is the largest segment of the Company. Organized into four primary offerings - Retirement; Health & Benefits; Talent & Rewards; and Technology and Administration Solutions, the segment is focused on addressing our clients' people and risk needs to help them take on the challenges of operating in a global marketplace.

HCB is strengthened with teams of international consultants that provide support in each of these areas to the global headquarters of multinational clients and their foreign subsidiaries.

Retirement — The Retirement business provides actuarial support, plan design, and administrative services for traditional pension and retirement savings plans. Our colleagues help our clients assess the costs and risks of retirement plans on cash

flow, earnings and the balance sheet, the effects of changing workforce demographics on their retirement plans and retiree benefit adequacy and security. We offer clients a full range of integrated retirement consulting services to meet the needs of all types of employers, including those that continue to offer defined benefit plans and those that are reexamining their retirement benefit strategies. We bring a particular in-depth data analysis and perspective to their decision process, because we have tracked the retirement designs of the largest public companies around the world over many years.

For clients that want to outsource some or all of their pension plan management, we offer integrated solutions that combine investment consulting, pension administration, core actuarial services, and communication and change management assistance.

Our retirement consulting relationships are generally long-term in nature, and client retention rates for this business are high. A significant portion of the revenue in this business is from recurring work, with multi-year contracts that are driven by the heavily regulated nature of employee benefit plans and our clients' annual needs for these services. Revenue for the Retirement business is somewhat seasonal, as much of our work pertains to calendar-year plan administration and reporting and compliance related to the completion of pension plan valuations; thus, the first quarter of the fiscal year is typically Retirement's strongest quarter. Major revenue growth drivers in this business include changes in regulations, capital market conditions, increased global demand and increased market share.

Health and Benefits — The Health & Benefits ('H&B') business provides plan management consulting, broking and administration across the full spectrum of health and group benefit programs, including medical, dental, disability, life and other coverage. Our H&B reach extends from small/mid-market clients to large market clients, across the full geographic footprint of the Company, and to most industries. We can address our clients' insured needs in more than 140 countries.

Our consultants help clients make strategic decisions on topics such as optimizing program spend; evaluating emerging coverage options (including publicly-subsidized health insurance exchanges and private exchanges in the U.S.); and dealing with above-inflation-rate increases in healthcare costs. In addition to our consulting services, we manage a number of collective purchasing initiatives, such as pharmacy and stop-loss, that allow employers to realize greater value from third-party service providers than they can achieve on their own.

With Global Benefits Management, our suite of global services supporting medical, dental and risk (life, accident and disability) programs, we have a tailored offering for multinationals. This offering includes a flexible set of ready-made solutions, proven technology, an efficient operational structure and an integrated approach to service delivery that translates to a globally consistent, high-quality experience for our clients.

Finally, H&B supports Group Marketplace, our private health insurance exchange for active employees. This offering is integrated with our other health insurance exchange offerings covered by our Individual Marketplace, which are offered within the Benefits Delivery and Administration segment.

Talent & Rewards — Our Talent & Rewards ('T&R') business provides advice, data, software and products to address clients' total rewards and talent issues. T&R has operations across the globe, including centralized software development and analytics teams that support the efficient delivery of services to clients.

Within our Rewards line of business, we address both executive compensation and broad-based rewards. We advise our clients' management and boards of directors on all aspects of executive pay programs, including base pay, annual bonuses, long-term incentives, perquisites and other benefits. Our focus is on aligning pay plans with an organization's business strategy and driving desired performance. Our solutions incorporate market benchmarking data and software to support compensation administration.

Our Talent line of business offers services focused on designing and implementing talent management programs and processes which help companies attract and deploy talent, engage them over time, manage their performance, develop their skills, provide them with relevant career paths, communicate with them and manage organizational change initiatives. Our solutions include employee insight and listening tools, talent assessment tools and services, and HR software to help companies administer and manage their talent management programs and analyze talent trends.

Revenue for the T&R business is partly seasonal in nature, with a meaningful amount of heightened activity in the second half of the calendar year during the annual compensation, benefits and survey cycles. While T&R enjoys long-term relationships with many clients, work in several practices is often project-based and can be sensitive to economic changes. The business benefits from regulatory changes affecting our clients that require strategic advice, program changes and communication such as CEO pay ratio disclosure in the U.S. and gender-pay-gap reporting in the U.K. Additional areas of

growth for T&R include evolving views on effective individual performance measurement and management, focus on workforce productivity improvements and labor cost reductions, globalization and digitization of the workforce, merger and acquisition ('M&A') activity, technology-enabled approaches for measuring and understanding workforce engagement, and the opportunity to leverage HR software to improve the design, management and implementation of HR processes and programs.

Technology and Administration Solutions — Our Technology and Administration Solutions ('TAS') business provides benefits outsourcing services to hundreds of clients across multiple industries. Our TAS team focuses on clients outside of the U.S. where our services are supported by high quality administration teams using robust technology platforms. We have high client retention rates, and we are the leading administrator among the 200 largest pension plans in the U.K., as well as a leader in Germany.

For both our defined benefit and defined contribution administration services, we use highly-automated processes and web technology to enable benefit plan members to access and manage their records, perform self-service functions and improve their understanding of their benefits. Our technology also provides trustees and HR teams with timely management information to monitor activity and service levels and reduce administration costs.

Corporate Risk and Broking

The Willis Towers Watson Corporate Risk & Broking ('CRB') segment provides a broad range of risk advice, insurance brokerage and consulting services to clients worldwide ranging from small businesses to multinational corporations. The segment delivers integrated global solutions tailored to client needs and underpinned by data and analytics. CRB has placed more than \$20 billion of premium into the insurance markets on an annual basis.

CRB operates as an integrated global team comprising both functional and geographic leadership. In addition there are three global offerings, which aim to leverage capabilities across geographies. In these operations, we have extensive specialized experience handling diverse lines of coverage, including complex insurance programs. A key objective is to assist clients in reducing their overall cost of risk.

Property and Casualty — Property and Casualty provides property and liability insurance brokerage services across a wide range of industries including construction, real estate, healthcare and natural resources. Our construction practice provides risk management advice and brokerage services for a wide range of international construction activities. Clients of the construction practice include contractors, project owners, project managers, consultants and financiers. Our natural resources practice encompasses the oil and gas, mining, power and utilities sectors; and provides services including property damage and liability advisory and broking services for both the onshore and offshore assets of our global clients. In addition, we also arrange insurance products and services for our affinity client partners to offer to their customers, employees or members alongside, or in addition to, their principal business offerings.

Financial Lines — Financial Lines specializes in brokerage services for financial, political and credit risks. Our clients include financial institutions, professional services firms and affinity groups from around the globe that require coverage for areas ranging from business risks, such as trade credit, directors and officers and medical malpractice, to external threats, such as cyber attacks, terrorism and creditor payment protection.

Transport — Transport provides specialist expertise to the transportation, aerospace, marine and inspace industries. Our aerospace business provides insurance brokerage and risk management services to aerospace clients worldwide, including the world's leading airlines, aircraft manufacturers, air cargo handlers and other airport and general aviation companies. Our marine business provides insurance brokerage services related to hull and machinery, cargo, protection and indemnity and general marine liabilities. Our marine clients include ship owners, ship builders, logistics operations, port authorities, traders and shippers. The specialist inspace team is also prominent in providing insurance and risk management services to the space industry.

Facultative capabilities exist within each of the above offerings to serve as a broker or intermediary for insurance companies looking to arrange reinsurance solutions across various classes of risk. This allows our team of experts to deliver differentiated outcomes to their direct insureds, which in many situations are also clients of the wider Willis Towers Watson business. The facultative team also works closely with our treaty reinsurance business to structure reinsurance solutions that deliver capital and strategic benefits to insurance company clients.

Investment, Risk and Reinsurance

The Willis Towers Watson Investment, Risk and Reinsurance ('IRR') segment uses a sophisticated approach to risk which helps clients free up capital and manage investment complexity. The segment works closely with investors, reinsurers and insurers to manage the equation between risk and return. Blending advanced analytics with deep institutional knowledge, IRR identifies new opportunities to maximize performance. IRR provides investment consulting and discretionary management services and insurance specific services and solutions through reserves opinions, software, ratemaking, risk underwriting and reinsurance broking.

With approximately 76% of the revenue for this segment split between North America and the U.K., this segment includes the following businesses and offerings:

Willis Re — Willis Re provides reinsurance industry clients with an understanding of how risk affects capital and financial performance and advises on the best ways to manage related outcomes. We operate this business on a global basis and provide a complete range of transactional capabilities, including, in conjunction with Willis Towers Watson Securities, a wide variety of capital markets-based products to both insurance and reinsurance companies. Our services are underpinned by modeling, financial analysis and risk management advice.

Insurance Consulting and Technology — Insurance Consulting and Technology is a global business that provides advice and technology solutions to the insurance industry. We leverage our industry experience, strategic perspective and analytical skills to help clients measure and manage risk and capital, improve business performance and create a sustainable competitive advantage. Our services include software and technology, risk and capital management, products and pricing, financial and regulatory reporting, financial and capital modeling, M&A, outsourcing and business management.

Investments — Investments provides advice and discretionary management solutions to improve investment outcomes for asset owners using a broad and sophisticated framework for managing risk. We provide coordinated investment advice and solutions to some of the world's largest pension funds and institutional investors based on our expertise in risk assessment, asset-liability modeling, strategic asset allocation policy setting, manager selection and investment execution.

Wholesale Insurance Broking — Wholesale Insurance Broking provides specialist broking services to Retail and Wholesale brokers, Coverholders and Direct Clients in specialty lines worldwide, through Willis Towers Watson and London-based specialist broker Miller.

Underwriting and Capital Management — Underwriting and Capital Management, formerly Portfolio and Underwriting Services, with operations in London and North America, brings together our existing set of Managing General Agent underwriting activities for purposes of accelerating their future development. Within Underwriting and Capital Management, we act on behalf of our insurance carrier partners and self-insured entities in product marketing and distribution, risk underwriting and selection, claims management and other general administrative responsibilities.

Willis Towers Watson Securities — Willis Towers Watson Securities, with offices in New York, London, Hong Kong and Sydney, provides capital markets services to companies involved in the insurance and reinsurance industries, including acting as underwriter for primary issuances, operating a secondary insurance-linked securities trading desk and engaging in strategic advisory work.

Max Matthiessen — Max Matthiessen is a leading advisor and broker within insurance, benefits, human resources and savings in the Nordic region. The business specializes in providing human capital and benefits administration together with providing market leading savings and insurance solutions.

Benefits Delivery and Administration

The Willis Towers Watson Benefits Delivery and Administration ('BDA') segment provides primary medical and ancillary benefit exchange and outsourcing services to active employees and retirees across both the group and individual markets. BDA services individual populations via its 'group to individual' technology platform, which tightly integrates patented call routing technology, an efficient quoting and enrollment engine, a Customer Relationship Management system and comprehensive insurance carrier connectivity. This segment also delivers group benefit exchanges and full outsourcing solutions serving the active employees of employers across the United States. BDA uses Software as a Service ('SaaS')-based technology and related services to deliver consumer-driven healthcare and reimbursement accounts, including health savings accounts, health reimbursement arrangements, flexible spending accounts and other consumer-directed accounts.

A significant portion of the revenue in this segment is recurring in nature, driven by either the commissions from the policies we sell, or from long-term service contracts with our clients that typically range from three to five years. Revenue across this segment is generally higher in the fourth quarter as it is driven by the magnitude of annual enrollment activity.

BDA provides services across the following four integrated or related offerings to customers primarily in the U.S.:

Individual Marketplace — This business provides solutions through a proprietary technology platform, Via Benefits Retiree, formerly OneExchange Retiree, which enables our employer clients to transition their retirees to individual, defined contribution health plans that provide individuals with a tax-free allowance or contribution to spend on healthcare services at an annual cost that the employer controls, as opposed to group-based, defined benefit health plans that provide groups of individuals with healthcare benefits at uncertain annual costs.

Group Marketplace — This business is focused on delivering group benefit exchanges, serving the active employees of employers across the United States. Using our proprietary BenefitConnect or Bright Choices exchange platforms, combined with our expertise in creating high-performing benefit plan designs, we believe we are well-positioned to help our clients simplify their benefits delivery, while lowering the total costs of benefits and related administration. We have relationships with more than 400 broker partners to access and service the small to mid-size group market and offer both fully-insured and self-insured exchanges to meet the needs of our employer clients.

Benefits Outsourcing — Through our proprietary BenefitConnect technology, this business provides a broad suite of health and welfare outsourcing services as well as decision support and modeling tools for pension users within the U.S. With our disciplined approach to customer service, we offer cost-effective, high-touch service to hundreds of clients across many industries.

Benefits Accounts — This business uses its SaaS-based technology and related services to deliver consumer-driven healthcare and reimbursement accounts, including health savings accounts, health reimbursement arrangements and other consumer-directed accounts.

Competition

We face competition in all fields in which we operate, based on global capability, product breadth, innovation, quality of service and price. We compete with Accenture plc, Aon plc, Arthur J. Gallagher & Co., Brown & Brown Inc., Cognizant Technology Solutions Corporation, Marsh & McLennan Companies, Inc. and Robert Half International Inc., as well as with numerous specialty, regional and local firms. Marsh & McLennan Companies and Aon plc are two of the largest providers of global risk management services. Competition for business is intense in all of our business lines and in every insurance market, and in some business lines Marsh & McLennan Companies and Aon plc have greater market share than we do.

Competition on premium rates has also exacerbated the pressures caused by a continuing reduction in demand in some classes of business. For example, rather than purchase additional insurance through brokers, some insureds have been retaining a greater proportion of their risk portfolios than previously. Industrial and commercial companies increasingly rely upon their own subsidiary insurance companies, known as captive insurance companies, self-insurance pools, risk retention groups, mutual insurance companies and other mechanisms for funding their risks, rather than buy insurance. Additional competitive pressures arise from the entry of new market participants, such as banks, accounting firms and insurance carriers themselves, offering risk management or transfer services.

The human capital and risk management consulting industries are highly competitive. We believe there are significant barriers to entry, and we have developed competitive advantages in providing HR consulting and risk management consulting services. We face strong competition from several sources.

Our principal competitors in the pension consulting industry are Mercer HR Consulting (a Marsh & McLennan company) and Aon plc. Beyond these large players, the global HR consulting industry is highly fragmented.

Our major competitors in the insurance consulting and software industry include Milliman, Oliver Wyman (a Marsh & McLennan company), the big four accounting firms and SunGard. Aon, Buck Consultants (a Conduent Company), Connexions (a United Healthcare company), Mercer (a Marsh & McLennan company), Automatic Data Processing and Fidelity are our primary competitors in the insurance exchange industry. With the implementation of the Patient Protection and Affordable Care Act, we also compete with the public exchanges currently run by the U.S. federal and state governments.

We now compete with providers of account-based health plans and consumer-directed benefits such as WageWorks and HealthEquity.

The market for our services is subject to change as a result of economic, regulatory and legislative changes, technological developments, and increased competition from established and new competitors. Regulatory and legislative actions, along with continuously evolving technological developments, will likely have the greatest impact on the overall market for our exchange products. We believe the primary factors in selecting an HR consulting or risk management services firm include reputation; the ability to provide measurable increases to shareholder value and return on investment; global scale; quality of service; and the ability to tailor services to clients' unique needs. With regard to the marketplace for individuals and active employee exchanges, we believe that clients base their decisions on a variety of factors that include the ability of the provider to deliver measurable cost savings, a strong reputation for efficient execution, a provider's capability in delivering a broad number of configurations to serve various population segments and financing options, and an innovative service delivery model and platform. For our traditional consulting and risk management services and the rapidly evolving exchange products, we believe we compete favorably with respect to these factors.

Regulation

Our business activities are subject to legal requirements and governmental and quasi-governmental regulatory supervision in all countries in which we operate. Also, such regulations may require individual or company licensing to conduct our business activities. While these requirements may vary from location to location, they are generally designed to protect our clients by establishing minimum standards of conduct and practice, particularly regarding the provision of advice and product information, as well as financial criteria. We are also subject to data privacy regulations in many countries. Our most significant regulatory regions are described below:

United States

Our activities in connection with insurance brokerage services within the U.S. are subject to regulation and supervision by state authorities. Although the scope of regulation and form of supervision may vary from state to state, insurance laws in the United States are often complex and generally grant broad discretion to supervisory authorities in adopting regulations and supervising regulated activities. That supervision generally includes the licensing of insurance brokers and agents and the regulation of the handling and investment of client funds held in a fiduciary capacity. Our continuing ability to provide insurance brokerage in the states in which we currently operate is dependent upon our compliance with the rules and regulations promulgated by the regulatory authorities in each of these states. Additionally, some of our private exchange activities are overseen by the Centers for Medicare & Medicaid Services, which is part of the Department of Health and Human Services. Furthermore, certain of our activities are subject to regulation under the Health Insurance Portability and Accountability Act ('HIPAA'), which is enforced by the Office for Civil Rights within the Department of Health and Human Services.

Certain of our activities are governed by other regulatory bodies, such as investment and securities licensing authorities. Our activities in connection with investment services within the United States are subject to regulation and supervision at both the federal and state levels. At the federal level, certain of our operating subsidiaries are regulated by the SEC through the Investment Company Act of 1940 and the Investment Advisers' Act of 1940; and by the Department of Labor through the Employee Retirement Income Security Act, or ERISA. In connection with the SEC regulations, we are required to file certain reports, and are subject to various marketing restrictions, among other requirements. In connection with ERISA regulations, we are restricted in the actions we can take for plans for which we serve as fiduciaries, among other matters. Our U.S. investment activities are also subject to certain state regulatory schemes.

Our Willis Towers Watson Securities business operates through its wholly-owned subsidiary, Willis Securities, Inc., a U.S.-registered broker-dealer and member of FINRA/SIPC, primarily in connection with advising on alternative risk financing transactions and investment banking services.

Our activities in connection with Third Party Administrator ('TPA') services in the United States are also subject to regulation and supervision by many state authorities. Licensing requirements and supervision vary from state to state. As with insurance brokerage services, our continuing ability to provide these services in states that regulate our activities is dependent upon our compliance with the rules and regulations promulgated from time to time by the regulatory authorities in each of these states.

United Kingdom

In the U.K., our business is regulated by the Financial Conduct Authority ('FCA').

The FCA has a sole strategic objective: to ensure that the relevant markets function well. Its operational objectives are to: secure an appropriate degree of protection for consumers; protect and enhance the integrity of the U.K. financial system; and to promote effective competition in the interests of consumers. The FCA has a wide range of rule-making, investigatory and enforcement powers (including the power to censure and fine), and conducts monitoring visits to assess our compliance with regulatory requirements. In addition, the FCA has approved the Senior Managers and Certification Regime ('SMCR') that will become effective in December 2019. The SMCR is designed to drive improvements in culture and governance within financial services firms and to deter misconduct by increasing individual accountability to the FCA.

Brexit will generally cause an increase in regulations that are specific to the U.K. and will result in differences from the regulatory requirements of the E.U. Brexit may result in an increase in business conducted through subsidiaries domiciled in and regulated by members of the E.U. See Item 1A, 'Risk Factors', for a description of Brexit-related risks to the Company.

European Union

In 2005, the European Union Insurance Mediation Directive introduced rules to enable insurance and reinsurance intermediaries to operate and provide services within each member state of the European Union ('E.U.') on a basis consistent with the E.U. single market and customer protection aims. Each E.U. member state in which we operate is required to ensure that the insurance and reinsurance intermediaries resident in their country are registered with a statutory body in that country and that each intermediary meets professional requirements in relation to their competence, good repute, professional indemnity cover and financial capacity. The E.U. has issued a new Insurance Distribution Directive that expands the 2005 directive. The E.U. member states in which we operate were required to enact the new directive and adopt local country laws by October 1, 2018.

In addition, our Willis Towers Watson Securities business provides advice on securities or investments in the European Union and Australia through our U.K. wholly-owned subsidiary, Willis Towers Watson Securities Europe Limited, which is authorized and regulated by the FCA.

Willis Towers Watson is also subject to the new E.U. General Data Protection Regulation ('GDPR'), which became effective in May 2018. The GDPR is a new, comprehensive regime that significantly increases our responsibilities when handling personal data, including, without limitation, requiring us to conduct privacy impact assessments, restricting the transmission of data and requiring public disclosure of significant data breaches.

Other

Our Willis Towers Watson Securities business, through an affiliate, Willis Towers Watson Securities (Hong Kong) Limited, is licensed to conduct certain securities-related activities, and is subject to regulation by the Hong Kong Securities and Futures Commission. Certain of our entities that undertake pension scheme management are subject to MiFID (Markets in Financial Instruments Directive) and MiFIR (the Markets in Financial Instruments Regulation). In addition, revisions to MiFID ('MiFID II') took effect in January 2018. These revisions are aimed at strengthening investor protection and improving the function of financial markets. MiFID II imposes a variety of new requirements that include, among others, rules relating to product governance and independent investment advice, responsibility of management bodies, inducements, information and reporting to clients, cross-selling, remuneration of staff, and best execution of trades for clients. Further, some of our entities are also authorized and regulated by certain financial services authorities in countries such as Sweden, Ireland, the Netherlands and the U.K.

All companies carrying on similar activities in a given jurisdiction are subject to regulations which are not dissimilar to the requirements for our operations in the U.S. and U.K. We do not consider these regulatory requirements as adversely affecting our competitive position.

Across most jurisdictions we are subject to various data privacy laws and regulations that apply to health, medical, financial and other types of personal information belonging to our clients, their employees and third parties, as well as our own employees.

Across many jurisdictions we are subject to various financial crime laws and regulations through our activities, activities of associated persons, the products and services we provide and our business and client relationships. Such laws and regulations

relate to, among other areas, sanctions and export control, anti-bribery, anti-corruption, anti-money-laundering and counter-terrorist financing.

Our failure, or that of our employees, to satisfy the regulatory compliance requirements or the legal requirements governing our activities, can result in disciplinary action, fines, reputational damage and financial harm.

See Part I, Item 1A-Risk Factors for an analysis of how actions by regulatory authorities or changes in legislation and regulation, including Brexit, in the jurisdictions in which we operate may have an adverse effect on our business.

Executive Officers of the Registrant

The executive officers of the Company as of February 27, 2019 were as follows:

Nicolas Aubert (age 53) - Mr. Aubert has served as the Head of Great Britain at Willis Towers Watson since January 4, 2016, and as the CEO of Willis Limited, the Company's U.K. insurance and reinsurance broking subsidiary, since September 30, 2015. Prior to his appointment as the Head of Great Britain, Mr. Aubert served as CEO of Willis GB, the operating segment of Willis Group Holdings that included Willis' London specialty businesses and facultative business, and the retail insurance business in Great Britain since January 2015. Since September 2017, Mr. Aubert has served as the President of the Insurance Institute of London (IIL), is the immediate Past Chair of the London Market Group (LMG), remaining a member of its board, sits on the Executive Committee of the London & International Brokers Association (LIIBA) and is a member of TheCityUK's Advisory Council. Prior to joining Willis, Mr. Aubert served as the Chief Operating Officer of American International Group (AIG) in Europe, the Middle East and Africa, and formerly as the Managing Director of AIG in the U.K. After joining AIG in June 2002 to lead AIG France, Mr. Aubert served in various other senior management positions, including Managing Director of Southern Europe, where he oversaw operations in 12 countries, including Israel. Prior to AIG, Mr. Aubert worked in various leadership positions at ACE, CIGNA, GAN and started his career at GENERALI. He holds specialized Masters Degrees in Insurance Law (DESS Assurances) from Pantheon-Sorbonne University of Paris and from Institut des Assurances de Paris (Université Paris-Dauphine) and an M.B.A. from the French High Insurance Studies Center (CHEA).

Anne D. Bodnar (age 62) - Ms. Bodnar has served as the Chief Human Resources Officer at Willis Towers Watson since January 4, 2016. Previously, Ms. Bodnar served on Towers Watson's Management Committee since January 2015, and as Towers Watson's Chief Administrative Officer since January 1, 2010. Ms. Bodnar previously served as Managing Director of HR at Towers Perrin beginning in 2001. From 1995 to 2000, Ms. Bodnar led Towers Perrin's recruiting and learning and development efforts. Prior to that, she was a strategy consultant in Towers Perrin's Human Capital business. Earlier in her career, Ms. Bodnar held several operational and strategic planning roles at what is now JP Morgan Chase. Additionally, Ms. Bodnar published a chapter entitled "HR as a Strategic Partner" in Human Resources Leadership Strategies: Fifteen Ways to Enhance HR Value in Your Company. She was elected to the YWCA's Academy of Women Achievers in 1999. Ms. Bodnar graduated cum laude and Phi Beta Kappa from Smith College and has an M.B.A. from Harvard Business School.

Michael J. Burwell (age 55) - Mr. Burwell has served as Chief Financial Officer of Willis Towers Watson since October 3, 2017. Before joining Willis Towers Watson, Mr. Burwell spent over 30 years at PricewaterhouseCoopers LLP (PwC), where he served in various senior leadership roles, including, most recently, as a Senior Partner driving Transformation activities with various clients across industries since 2016. Prior to that, Mr. Burwell served as Vice Chairman, Global and US Transformation Leader from 2012 to 2016, as Vice Chairman, US Operations Leader (COO) and Chief Financial Officer from 2007 to 2012, and as Leader of the Transaction Services practice from 2005 to 2007. During his initial time at PwC, Mr. Burwell served 11 years in the assurance practice working on numerous audit clients. He has a bachelor's degree in business administration from Michigan State University and is a certified public accountant. In 2010, he was named Michigan State University's Alumnus of the year.

Matthew S. Furman (age 49) - Mr. Furman has served as General Counsel at Willis Towers Watson since January 4, 2016. Previously, Mr. Furman served as Executive Vice President and Group General Counsel at Willis Group Holdings, where he was a member of the Operating Committee since April 2015. From 2007 until March 2015, Mr. Furman was Senior Vice President, Group General Counsel-Corporate and Governance, and Corporate Secretary for The Travelers Companies, Inc. From 2000 until 2007, Mr. Furman was an attorney at Goldman, Sachs & Co. in New York, where he was Vice President and Associate General Counsel in the finance and corporate legal group. Prior to that, he was in private practice, with almost six years' experience at Simpson Thacher & Bartlett in New York. Mr. Furman also serves as a Director of the Legal Aid Society and a member of the U.S. Securities and Exchange Commission's Investor Advisory Committee, where he serves on the Executive Committee, and chairs the Market Structure Subcommittee. He holds a bachelor's degree from Brown University and a law degree from Harvard Law School.

Adam L. Garrard (age 53) - Mr. Garrard has served as Head of International at Willis Towers Watson since January 4, 2016. Previously, Mr. Garrard served as Chief Executive Officer for Willis Group Holdings in Asia since September 2012. Prior to that, Mr. Garrard served as Chief Executive Officer for Willis in Europe since January 2009, Chief Executive Officer for Willis in Australasia since May 2005 and Chief Executive Officer for Asia since January 2002. Mr. Garrard has resided in Singapore, Shanghai, Sydney and London while undertaking his Chief Executive Officer roles. After graduating from De Montfort University with a bachelor's degree in Business Administration in 1992, Mr. Garrard joined SBJ Stephenson Insurance Brokers before joining Willis in 1994.

Julie J. Gebauer (age 57) - Ms. Gebauer has served as Head of Human Capital & Benefits at Willis Towers Watson since January 4, 2016. Previously, Ms. Gebauer served as Managing Director of Towers Watson's Talent and Rewards business segment since January 1, 2010. Beginning in 2002, Ms. Gebauer served as a Managing Director of Towers Perrin and led Towers Perrin's global Workforce Effectiveness Practice and the global Towers Perrin-International Survey Research Corporation line of business. Ms. Gebauer was a member of Towers Perrin's Board of Directors from 2003 through 2006. She joined Towers Perrin in 1986 as a consultant and held several leadership positions at Towers Perrin, serving as the Managing Principal for the New York office from 1999 to 2001 and the U.S. East Region Leader for the Human Capital Group from 2002 to 2006. Ms. Gebauer is a Fellow of the Society of Actuaries. Ms. Gebauer graduated Phi Beta Kappa and with high distinction from the University of Nebraska-Lincoln with a bachelor's degree in Mathematics, and was designated a Chancellor's Scholar.

Joseph Gunn (age 48) - Mr. Gunn has served as the Head of North America at Willis Towers Watson since October 27, 2016. Previously, Mr. Gunn served as the regional director for the Northeast region of Willis Towers Watson where he led the business in both Metro New York and New England since January 4, 2016. Prior to that, Mr. Gunn served as the National Partner for the Northeast Region at Willis North America since July 2009, and before that, as the Chief Growth Officer for Willis North America and regional executive officer for the South Central region of Willis North America since August 2006. Before joining Willis in 2004, Mr. Gunn led the Marsh Client Development team for the North Texas operations and served as a senior relationship officer on several large accounts. Mr. Gunn serves as a member of the board of trustees of Big Brothers Big Sisters of New York. He holds a bachelor's degree in Political Science from Florida State University.

John J. Haley (age 69) - Mr. Haley has served as Chief Executive Officer and Director at Willis Towers Watson since January 4, 2016. Previously, Mr. Haley served as the Chief Executive Officer and Chairman of the Board of Directors of Towers Watson since January 1, 2010, and as President since October 3, 2011. Prior to that, Mr. Haley served as President and Chief Executive Officer of Watson Wyatt beginning on January 1, 1999, as Chairman of the Board of Watson Wyatt beginning in 1999 and as a director of Watson Wyatt beginning in 1992. Mr. Haley joined Watson Wyatt in 1977. Prior to becoming President and Chief Executive Officer of Watson Wyatt, he was the Global Director of the Benefits Group at Watson Wyatt. Mr. Haley is a Fellow of the Society of Actuaries, and a member of the American Academy of Actuaries and the Conference of Consulting Actuaries. He is also a co-author of Fundamentals of Private Pensions (University of Pennsylvania Press). Mr. Haley also serves on the board of MAXIMUS, Inc., a provider of health and human services program management, consulting services and system solutions, and previously served on the board of Hudson Global, Inc., an executive search, specialty staffing and related consulting services firm. He has an A.B. in Mathematics from Rutgers College and studied under a Fellowship at the Graduate School of Mathematics at Yale University.

Carl A. Hess (age 57) - Mr. Hess has served as the Head of Investment, Risk and Reinsurance since October 27, 2016. Previously, Mr. Hess served as the Co-Head of North America at Willis Towers Watson since January 4, 2016. Prior to that, Mr. Hess served as Managing Director, The Americas of Towers Watson since February 1, 2014, and before that, he served as the Managing Director of Towers Watson's Investment business since January 1, 2010. Before his service at Towers Watson, Mr. Hess worked in a variety of roles for over 20 years at Watson Wyatt, lastly as Global Practice Director of Watson Wyatt's Investment business. Mr. Hess is a Fellow of the Society of Actuaries and the Conference of Consulting Actuaries, and a Chartered Enterprise Risk Analyst. He has a bachelor's degree cum laude in Logic and Language from Yale University.

Todd Jones (age 54) - Mr. Jones has served as the Head of Corporate Risk and Broking since October 27, 2016. Previously, Mr. Jones served as the Co-Head of North America at Willis Towers Watson since January 4, 2016. Prior to that, Mr. Jones served as an executive officer and Chief Executive Officer of Willis North America since July 1, 2013. Mr. Jones joined Willis in 2003 as the North American Practice Leader for Willis' Executive Risks Practice and served as the President of Willis North America from 2010 to 2013. Mr. Jones also served as a National Partner for the Northeast Region. Prior to joining Willis, Mr. Jones held various leadership roles in the insurance brokerage industry. Before entering the brokerage industry, he was a financial analyst and corporate banker for a regional bank that is now part of Wells Fargo. He holds a

bachelor's degree in Business from Wake Forest University and an M.B.A. from the Stern School of Business at New York University.

Paul G. Morris (age 54) - Mr. Morris has served as Head of Western Europe at Willis Towers Watson since January 4, 2016. Previously, Mr. Morris served as Managing Director for Towers Watson in Europe, the Middle East and Africa since September 1, 2011. Prior to that, Mr. Morris served as Director, Consulting Services, for Towers Watson beginning January 1, 2010. Mr. Morris served as a Managing Consultant of Watson Wyatt from 2005 until the consummation of the merger of Towers Perrin and Watson Wyatt. He joined The Wyatt Company in 1988. Following the establishment of the global Watson Wyatt Worldwide alliance in 1995, Mr. Morris served as a Senior Consultant of Watson Wyatt Partners from 1995 through 1999 and became a partner in 1999. Mr. Morris is a Fellow of the Society of Actuaries, a Member of the Institute of Actuaries, and has a bachelor's degree in Applied Mathematics from Harvard College and an M.Sc. in Applied Mathematics from Harvard Graduate School of Arts and Sciences.

Anne Pullum (age 36) - Ms. Pullum has served as the Chief Administrative Officer and Head of Strategy and Innovation at Willis Towers Watson since October 27, 2016. Beginning on January 4, 2016, Ms. Pullum served as Willis Towers Watson's Head of Strategy, where she has played a key role in determining the Company's strategy and worked across all business segments and functional areas. Previously, Ms. Pullum served as the Head of Strategy for Willis Group since May 2014. Before joining Willis, Ms. Pullum worked at McKinsey & Company, where she served financial services and natural resource clients since October 2010. Prior to that, Ms. Pullum conducted economic research at Greenspan Associates in Washington, D.C. and served as an analyst in the Goldman Sachs Equities Division in London. Ms. Pullum holds an M.B.A. from INSEAD and a bachelor's degree in International Economics from Georgetown University's School of Foreign Service.

David Shalders (age 52) - Mr. Shalders has served as Operations and Technology Director at Willis Towers Watson since January 4, 2016. Previously, Mr. Shalders served as an executive officer and Group Operations & Technology Director of Willis Group Holdings since November 4, 2013. Prior to joining Willis, Mr. Shalders spent over a decade in senior operations and IT roles at the Royal Bank of Scotland Group, most recently as Global COO for Global Banking and Markets. Mr. Shalders also held roles as Head of London & Asia Operations and Head of Derivative Operations for NatWest at RBS. Prior to RBS, Mr. Shalders held various IT and Operations leadership roles at Accenture, JP Morgan and SG Warburg. He has an M.A. in Geography from Cambridge University and an M.Sc. in Computer Science from The London School of Economics.

Gene H. Wickes (age 66) - Mr. Wickes has served as the Head of Benefits Delivery and Administration at Willis Towers Watson since April 1, 2016. Prior to that, Mr. Wickes served as an Executive Sponsor of the combined Willis Towers Watson Merger integration team since January 4, 2016. Previously, he served as the Managing Director of the Benefits business segment of Towers Watson from January 1, 2010 until the closing of the Willis Towers Watson merger. Prior to that, he served as the Global Director of the Benefits Practice of Watson Wyatt beginning in 2005 and as a member of Watson Wyatt's Board of Directors from 2002 to 2007. Mr. Wickes was Watson Wyatt's Global Retirement Practice Director in 2004 and the U.S. West Division's Retirement Practice Leader from 1997 to 2004. Mr. Wickes joined Watson Wyatt in 1996 as a senior consultant and consulting actuary. Prior to joining Watson Wyatt, he spent 18 years with Towers Perrin, where he assisted organizations with welfare, retirement, and executive benefit issues. Mr. Wickes is a Fellow of the Society of Actuaries and a member of the Conference of Consulting Actuaries, and has a B.S. in Mathematics and Economics, an M.S. in Mathematics and an M.S. in Economics, all from Brigham Young University.

Board of Directors

A list of the Board of Directors of the Company and their principal occupations is provided below:

John J. Haley

Chief Executive Officer

James F. McCann

Former Non-Executive Chairman of Willis Towers Watson, Executive Chairman of 1-800-Flowers.com

Paul D. Thomas

Former CEO of Reynolds Packaging Group

Anna C. Catalano

Former Group Vice President, Marketing for BP plc

Brendan R. O'Neill

Former CEO of Imperial Chemical Industries PLC

Wilhelm Zeller

Former CEO of Hannover Re Group

Victor F. Ganz

Non-Executive Chairman of Willis Towers Watson, Former President & CEO of The Hearst Corporation

Jaymin B. Patel

Former CEO of Brightstar Corp.

Wendy E. Lane

Chairman of Lane Holdings, Inc.

Linda D. Rabbitt

Founder and Chairman of rand* construction corporation

ITEM 1A. RISK FACTORS

In addition to the factors discussed elsewhere in this Annual Report on Form 10-K, the following are some of the important factors that could cause our actual results to differ materially from those projected in any forward-looking statements. These risk factors should be carefully considered in evaluating our business. The descriptions below are not the only risks and uncertainties that we face. Additional risks and uncertainties that are presently unknown to us could also impair our business operations, financial condition or results. If any of the risks and uncertainties below or other risks were to occur, our business operations, financial condition or results of operations could be materially and adversely impacted. **With respect to the tax-related consequences of acquisition, ownership and disposal of ordinary shares, you should consult with your own tax advisors.**

Strategic and Operational Risks

Our success largely depends on our ability to achieve our global business strategy as it evolves, and our results of operations and financial condition could suffer if the Company were unable to successfully establish and execute on its strategy and generate anticipated revenue growth and cost savings and efficiencies.

Our future growth, profitability and cash flows largely depend upon our ability to successfully establish and execute our global business strategy. As discussed under Item 1, 'Business - Business Strategy', we seek to be an advisory, broking and solutions provider of choice through an integrated global platform. While we have confidence that our strategic plan reflects opportunities that are appropriate and achievable, there is a possibility that our strategy may not deliver projected long-term growth in revenue and profitability due to inadequate execution, incorrect assumptions, global or local economic conditions, competition, changes in the industries in which we operate, sub-optimal resource allocation or any of the other risks described in this 'Risk Factors' section. In addition, our strategy has evolved since the Merger and continues to evolve, and it is possible that we will be unable to successfully execute the associated strategy changes, including due to factors discussed above or elsewhere in this 'Risk Factors' section. In pursuit of our growth strategy, we may also invest significant time and resources into new product or service offerings, and there is the possibility that these offerings may fail to yield sufficient return to cover their investment. The failure to continually develop and execute optimally on our global business strategy could have a material adverse effect on our business, financial condition and results of operations.

Demand for our services could decrease for various reasons, including a general economic downturn, increased competition, or a decline in a client's or an industry's financial condition or prospects, all of which could materially adversely affect us.

We can give no assurance that the demand for our services will grow or be maintained, or that we will compete successfully with our existing competitors, new competitors or our clients' internal capabilities. Client demand for our services may change based on the clients' needs and financial conditions, among other factors.

Our results of operations are affected directly by the level of business activity of our clients, which in turn is affected by the level of economic activity in the industries and markets that they serve. For example, any changes in U.S. trade policy (including any increases in tariffs that result in a trade war), ongoing stock market volatility or an increase in interest rates could adversely affect the general economy. As a result, global financial markets may continue to experience disruptions, including increased volatility and reduced credit availability, which could substantially impact our results. While it is difficult to predict the consequences of any deterioration in global economic conditions on our business, any significant reduction or delay by our clients in purchasing our services or insurance or making payment of premiums could have a material adverse impact on our financial condition and results of operations. In addition, the potential for a significant insurer to fail, be downgraded or withdraw from writing certain lines of insurance coverages that we offer our clients could negatively impact overall capacity in the industry, which could then reduce the placement of certain lines and types of insurance and reduce our revenue and profitability. The potential for an insurer to fail or be downgraded could also result in errors and omissions claims by clients.

In addition, the markets for our principal services are highly competitive. Our competitors include other insurance brokerage, human capital and risk management consulting and actuarial firms, and the human capital and risk management divisions of diversified professional services, insurance, brokerage and accounting firms and specialty, regional and local firms.

Competition for business is intense in all of our business lines and in every insurance market, and some competitors have greater market share in certain lines of business than we do. Some of our competitors have greater financial, technical and marketing resources than us, which could enhance their ability to finance acquisitions, fund internal growth and respond more quickly to professional and technological changes. New competitors, as well as increasing and evolving consolidation or alliances among existing competitors, could create additional competition and significantly reduce our market share, resulting in a loss of business for us and a corresponding decline in revenue and profit margin. In order to respond to increased competition and pricing pressure, we may have to lower our prices, which would also have an adverse effect on our revenue and profit margin.

In addition, existing and new competitors could develop competing technologies or product or service offerings that disrupt our industries. Any new technology or product or service offering (including insurance companies selling their products directly to consumers or other insureds) that reduces or eliminates the need for intermediaries in insurance or reinsurance sales transactions could have a material adverse effect on our business and results of operations. Further, the increasing willingness of clients to either self-insure or maintain a captive insurance company, and the development of capital markets-based solutions and other alternative capital sources for traditional insurance and reinsurance needs, could also materially adversely affect us and our results of operations.

An example of a business that may be significantly impacted by changes in customer demand is our retirement consulting and actuarial business, which comprises a substantial portion of our revenue and profit. We provide clients with actuarial and consulting services relating to both defined benefit and defined contribution pension plans. Defined benefit pension plans generally require more actuarial services than defined contribution plans because defined benefit plans typically involve large asset pools, complex calculations to determine employer costs, funding requirements and sophisticated analysis to match liabilities and assets over long periods of time. If organizations shift to defined contribution plans more rapidly than we anticipate, or if we are unable to otherwise compensate for the decline in our business that results from employers moving away from defined benefit plans, our business, financial condition and results of operations could be materially adversely affected.

In addition, the demand for many of our core benefit services, including compliance-related services, is affected by government regulation and taxation of employee benefit plans. Significant changes in tax or social welfare policy or other regulations could lead some employers to discontinue their employee benefit plans, including defined benefit pension plans, thereby reducing the demand for our services. A simplification of regulations or tax policy also could reduce the need for our services.

We could be subject to claims and lawsuits arising from our work, which could materially adversely affect our reputation, business and financial condition.

We depend in large part on our relationships with clients and our reputation for high-quality services to secure future engagements. Clients that become dissatisfied with our services may terminate their business relationships with us, and clients and third parties that claim they suffered damages caused by our services may bring lawsuits against us. We are subject to various actual and potential claims, lawsuits, investigations and other proceedings relating principally to alleged errors and omissions in connection with the provision of our services or the placement of insurance and reinsurance in the ordinary course of business. We are also subject to actual and potential claims, lawsuits, investigations and proceedings outside of errors and omissions claims. See Note 14 - Commitments and Contingencies in Item 8 in this Annual Report on Form 10-K for examples of claims to which we are subject.

Because we often assist our clients with matters involving substantial amounts of money, including actuarial services, asset management and the placement of insurance coverage and the handling of related claims, errors and omissions claims against us may arise that allege our potential liability for all or part of the substantial amounts in question. The nature of our work, particularly our actuarial services, necessarily involves the use of assumptions and the preparation of estimates relating to future and contingent events, the actual outcome of which we cannot know in advance. Our actuarial and brokerage services also rely on substantial amounts of data provided by clients, the accuracy and quality of which we cannot ensure. In addition, we could make computational, software programming or data management errors in connection with the services we provide to clients.

Clients may seek to hold us responsible for alleged errors or omissions relating to any of the brokerage advice and services we provide, including when claims they submit to their insurance carriers are disputed or denied. Given that many of our clients have very high insurance policy limits to cover their risks, alleged errors and omissions claims against us arising from disputed or denied claims are often significant. Moreover, in various circumstances, our brokerage, investment and certain other types of business may not limit the maximum liability to which we may be exposed for claims involving alleged errors or omissions; and as such, we do not have limited liability for the work we provide to the associated clients.

Further, given that we frequently work with large pension funds and insurance companies as well as other large clients, relatively small percentage errors or variances can create significant financial variances and result in significant claims for unintended or unfunded liabilities. The risks from such variances or errors could be aggravated in an environment of declining pension fund asset values and insurance company capital levels. In almost all cases, our exposure to liability with respect to a particular engagement is substantially greater than the revenue opportunity that the engagement generates for us.

Clients may seek to hold us responsible for the financial consequences of variances between assumptions and estimates and actual outcomes or for errors. For example, in the case of pension plan actuarial work, a client's claims might focus on the client's alleged reliance on actuarial assumptions that it believes were unreasonable and, based on such reliance, the client made benefit commitments that it may later claim are not affordable or funding decisions that result in plan underfunding if and when actual outcomes vary from actuarial assumptions.

We also continue to create new products and services and to grow the business of providing products and services to institutional investors, financial services companies and other clients. The risk of claims from these lines of business and related products and services may be greater than from our core products or services, and such claims may be for significant amounts.

We also provide advice on both asset allocation and selection of investment managers. Increasingly, for many clients, we are responsible for making decisions on both of these matters, or we may serve in a fiduciary capacity, either of which may increase liability exposure. In addition, the Company offers affiliated investment funds, including in the U.S. and Ireland, with plans to launch additional funds over time. Given that our Investment business may recommend affiliated investment funds or affirmatively invest such clients' assets in such funds under delegated authority, this may increase our liability exposure. We may also be liable for actions of managers or other service providers to the funds. Further, for certain clients, we are responsible for some portions of cash and investment management, including rebalancing of investment portfolios and guidance to third parties on the structure of derivatives and securities transactions. Asset classes may experience poor absolute performance, and investment managers may underperform their benchmarks; in both cases the investment return shortfall can be significant. Clients experiencing this underperformance, including from our affiliated investment funds, may assert claims against us, and such claims may be for significant amounts. In addition, our failure to properly execute our role can cause monetary damage to our clients or such third parties for which we might be found liable, and such claims may be for significant amounts. Our expected expansion of this business geographically and in new offerings will subject us to additional contractual exposures and obligations with investors, asset managers and third party service providers, as well as

increased regulatory exposures. Overall, our ability to contractually limit our potential liability may be limited in certain jurisdictions or markets or in connection with claims involving breaches of fiduciary duties or other alleged errors or omissions.

The ultimate outcome of all of the above matters cannot be ascertained and liabilities in indeterminate amounts may be imposed on us. In addition, our insurance coverage may not be sufficient in type or amount to cover us against such liabilities. It is thus possible that future results of operations or cash flows for any particular quarterly or annual period could be materially adversely affected by an unfavorable resolution of these matters. In addition, these matters continue to divert management and personnel resources away from operating our business. Even if we do not experience significant monetary costs, there may be adverse publicity associated with these matters that could result in reputational harm to the industries we operate in or to us in particular that may adversely affect our business, client or employee relationships. In addition, defending against these claims can involve potentially significant costs, including legal defense costs.

As a highly-regulated company, we are subject from time to time to inquiries or investigations by governmental agencies or regulators that could have a material adverse effect on our business or results of operations.

We have also been and may continue to be subject to inquiries and investigations by federal, state or other governmental agencies regarding aspects of our clients' businesses or our own businesses, especially regulated businesses such as our insurance broker, securities broker-dealer and investment advisory services. Such inquiries or investigations may consume significant management time and result in regulatory sanctions, fines or other actions as well as significant legal fees, which could have a material adverse impact on our business, results of operations and liquidity. Also, we may face additional regulatory scrutiny as we expand our businesses geographically and in new products and services that we offer.

Examples of these inquiries or investigations are set forth in more detail in Note 14 — Commitments and Contingencies in Item 8 in this Annual Report on Form 10-K. These include the European Commission's civil investigation proceedings in respect of an alleged exchange of commercially sensitive information among competitors in aerospace insurance and reinsurance broking in the European Economic Area as well as investigation proceedings brought by other regulators.

All of these items reflect an increased focus by regulators (in the U.K., U.S. and elsewhere) on various aspects of the operations and affairs of our regulated businesses. We are unable to predict the outcome of these inquiries or investigations. Any proposed changes that result from these investigations and inquiries, or any other investigations, inquiries or regulatory developments, or any potential fines or enforcement action, could materially adversely affect our business and our results of operations.

Our growth strategy depends, in part, on our ability to make acquisitions and we face risks when we acquire or divest businesses, and could have difficulty in acquiring, integrating or managing acquired businesses, or with effecting internal reorganizations, all of which could harm our business, financial condition, results of operations or reputation.

Our growth depends in part on our ability to make acquisitions. As we complete the Merger integration period, we may consider larger acquisition opportunities than we have pursued over the past few years. We may not be successful in identifying appropriate acquisition candidates or consummating acquisitions on terms acceptable or favorable to us. We also face additional risks related to acquisitions, including that we could overpay for acquired businesses and that any acquired business could significantly underperform relative to our expectations. In addition, we may not repurchase as many of our outstanding shares as anticipated due to our acquisition activity or investment opportunities, as well as other market or business conditions. If we are unable to identify and successfully make, integrate and manage acquisitions, our business could be materially adversely affected. In addition, we face risks related to divesting businesses, including that we may not receive adequate consideration in return for the divested business, we may continue to be subject to the liabilities of the divested business after its divestiture (including with respect to work we might have performed on behalf of the divested business), and we may not be able to reduce overhead or redeploy assets or retain colleagues after the divestiture closes.

In addition, we cannot be certain that our acquisitions will be accretive to earnings or that our acquisitions or divestitures will otherwise meet our operational or strategic expectations. Acquisitions involve special risks, including the potential assumption of unanticipated liabilities and contingencies and difficulties in integrating acquired businesses, and acquired businesses may not achieve the levels of revenue, profit or productivity we anticipate or otherwise perform as we expect. In addition, if the operating performance of an acquired business deteriorates significantly, we may need to write down the value of the goodwill and other acquisition-related intangible assets recorded on our balance sheet.

We may be unable to effectively integrate an acquired business into our organization, and may not succeed in managing such acquired businesses or the larger company that results from such acquisitions. The process of integrating an acquired business

may subject us to a number of risks, including, without limitation, an inability to retain the management, key personnel and other employees of the acquired business; an inability to establish uniform standards, controls, systems, procedures and policies or to achieve anticipated savings; and exposure to legal claims for activities of the acquired business prior to acquisition.

If acquisitions are not successfully integrated, our business, financial condition and results of operations could be materially adversely affected, as well as our professional reputation. We also own an interest in a number of associates and companies where we do not exercise management control and we are therefore limited in our ability to direct or manage the business to realize the anticipated benefits that we could achieve if we had full ownership.

Data security breaches or improper disclosure of confidential company or personal data could result in material financial loss, regulatory actions, reputational harm or legal liability.

We depend on information technology networks and systems to process, transmit and store electronic information and to communicate among our locations around the world and with our alliance partners, insurance carriers/markets and clients. Additionally, one of our significant responsibilities is to maintain the security and privacy of our clients' confidential and proprietary information and the personal data of their customers and/or employees. Our information systems, and those of our third-party service providers and vendors, are vulnerable to an increasing threat of continually evolving cybersecurity risks. Computer viruses, hackers, distributed denial of service attacks, malware infections, ransomware attacks, phishing and spear-phishing campaigns and other external hazards, as well as improper or inadvertent staff behavior, could expose confidential company and personal data systems and information to security breaches.

Many of the software applications that we use in our business are licensed from, and supported, upgraded and maintained by, third-party vendors. Our third-party applications include enterprise cloud storage and cloud computing application services provided and maintained by third-party vendors. These third-party applications store confidential and proprietary data of both the Company and our clients. We have processes designed to require third-party IT outsourcing, offsite storage and other vendors to agree to maintain certain standards with respect to the storage, protection and transfer of confidential, personal and proprietary information. However, we remain at risk of a data breach due to the intentional or unintentional non-compliance by a vendor's employee or agent, the breakdown of a vendor's data protection processes, or a cyber-attack on a vendor's information systems. Further, the potential impact of a data breach of our third-party vendors' systems increases as we move more of our and our clients' data into our vendors' cloud storage, we engage in IT outsourcing or we consolidate the group of third-party vendors that provide cloud storage or other IT services for the Company.

We and our vendors regularly experience cybersecurity incidents, including successful attacks from time to time, and we expect that to continue going forward. However, to our knowledge, we have not experienced any attacks or other cybersecurity incidents that have been material to our business or financial results. Some of these incidents include those resulting from human error or malfeasance, implantation of malware and viruses, phishing and spear-phishing attacks, unauthorized access to our information technology networks and systems, and unauthorized access to data or individual account funds through fraud or other means of deceiving our colleagues, third-party service providers and vendors. We have experienced successful attacks, by various types of hacking groups, in which personal and commercially sensitive information, belonging to us or our clients, has been compromised; however, none of these attacks to our knowledge have been material. When required by law, we have notified individuals and relevant regulatory authorities (such as state attorney generals, state insurance regulators, the U.S. Department of Health and Human Services, and the U.K.'s Information Commissioner's Office) of such incidents.

Over time, the frequency, severity and sophistication of the attacks against us have increased. We maintain policies, procedures and technological safeguards (such as, where in place, multifactor authentication and encryption of data in transit and at rest) designed to protect the security and privacy of this information. However, such safeguards are time consuming and expensive to deploy broadly and are not necessarily always in place or effective, and we cannot entirely eliminate the risk of data security breaches, improper access to, takeover of or disclosure of confidential company or personally identifiable information. We may not be able to detect and assess such issues, or implement appropriate remediation, in a timely manner. Our technology may fail to adequately secure the private information we hold and protect it from theft, computer viruses, hackers or inadvertent loss.

If any person, including any of our colleagues, fails to comply with, disregards or intentionally breaches our established controls with respect to such data or otherwise mismanages or misappropriates that data, we could be subject to monetary damages, fines, regulatory enforcement or criminal prosecution. Unauthorized disclosure of sensitive or confidential client, supplier or employee data, whether through systems failure, accident, employee negligence, fraud or misappropriation, could damage our reputation and cause us to lose clients. Similarly, unauthorized access to or through our information systems or

those we develop for our clients, whether by our colleagues or third parties, could result in significant additional expenses (including expenses relating to incident response and investigation, remediation work, notification of data security breaches and costs of credit monitoring services), negative publicity, legal liability and damage to our reputation, as well as require substantial resources and effort of management, thereby diverting management's focus and resources from business operations.

The methods used to obtain unauthorized access, disable or degrade service or sabotage systems are also constantly changing and evolving; continue to become more sophisticated and complex; and may be difficult to anticipate or detect. For example, the Cyber Division of the U.S. Federal Bureau of Investigation ('FBI') has noted that cyber criminals have targeted, and may increasingly target, assets held in Health Savings Accounts and Reimbursement Accounts to fraudulently acquire the assets held in those accounts. Assets held in Health Savings Accounts are expected to grow substantially over the next few years. We have experienced incidents in which unauthorized actors compromised personal information, including through use of unlawfully obtained demographic information. These incidents have not had a material impact on our business or operations but given the Company's move toward managing more of these assets ourselves as a Non-Bank Custodian, our reputation could be harmed and our business and results of operations could be materially adversely affected if we are the target of such fraud in the future.

We have implemented and regularly review and update processes and procedures to protect against fraud or unauthorized access to or use of secured data and to prevent data loss. The ever-evolving threats mean that we and our third-party service providers and vendors must continually evaluate, adapt, enhance and otherwise improve our respective systems and processes, especially as we grow our mobile, cloud and other internet-based services. There is no guarantee that such efforts will be adequate to safeguard against all fraud, data security breaches, operational impacts or misuses of data. For example, our policies, employee training (including phishing prevention training), procedures and technical safeguards may be insufficient to prevent or detect improper access to confidential, personal or proprietary information by employees, vendors or other third parties with otherwise legitimate access to our systems. Any future significant compromise or breach of our data security or fraud, whether external or internal, or misuse of client, colleague, supplier or company data, could result in additional significant costs, lost revenue opportunities, fines, lawsuits, and damage to our reputation with our clients and in the broader market.

Our inability to comply with complex and evolving laws and regulations related to data privacy and cyber security could result in material financial loss, regulatory actions, reputational harm or legal liability.

We are subject to numerous U.S. and foreign jurisdiction laws and regulations designed to protect client, colleague, supplier and company data, such as the E.U. General Data Protection Regulation ('GDPR'), regulations from other countries that prohibit the transmission of data outside of such country's borders and various U.S. federal and state laws governing the protection of health, financial or other individually identifiable information. GDPR, which became effective in May 2018, significantly increases our responsibilities when handling personal data, including, without limitation, requiring us to conduct privacy impact assessments, restricting the transmission of data and requiring public disclosure of significant data breaches. Violations of GDPR may result in possible fines of up to 4% of global annual turnover for the preceding financial year or €20 million (whichever is higher). Laws and regulations in this area are evolving and generally becoming more stringent. For example, the New York State Department of Financial Services has issued cybersecurity regulations that outline a variety of required security measures for protection of data. Other U.S. states, including California and South Carolina, have also recently enacted cybersecurity laws requiring certain security measures of regulated entities that are broadly similar to GDPR requirements, and we expect that other states will continue to do so. Further, a U.K. exit from the E.U. will increase uncertainty regarding applicable laws and regulations pending more clarity on the terms of that exit.

All of these evolving laws and regulations, some of which may be subject to evolving interpretations or conflicts with one another, may restrict the manner in which we provide services to our clients, divert resources from other important initiatives, increase the risk of non-compliance and impose significant compliance and other costs that are likely to increase over time, and increase the risk of fines, lawsuits or other potential liability, all of which could have a material adverse effect on our business and results of operations. Our failure to adhere to or successfully implement processes in response to legal or regulatory requirements, including changing legal or regulatory requirements that may be developed or revised due to Brexit, and changing customer expectations in this area, could result in substantial legal liability and impairment to our reputation or business.

The decision by the United Kingdom to leave the European Union, any changes to such decision, and the risk that other countries may follow, could adversely affect us.

In 2018, approximately 23% of our revenue was generated in the U.K., although only about 13% of revenue was denominated in Pounds sterling as much of the insurance business is transacted in U.S. dollars. Approximately 21% of our expenses were denominated in Pounds sterling. Given the evolving status of Brexit, it remains difficult to predict with any level of certainty the impact that it will have on the economy; economic, regulatory and political stability; and market conditions in Europe, including in the U.K., or on the Pound sterling, Euro or other European currencies, but any such impacts and others we cannot currently anticipate could materially adversely affect us and our operations. Among other things, we could experience: lower growth in the region due to indecision by businesses holding off on generating new projects or due to adverse market conditions; and reduced reported revenue and earnings because foreign currencies may translate into fewer U.S. dollars due to the fact that we translate revenue denominated in non-U.S. currencies such as Pounds sterling into U.S. dollars for our financial statements. In addition, there can be no assurance that our hedging strategies will be effective.

The British government and the E.U. continue to negotiate the terms of the U.K.'s future relationship with the E.U. While many separation issues have been resolved, significant uncertainty remains. It is also possible that Brexit does not occur as planned on March 29, 2019; that the U.K. decides not to exit the E.U. at all; or that the U.K. exits the E.U., in a potentially disruptive manner, with no agreed future relationship. The Company is heavily invested in the U.K. in our businesses and activities. If Brexit negatively impacts the U.K., then it could have a material adverse impact on us. In addition, Brexit may result in greater restrictions on business between the U.K. and E.U. countries and increased regulatory complexities. There is also uncertainty as to how the U.K.'s access to the E.U. Single Market and the wider trading, legal, regulatory, tax, social and labor environments, especially in the U.K. and E.U., will be impacted, including the resulting impact on our business and that of our clients. Any such changes may adversely affect our operations and financial results. For example, any changes to the passporting or other regulations relating to doing business in various E.U. countries by relying on a regulatory permission in the U.K. (or doing business in the U.K. by relying on a regulatory permission in an E.U. country) could increase our costs of doing business, or our ability to do so. At this point, we do not expect the current passporting regime to continue. Any such change, or other change in regulations could increase our costs of doing business, or in some cases affect our ability to do business, and adversely impact our operations and financial results.

In addition, the risk of a 'hard-Brexit' remains; that is, that the U.K. will leave the E.U. without formal terms for its withdrawal as well as their future relationship. We have planned for a worst-case hard-Brexit, and remain in the process of establishing appropriate arrangements for the continued servicing of client business under that scenario. These arrangements include the transaction of certain businesses and/or the movement of certain businesses outside of the U.K. However, various significant risks remain in the context of a hard-Brexit. Those risks include the following, among others:

- the risk that our proposed business solutions, such as business transfers, will not be completed in time or could cost more than expected, or that they will not be approved by regulators in the U.K. or E.U.;
- the risk that changes to our information technology required to move businesses or operations will not be completed in time;
- the risk that we may not timely complete any required changes to client contract terms and regulatory requirements, including with respect to data protection and privacy standards;
- the risk of a loss of key talent, or an inability to hire sufficient and qualified talent;
- the risk that the efforts and resources allocated to Brexit, and associated changes to our operations, cause disruptions to our existing businesses, whether inside or outside the U.K., or both;
- the risk that the U.K. will have in place no, or a limited number of, trade agreements with the E.U., its member states and/or any non-E.U. states leading to potentially adverse trading conditions with other territories; and
- the risk that the U.K. decision to exit the E.U. is altered prior to the current implementation date, resulting in the need to quickly and materially change our plans, and the risks described above with respect to any associated changes in such plans.

There is also a risk that other countries may decide to leave the E.U. We cannot predict the impact that any additional countries leaving the E.U. will have on us, but any such impacts could materially adversely affect us.

Allegations of conflicts of interest, including in connection with accepting market derived income ('MDI'), may have a material adverse effect on our business, financial condition, results of operation or reputation.

We could suffer significant financial or reputational harm if we fail to properly identify and manage potential conflicts of interest. Conflicts of interest exist or could exist any time the Company or any of its employees has or may have an interest in a transaction or engagement that is inconsistent with our clients' interests. This could occur, for example, when the Company is providing services to multiple parties in connection with a transaction. In addition, as we provide more solutions-based services, there is greater potential for conflicts with advisory services. Managing conflicts of interest is an important issue for the Company, but can be a challenge for a large and complex company such as ours. Due to the broad scope of our businesses and our client base, we regularly address potential conflicts of interest, including, without limitation, situations where our services to a particular client or our own investments or other interests conflict, or are perceived to conflict, with the interests of another client. If these are not carefully managed, this could then lead to failure or perceived failure to protect the client's interests, with attendant regulatory and reputational risks that could materially adversely affect us and our operations. There is no guarantee that all potential conflicts of interest will be identified, and undetected conflicts may result in damage to our professional reputation and result in legal liability which may have a material adverse effect on our business. Identifying conflicts of interest may also prove particularly difficult in the near-term while we continue to bring systems and information together and further integrate Legacy Willis, Legacy Towers Watson and Gras Savoye. In addition, we may not be able to adequately address such conflicts of interest.

In addition, insurance intermediaries have traditionally been remunerated by base commissions paid by insurance carriers in respect of placements we make for clients, or by fees paid by clients. Intermediaries also obtain other revenue from insurance carriers. This revenue, when derived from carriers in their capacity as insurance markets (as opposed to as corporate clients of the intermediaries where they may be purchasing insurance or reinsurance or other non-market related services), is commonly known as market derived income or 'MDI'. MDI is another example of an area in which allegations of conflicts of interest may arise. MDI takes a variety of forms, including volume- or profit-based contingent commissions, facilities administration charges, business development agreements, and fees for providing certain data to carriers.

MDI creates various risks. Intermediaries in many markets have a duty to act in the best interests of their clients and payments from carriers can incentivize intermediaries to put carriers' or their own interests ahead of their clients. Accordingly, MDI may be subject to scrutiny by various regulators under conflict of interest, anti-trust, unfair competition, conduct and anti-bribery laws and regulations. While accepting MDI is a lawful and acceptable business practice, and while we have established systems and controls to manage these risks, we cannot predict whether our position will result in regulatory or other scrutiny and our controls may not be effective.

In addition, the Company offers affiliated investment funds, with plans to launch additional funds over time. Given that our Investment business may recommend affiliated investment funds or affirmatively invest such clients' assets in such funds under delegated authority, there may be a perceived conflict of interest. While the Company has processes, procedures and controls in place intended to mitigate potential conflicts, such perception could cause regulatory inquiries, or could impact client demand and the business' financial performance, and our controls may not be effective. In addition, underperformance by our affiliated investment funds could lead to lawsuits by clients that were invested in such funds.

Separately, the FCA Wholesale Market Study is also examining various potential conflicts of interest in the wholesale insurance brokerage industry. There can be no assurances as to the outcome of this market study, and the FCA may recommend or require significant changes in the industry, further investigation, or impose firm-specific remedies.

The failure or perceived failure to adequately address conflicts of interest could affect the willingness of clients to deal with us, or give rise to litigation or enforcement actions. Conflicts of interest may also arise in the future that could cause material harm to us.

Damage to our reputation, including due to the failure of third parties on whom we rely to perform services or public opinions of third parties with whom we associate, could adversely affect our businesses.

Maintaining a positive reputation is critical to our ability to attract and maintain relationships with clients and colleagues. Damage to our reputation could therefore cause significant harm to our business and prospects. Harm to our reputation can arise from numerous sources, including, among others, employee misconduct, litigation or regulatory action, failure to deliver

minimum standards of service and quality, compliance failures, allegations of conflicts of interest and unethical behavior. Such harm could also arise from negative public opinions or political conditions arising from our association with third parties in any number of activities or circumstances. Negative perceptions or publicity, whether or not true, may result in harm to our prospects. In addition, the failure to deliver satisfactory service and quality in one line of business could cause clients to terminate the services we provide to that client in many other lines of business. This risk has increased as the Company has become larger and more complex.

In addition, as part of providing services to clients and managing our business, we rely on a number of third-party service providers. Our ability to perform effectively depends in part on the ability of these service providers to meet their obligations, as well as on our effective oversight of their performance. The quality of our services could suffer or we could be required to incur unanticipated costs if our third-party service providers do not perform as expected or their services are disrupted. This could have a material adverse effect on our reputation as well as our business and results of operations.

The loss of key colleagues could damage or result in the loss of client relationships and could result in such colleagues competing against us.

Our success depends on our ability to attract, retain and motivate qualified personnel, including key managers and colleagues. In addition, our success largely depends upon our colleagues' abilities to generate business and provide quality services. In particular, our colleagues' business relationships with our clients are a critical element of obtaining and maintaining client engagements. Labor markets have continued to tighten globally, and we have experienced intense competition for certain types of colleagues. In the past, as a result of the Merger and otherwise, we have lost colleagues who manage substantial client relationships or possess substantial experience or expertise; if we lose additional colleagues such as those, it could result in such colleagues competing against us and could materially adversely affect our ability to secure and complete engagements, which would materially adversely affect our results of operations and prospects.

Our ability to successfully manage ongoing organizational changes could impact our business results.

We have in the past few years undergone several significant business and organizational changes, including the Merger, the Gras Savoye acquisition and multi-year operational improvement programs, among others. There are also a number of other initiatives planned or ongoing to transform our processes and gain efficiencies. In addition, our strategy has evolved since the Merger, and continues to evolve, and such evolution may result in further organizational changes. In connection with all these changes, we are managing a number of large-scale and complex projects. While we have concluded that each of these large, complex projects is necessary or desirable to the execution of the Company's business strategy, we cannot guarantee that the collective effect of all of these projects will not adversely impact our business or results of operations. Effectively managing these organizational changes is critical to retaining talent, servicing clients and our business success overall. The failure to effectively manage such risks could adversely impact our resources or business or financial results.

Our inability to successfully recover should we experience a disaster or other business continuity problem could cause material financial loss, loss of human capital, regulatory actions, reputational harm or legal liability.

Should we experience a disaster or other business continuity problem, such as an earthquake, hurricane, terrorist attack, pandemic, security breach, power loss, telecommunications failure or other natural or man-made disaster, our continued success will depend, in part, on the availability of our personnel, our office facilities, access to data, and the proper functioning of our computer, telecommunication and other related systems and operations. In such an event, we could experience near-term operational challenges with regard to particular areas of our operations.

A disaster on a significant scale or affecting certain of our key operating areas within or across regions, or our inability to successfully recover should we experience a disaster or other business continuity problem, could materially interrupt our business operations and cause material financial loss, loss of human capital, regulatory actions, reputational harm, damaged client relationships or legal liability, particularly if any of these problems occur during peak times.

Interruption to or loss of our information processing capabilities or failure to effectively maintain and upgrade our information processing hardware or systems could cause material financial loss, regulatory actions, reputational harm or legal liability.

Our business depends significantly on effective information systems. Our capacity to service our clients relies on effective storage, retrieval, processing and management of information. Our information systems also rely on the commitment of significant resources to maintain and enhance existing systems, develop and create new systems and products in order to keep

pace with continuing changes in information processing technology or evolving industry and regulatory standards and to be at the forefront of a range of technology relevant to our business.

In addition, many of the software applications, including enterprise cloud storage and cloud computing application services, that we use in our business are licensed from, and supported, upgraded and maintained by, third-party vendors. We are increasing our use of such cloud services and expect this to increase over time. These third-party applications store confidential and proprietary data of both the Company and our clients. A suspension or termination of certain of these licenses or the related support, upgrades and maintenance could cause temporary system delays or interruptions that could adversely impact our business.

If the data we rely on to run our business were found to be inaccurate or unreliable or if we fail to maintain effective and efficient systems (including through a telecommunications failure, failure to replace or update redundant or obsolete computer hardware, applications or software systems, or the loss of skilled people with the knowledge needed to operate older systems, or if we experience other disruptions), this could result in material financial loss, regulatory action, reputational harm or legal liability.

In conducting our businesses around the world, we are subject to political, economic, legal, regulatory, cultural, market, operational and other risks that are inherent in operating in many countries.

In conducting our businesses and maintaining and supporting our global operations, we are subject to political, economic, legal, regulatory, market, operational and other risks. Our businesses and operations continue to expand into new regions throughout the world, including emerging markets. The possible effects of economic and financial disruptions throughout the world could have an adverse impact on our businesses and financial results. These risks include:

- the general economic and political conditions in foreign countries;
- the imposition of controls or limitations on the conversion of foreign currencies or remittance of dividends and other payments by foreign subsidiaries;
- the imposition of sanctions by both the U.S. and foreign governments;
- the imposition of withholding and other taxes on remittances and other payments from subsidiaries;
- the imposition or increase of investment and other restrictions by foreign governments;
- fluctuations in currency exchange rates or our tax rate;
- difficulties in controlling operations and monitoring employees in geographically dispersed and culturally diverse locations; and
- the practical challenges and costs of complying, or monitoring compliance, with a wide variety of foreign laws (some of which are evolving or are not as well-developed as the laws of the U.S. or U.K. or which may conflict with U.S. or other sources of law), and regulations applicable to insurance brokers and other business operations abroad (in more than 140 countries, including many in Africa), including laws, rules and regulations relating to the conduct of business, trade sanction laws administered by the U.S. Office of Foreign Assets Control, the E.U., the U.K. and the United Nations ('U.N.'), and the requirements of the U.S. Foreign Corrupt Practices Act as well as other anti-bribery and corruption rules and requirements in all of the countries in which we operate.

Sanctions imposed by governments, or changes to such sanction regulations, could have a material adverse impact on our operations or financial results.

As described above, our businesses are subject to the risk of sanctions imposed by the U.S., the E.U. and other governments. In recent months, the scope of actual and potential sanctions that may impact our business has increased. A significant example of this relates to Russia and the recent designation by the U.S. of a number of individuals and companies as sanctioned parties, as well as other U.S. sanctions on Nicaragua and Venezuela and a number of related individuals and companies. There is potential for broader sanctions in the future from the U.S., the E.U., the U.K., and others. In addition, proposed legislation in Russia could allow counter-sanctions to be imposed that may impact our business. It is not yet clear what form any counter-sanctions in Russia might take and how they may impact our business. Further, it is not yet clear whether market dynamics in Russia may disadvantage local companies controlled by foreign holding companies. As a result,

we cannot predict the impact of changes in U.S., E.U., U.K., Russian or other sanctions, and such changes could have a material adverse impact on our operations or financial results.

Our business will be negatively affected if we are not able to anticipate and keep pace with rapid changes in government laws or regulations, or if government laws or regulations decrease the need for our services or increase our costs.

A material portion of our revenue is affected by statutory or regulatory changes. An example of a statutory or regulatory change that could materially impact us is any change to the U.S. Patient Protection and Affordable Care Act ('PPACA'), and the Healthcare and Education Reconciliation Act of 2010, ('HCERA'), which we refer to collectively as 'Healthcare Reform'. While the U.S. Congress has not passed legislation replacing or significantly amending Healthcare Reform (other than changes to the individual mandate), such legislation, or another version of Healthcare Reform, could be implemented in the future. In addition, various aspects of Healthcare Reform have been challenged in the judicial system with some success. The status of some of those challenges are in flux, but could materially change U.S. healthcare. If we are unable to adapt our services to potential new laws and regulations, or judicial modifications, with respect to Healthcare Reform or otherwise, our ability to provide effective services in these areas may be substantially impacted. In addition, more restrictive rules or interpretations of the Centers for Medicare and Medicaid Services marketing rules, or judicial decisions that restrict or otherwise change existing provisions of U.S. healthcare regulation, could have a material adverse impact on our Benefits Delivery and Administration business.

Many areas in which we provide services are the subject of government regulation, which is constantly evolving. For example, our activities in connection with insurance brokerage services are subject to regulation and supervision by national, state or other authorities. Insurance laws in the markets in which we operate are often complex and generally grant broad discretion to supervisory authorities in adopting regulations and supervising regulated activities. That supervision generally includes the licensing of insurance brokers and agents and the regulation of the handling and investment of client funds held in a fiduciary capacity. Our continuing ability to provide insurance brokerage in the markets in which we currently operate is dependent upon our compliance with the rules and regulations promulgated from time to time by the regulatory authorities in each of these locations.

Changes in government and accounting regulations in the U.S. and the U.K., two of our principal geographic markets, affecting the value, use or delivery of benefits and human capital programs may materially adversely affect the demand for, or the profitability of, various of our services. In addition, we have significant operations throughout the world, which further subject us to applicable laws and regulations of countries outside the U.S. and the U.K. Changes in legislation or regulations and actions by regulators in particular countries, including changes in administration and enforcement policies, could require operational improvements or modifications, which may result in higher costs or hinder our ability to operate our business in those countries.

Our compliance systems and controls cannot guarantee that we comply with all applicable federal and state or foreign laws and regulations, and actions by regulatory authorities or changes in applicable laws and regulations in the jurisdictions in which we operate could have an adverse effect on our business.

Our activities are subject to extensive regulation under the laws of the U.S., the U.K., the E.U. and its member states, and the other jurisdictions around the world in which we operate. In addition, we own an interest in a number of associates and companies where we do not exercise management control. Over the last few years, regulators across the world are increasingly seeking to regulate brokers who operate in their jurisdictions. The foreign and U.S. laws and regulations applicable to our operations are complex, continually evolving and may increase the costs of regulatory compliance, limit or restrict the products or services we sell or subject our business to the possibility of regulatory actions or proceedings. These laws and regulations include insurance and financial industry regulations, anti-trust and competition laws, economic and trade sanctions laws relating to countries in which certain subsidiaries do business or may do business ('Sanctioned Jurisdictions') such as Cuba, Iran, Russia, Sudan and Syria, anti-corruption laws such as the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act 2010 and similar local laws prohibiting corrupt payments to governmental officials and the Foreign Account Tax Compliance provisions of the Hiring Incentives to Restore Employment Act in the U.S., as well as laws and regulations related to data privacy and cyber security. Because of changes in regulation and company practice, our non-U.S. subsidiaries are providing more services with connections to various countries, including some Sanctioned Jurisdictions, that our U.S. subsidiaries are unable to perform.

In most jurisdictions, governmental and regulatory authorities have the ability to interpret and amend these laws and regulations and impose penalties for non-compliance, including sanctions, civil remedies, monetary fines, injunctions,

revocation of licenses or approvals, suspension of individuals, limitations on business activities or redress to clients. While we believe that we have substantially increased our focus on the geographic breadth of regulations to which we are subject, maintain good relationships with our key regulators and our current systems and controls are adequate, we cannot assure that such systems and controls will prevent any violations of any applicable laws and regulations. While we strive to remain fully-compliant with all applicable laws and regulations, we cannot guarantee that we will fully comply at all times with all laws and regulations, especially in countries with developing or evolving legal systems or with evolving or extra-territorial regulations. In particular, given the challenges of integrating operations, many of which are de-centralized, we cannot assure that our newly-acquired entities' business systems and controls have prevented or will prevent any and all violations of applicable laws or regulations.

Our business performance and growth plans could be negatively affected if we are not able to effectively apply technology and analytics to drive value for our clients through technology-based solutions or gain internal efficiencies through the effective application of technology, analytics and related tools.

Our success depends, in part, on our ability to develop and implement technology and analytic solutions that anticipate, lead or keep pace with rapid and continuing changes in technology, industry standards and client preferences. We may not be successful in anticipating or responding to these developments in a timely and cost-effective manner or in attracting personnel with the necessary skills in this area. Additionally, our ideas may not be accepted in the marketplace. The effort to gain technological expertise and develop new technologies or analytic techniques in our business requires us to incur significant cost and attract qualified technical talent who are in high demand. Our competitors are seeking to develop competing or new technologies, and their success in this space may impact our ability to differentiate our services to our clients through the use of unique technological solutions. If we cannot offer new technologies or analytic services or solutions as quickly or effectively as our competitors, or if our competitors develop more cost-effective technologies or analytic tools, it could have a material adverse effect on our ability to obtain and complete client engagements.

Our business may be harmed by any negative developments that may occur in the insurance industry or if we fail to maintain good relationships with insurance carriers.

Many of our businesses are heavily dependent on the insurance industry. Any negative developments that occur in the insurance industry may have a material adverse effect on our business and our results of operations. In addition, if we fail to maintain good relationships with insurance carriers, it may have a material adverse effect on our business and results of operations.

The private health insurance industry in the U.S. has experienced a substantial amount of consolidation over the past several years, resulting in a decrease in the number of insurance carriers. In the future, it may become necessary for us to offer insurance plans from a reduced number of insurance carriers or to derive a greater portion of our revenue from a more concentrated number of carriers as our business and the health insurance industry continue to evolve. The termination, amendment or consolidation of our relationships with our insurance carriers could harm our business, results of operations and financial condition.

Changes and developments in the health insurance system in the United States could harm our business.

In 2010, the Federal government enacted significant reforms to healthcare legislation through Healthcare Reform. Many of our lines of business depend upon the private sector of the U.S. insurance system, its role in financing health care delivery, and insurance carriers' use of, and payment of commissions to, agents, brokers and other organizations to market and sell individual and family health insurance plans. Healthcare Reform contains provisions that have changed and will continue to change the industry in which we operate in substantial ways. Any changes to the roles of the private and public sectors in the health insurance system could also substantially change the industry.

The current administration, and certain key members of Congress, have expressed a desire to replace or amend all or a portion of Healthcare Reform. In addition, various aspects of Healthcare Reform have been challenged in the judicial system with some success. Any partial or complete repeal or amendment, judicial modifications or implementation difficulties, or uncertainty regarding such events, could increase our costs of compliance, prevent or delay future adoption or revisions to our exchange platform, and adversely impact our results of operations and financial condition. In addition, certain key members of Congress have otherwise expressed a desire to establish alternatives to employer-sponsored health insurance or replace it with government-sponsored health insurance. Given the uncertainties relating to the potential repeal and replacement of Healthcare Reform or other alternative proposals related to health insurance plans, the impact is difficult to determine, but it could have material negative effects on us, including:

- increasing our competition;
- reducing or eliminating the need for health insurance agents and brokers or demand for the health insurance that we sell;
- decreasing the number of types of health insurance plans that we sell, as well as the number of insurance carriers offering such plans;
- causing insurance carriers to change the benefits and/or premiums for the plans they sell;
- causing insurance carriers to reduce the amount they pay for our services or change our relationship with them in other ways; or
- materially restricting our call center operations.

Any of these effects could materially harm our business and results of operations. For example, the manner in which the Federal government and the states implement health insurance exchanges and the process for receiving subsidies and cost-sharing credits could substantially increase our competition and member turnover and substantially reduce the number of individuals who purchase insurance through us. Various aspects of Healthcare Reform could cause insurance carriers to limit the types of health insurance plans we are able to sell and the geographies in which we are able to sell them. In addition, the U.S. Congress may seek to find spending cuts, and such cuts may include Medicare. If cuts are made to Medicare, there may be substantial changes in the types of health insurance plans we are able to sell. Changes in the law could also cause insurance carriers to exit the business of selling insurance plans in a particular jurisdiction, to eliminate certain categories of products or to attempt to move members into new plans for which we receive lower commissions. If insurance carriers decide to limit our ability to sell their plans or determine not to sell individual health insurance plans altogether, our business, results of operations and financial condition would be materially harmed.

Limited protection of our intellectual property could harm our business, and we face the risk that our services or products may infringe upon the intellectual property rights of others.

We cannot guarantee that trade secret, trademark and copyright law protections are adequate to deter misappropriation of our intellectual property (including our software, which may become an increasingly important part of our business). Existing laws of some countries in which we provide services or products may offer only limited protection of our intellectual property rights. Also, we may be unable to detect the unauthorized use of our intellectual property and take the necessary steps to enforce our rights, which may have a material adverse impact on our business, financial condition or results of operations. We cannot be sure that our services and products, or the products of others that we offer to our clients, do not infringe on the intellectual property rights of third parties, and we may have infringement claims asserted against us or our clients. These claims may harm our reputation, result in financial liability, consume financial resources to pursue or defend, and prevent us from offering some services or products.

Financial and Tax Risks

We have material pension liabilities that can fluctuate significantly and adversely affect our financial position or net income or result in other financial impacts.

We have material pension liabilities, some of which represent unfunded and underfunded pension and postretirement liabilities. Movements in the interest rate environment, investment returns, inflation or changes in other assumptions that are used to estimate our benefit obligations and other factors could have a material effect on the level of liabilities in these plans at any given time. Most pension plans have minimum funding requirements that may require material amounts of periodic additional funding and accounting requirements that may result in increased pension expense. For example, in 2018 we were required to recognize a £31 million (\$40 million) pension settlement expense related to the accelerated recognition of certain accumulated losses in one of our U.K. pension schemes following the transfer out of assets of certain plan participants. Depending on the above factors, among others, we could be required to recognize further pension expense in the future. Increased pension expense could adversely affect our earnings or cause earnings volatility. In addition, the need to make additional cash contributions may reduce our financial flexibility and increase liquidity risk by reducing the cash available to meet our other obligations, including the payment obligations under our credit facilities and other long-term debt, or other needs of our business.

Our outstanding debt could adversely affect our cash flows and financial flexibility and we may not be able to obtain financing on favorable terms or at all.

Willis Towers Watson had total consolidated debt outstanding of approximately \$4.6 billion as of December 31, 2018, and our interest expense was \$208 million for the year ended December 31, 2018.

Although management believes that our cash flows will be sufficient to service this debt, there may be circumstances in which required payments of principal and/or interest on this debt could adversely affect our cash flows and this level of indebtedness may:

- require us to dedicate a significant portion of our cash flow from operations to payments on our debt, thereby reducing the availability of cash flow to fund capital expenditures, to pursue other acquisitions or investments, to pay dividends and for general corporate purposes;
- limit our flexibility in planning for, or reacting to, changes or challenges relating to our business and industry; and
- put us at a competitive disadvantage against competitors who have less indebtedness or are in a more favorable position to access additional capital resources.

The terms of our current financings also include certain limitations. For example, the agreements relating to the debt arrangements and credit facilities contain numerous operating and financial covenants, including requirements to maintain minimum ratios of consolidated EBITDA to consolidated cash interest expense and maximum levels of consolidated funded indebtedness in relation to consolidated EBITDA, in each case subject to certain adjustments. The operating restrictions and financial covenants in our credit facilities do, and any future financing agreements may, limit our ability to finance future operations or capital needs or to engage in other business activities.

A failure to comply with the restrictions under our credit facilities and outstanding notes could result in a default under the financing obligations or could require us to obtain waivers from our lenders for failure to comply with these restrictions. The occurrence of a default that is not cured, or the inability to secure a necessary consent or waiver, could cause our obligations with respect to our debt to be accelerated and have a material adverse effect on our business, financial condition or results of operations.

The maintenance and growth of our business depends on our access to capital, which will depend in large part on cash flow generated by our business and the availability of equity and debt financing. Also, we could be at risk to rising interest rates in the future to the extent that we borrow at floating rates under our existing borrowing agreements or refinance existing debt at higher rates. There can be no assurance that our operations will generate sufficient positive cash flow to finance all of our capital needs or that we will be able to obtain equity or debt financing on favorable terms or at all, which could have a material adverse effect on us.

A downgrade to our corporate credit rating and the credit ratings of our outstanding debt may adversely affect our borrowing costs and financial flexibility and, under certain circumstances, may require us to offer to buy back some of our outstanding debt.

A downgrade in our corporate credit rating or the credit ratings of our debt would increase our borrowing costs including those under our credit facilities, and reduce our financial flexibility. In addition, certain downgrades would trigger a step-up in interest rates under the indentures for certain of our senior notes, which would increase our interest expense. If we need to raise capital in the future, any credit rating downgrade could negatively affect our financing costs or access to financing sources.

In addition, under the indenture for our 3.600% senior notes due 2024, our 4.625% senior notes due 2023, our 6.125% senior notes due 2043, our 3.500% senior notes due 2021, our 4.400% senior notes due 2026, our 2.125% senior notes due 2022, our 4.500% senior notes due 2028, and our 5.050% senior notes due 2048, if we experience a ratings decline together with a change of control event, we would be required to offer to purchase these notes from holders unless we had previously redeemed those notes. We may not have sufficient funds available or access to funding to repurchase tendered notes in that event, which could result in a default under the notes. Any future debt that we incur may contain covenants regarding repurchases in the event of a change of control triggering event.

If a U.S. person is treated as owning at least 10% of our shares, such a holder may be subject to adverse U.S. federal income tax consequences.

As a result of U.S. Tax Reform, many of our non-U.S. subsidiaries are now classified as ‘controlled foreign corporations’ (‘CFCs’) for U.S. federal income tax purposes due to the expanded application of certain ownership attribution rules within a multinational corporate group. If a U.S. person is treated as owning (directly, indirectly or constructively) at least 10% of the value or voting power of our shares, such a person may be treated as a ‘U.S. shareholder’ with respect to one or more of our CFC subsidiaries. In addition, if our shares are treated as owned more than 50% by U.S. shareholders, we would be treated as a CFC. A U.S. shareholder of a CFC may be required to annually report and include in its U.S. taxable income, as ordinary income, its pro-rata share of ‘Subpart F income,’ ‘global intangible low-taxed income,’ and investments in U.S. property by CFCs, whether or not we make any distributions to such U.S. shareholder. An individual U.S. shareholder generally would not be allowed certain tax deductions or foreign tax credits that would be allowed to a corporate U.S. shareholder with respect to a CFC. A failure by a U.S. shareholder to comply with its reporting obligations may subject the U.S. shareholder to significant monetary penalties and may extend the statute of limitations with respect to the U.S. shareholder’s U.S. federal income tax return for the year for which such reporting was due. We cannot provide any assurances that we will assist investors in determining whether we or any of our non-U.S. subsidiaries are CFCs or whether any investor is a U.S. shareholder with respect to any such CFCs. We also cannot guarantee that we will furnish to U.S. shareholders any or all of the information that may be necessary for them to comply with the aforementioned obligations. U.S. investors should consult their own advisors regarding the potential application of these rules to their investments in us.

Legislative or regulatory action in the U.S. or abroad could materially adversely affect our ability to maintain a competitive worldwide effective corporate tax rate.

We cannot give any assurance as to what our effective tax rate will be in the future, because of, among other things, uncertainty regarding the tax policies of the jurisdictions where we operate. Our actual effective tax rate may vary from expectations and that variance may be material. Additionally, the tax laws of Ireland and other jurisdictions could change in the future, and such changes could cause a material change in our effective tax rate.

On December 22, 2017, the U.S. government enacted comprehensive tax reform legislation commonly referred to as the Tax Cuts and Jobs Act (the ‘U.S. Tax Reform’), which generally became effective on January 1, 2018. The U.S. Tax Reform included numerous changes to existing tax law, including a permanent reduction in the federal corporate income tax rate from 35% to 21%. Among other things, U.S. Tax Reform could cause us to lose the benefit of certain tax credits and deductions, limit our ability to deduct interest incurred in the U.S. and potentially increase our income taxes due to the base erosion and anti-abuse tax. The U.S. Treasury Department has issued a number of proposed regulations clarifying some of the provisions of the U.S. Tax Reform, which are expected to be finalized in 2019. We will continue to evaluate the overall impact of U.S. Tax Reform and related regulations on our operations and tax position over the next twelve months. Our expectations of the impact of U.S. Tax Reform are also subject to change, possibly materially, due to, among other things, changes in interpretation or assumptions, and/or updated regulatory guidance. The U.S. Tax Reform could have a material adverse effect on our financial results.

Further legislative action may be taken by the U.S. Congress which, if ultimately enacted, could limit the availability of tax benefits or deductions that we currently claim, override tax treaties upon which we rely, or otherwise affect the taxes that the U.S. imposes on our worldwide operations. Regulations or administrative guidance from the U.S. Treasury Department that are currently proposed or newly issued in the future could have similar consequences. Such changes could materially adversely affect our effective tax rate and/or require us to take further action, at potentially significant additional expense, to seek to preserve our effective tax rate. In addition, if proposals were enacted that have the effect of limiting our ability as an Irish company to take advantage of tax treaties with the U.S., we could incur additional tax expense and/or otherwise experience business detriment.

In addition, the U.S. Congress, the Organisation for Economic Co-operation and Development ('OECD'), the World Trade Organization and other government agencies in non-U.S. jurisdictions where we and our affiliates do business have had an extended focus on issues related to the taxation of multinational corporations. One example is in the area of 'base erosion and profit shifting', where payments are made between affiliates from a jurisdiction with high tax rates to a jurisdiction with lower tax rates. In October 2015, the OECD released final reports addressing fifteen specific actions as part of a comprehensive plan to create an agreed set of international rules for fighting base erosion and profit shifting. Although the timing and methods of implementation vary, several jurisdictions have enacted legislation that is aligned with, and in some cases exceeds the scope of, the OECD's recommendations. As a result, the tax laws in the U.S., Ireland, and other countries in which we and our affiliates do business could change on a prospective or retroactive basis, and any such changes could adversely affect us and our affiliates.

Our significant non-U.S. operations, particularly our London market operations, expose us to exchange rate fluctuations and various other risks that could impact our business.

A significant portion of our operations is conducted outside of the U.S. Accordingly, we are subject to legal, economic and market risks associated with operating in foreign countries, including devaluations and fluctuations in currency exchange rates; imposition of limitations on conversion of foreign currencies into Pounds sterling or U.S. dollars or remittance of dividends and other payments by foreign subsidiaries; hyperinflation in certain foreign countries; imposition or increase of investment and other restrictions by foreign governments; and the requirement of complying with a wide variety of foreign laws. Additionally and as noted above, the unknown impacts of Brexit may expose us to additional exchange rate fluctuations in the Pound sterling.

We report our operating results and financial condition in U.S. dollars. Our U.S. operations earn revenue and incur expenses primarily in U.S. dollars. In our London market operations, however, we earn revenue in a number of different currencies, but expenses are almost entirely incurred in Pounds sterling. Outside of the U.S. and our London market operations, we predominantly generate revenue and expenses in local currencies.

Because of devaluations and fluctuations in currency exchange rates or the imposition of limitations on conversion of foreign currencies into U.S. dollars, we are subject to currency translation exposure on the profits of our operations, in addition to economic exposure. Furthermore, the mismatch between Pounds sterling revenue and expenses, together with any net Pound sterling balance sheet position we hold in our U.S. dollar denominated London market operations, creates an exchange exposure. While we do utilize hedging strategies to attempt to reduce the impact of foreign currency fluctuations, there can be no assurance that our hedging strategies will be effective.

Changes in accounting principles or in our accounting estimates and assumptions could negatively affect our financial position and results of operations.

We prepare our financial statements in accordance with U.S. GAAP. Any change to accounting principles, particularly to U.S. GAAP, could have a material adverse effect on us or our results of operations.

U.S. GAAP accounting principles require us to make estimates and assumptions that affect the reported amounts of assets and liabilities, and the disclosure of contingent assets and liabilities at the date of our financial statements. We are also required to make certain judgments that affect the reported amounts of revenue and expenses during each reporting period. We periodically evaluate our estimates and assumptions, including those relating to revenue recognition, valuation of billed and unbilled receivables from clients, discretionary compensation, incurred-but-not-reported liabilities, restructuring, pensions, goodwill and other intangible assets, contingencies, share-based payments and income taxes. We base our estimates on historical experience and various assumptions that we believe to be reasonable based on specific circumstances. Actual results could differ from these estimates, and changes in accounting standards could have an adverse impact on our future financial position and results of operations.

In addition, we have a substantial amount of goodwill on our balance sheet as a result of acquisitions we have completed, and we significantly increased goodwill as a result of the Merger. We review goodwill for impairment annually or whenever events or circumstances indicate impairment may have occurred. Application of the impairment test requires judgment, including the identification of reporting units, assignment of assets, liabilities and goodwill to reporting units and the determination of the fair value of each reporting unit. A significant deterioration in a key estimate or assumption or a less significant deterioration to a combination of assumptions, or the sale of a part of a reporting unit, could result in an impairment charge in the future, which could have a significant adverse impact on our reported earnings.

Our quarterly revenue could fluctuate, including as a result of factors outside of our control, while our expenses are relatively fixed.

Quarterly variations in our revenue and results of operations have occurred in the past and could occur as a result of a number of factors, such as: the significance of client engagements commenced and completed during a quarter; seasonality of certain types of services; the number of business days in a quarter; colleague hiring and utilization rates; our clients' ability to terminate engagements without penalty; the size and scope of assignments; and general economic conditions.

We derive significant revenue from commissions for brokerage services, but do not determine the insurance premiums on which our commissions are generally based. Commission levels generally follow the same trend as premium levels, as they are a percentage of the premiums paid by the insureds. Fluctuations in the premiums charged by the insurance carriers can therefore have a direct and potentially material impact on our results of operations. Due to the cyclical nature of the insurance market and the impact of other market conditions on insurance premiums, commission levels may vary widely between accounting periods. A period of low or declining premium rates, generally known as a 'soft' or 'softening' market, generally leads to downward pressure on commission revenue and can have a material adverse impact on our commission revenue and operating margin. We could be negatively impacted by soft market conditions across certain sectors and geographic regions. In addition, insurance carriers may seek to reduce their expenses by reducing the commission rates payable to insurance agents or brokers such as us. The reduction of these commission rates, along with general volatility and/or declines in premiums, may significantly undermine our profitability.

A sizeable portion of our total operating expenses is relatively fixed, encompassing the majority of administrative, occupancy, communications and other expenses, depreciation and amortization, and salaries and employee benefits excluding fiscal year-end incentive bonuses. Therefore, a variation in the number of client assignments, or in the timing of the initiation or the completion of client assignments, or our inability to forecast demand, can cause significant variations in quarterly operating results and could result in losses and volatility in our stock price.

It is unclear how increased regulatory oversight and changes in the method for determining the London Interbank Offered Rate ('LIBOR') may affect the value of the financial obligations to be held or issued by us that are linked to LIBOR, or how such changes could affect our results of operations or financial condition.

In the recent past, concerns have been publicized regarding the calculation of LIBOR, the London interbank offered rate, which present risks for the financial instruments that use LIBOR as a reference rate. LIBOR is the basic rate of interest used in lending between banks on the London interbank market and is widely used as a reference for setting the interest rate on loans globally.

Accordingly, uncertainty as to the nature of such changes may affect the market for or pricing of any LIBOR-linked securities, loans, derivatives and other financial obligations or extensions of credit held by or due to us or on our overall financial condition or results of operations. In addition, any further changes or reforms to the determination or supervision of LIBOR may result in a sudden or prolonged increase or decrease in reported LIBOR, which could have an impact on the market for or pricing of any LIBOR-linked securities, loans, derivatives and other financial obligations or extensions of credit held by or due to us, including our revolving credit facility, or on our overall financial condition or results of operations. For example, on July 27, 2017, the United Kingdom's Financial Conduct Authority, which regulates LIBOR, announced that it intends to stop persuading or compelling banks to submit LIBOR rates after 2021. At this time, it is not possible to predict the effect of any such changes, any establishment of alternative reference rates or any other reforms to LIBOR that may be enacted in the United Kingdom or elsewhere.

The laws of Ireland differ from the laws in effect in the United States and may afford less protection to holders of our securities.

It may not be possible to enforce court judgments obtained in the U.S. against us in Ireland, based on the civil liability provisions of the U.S. federal or state securities laws. In addition, there is some uncertainty as to whether the courts of Ireland would recognize or enforce judgments of U.S. courts obtained against us or our directors or officers based on the civil liabilities provisions of the U.S. federal or state securities laws or hear actions against us or those persons based on those laws. We have been advised that the U.S. currently does not have a treaty with Ireland providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters. Therefore, a final judgment for the payment of money rendered by any U.S. federal or state court based on civil liability, whether or not based solely on U.S. federal or state securities laws, would not automatically be enforceable in Ireland.

As an Irish company, we are governed by the Irish Companies Act, which differs in some material respects from laws generally applicable to U.S. corporations and shareholders, including, among others, differences relating to interested director and officer transactions and shareholder lawsuits. Likewise, the duties of directors and officers of an Irish company generally are owed to the company only. Shareholders of Irish companies generally do not have a personal right of action against directors or officers of the company and may exercise such rights of action on behalf of the company only in limited circumstances. Accordingly, holders of our securities may have more difficulty protecting their interests than would holders of securities of a corporation incorporated in a jurisdiction of the United States.

We are a holding company and, therefore, may not be able to receive dividends or other distributions in needed amounts from our subsidiaries.

The Company is organized as a holding company, a legal entity separate and distinct from our operating subsidiaries. As a holding company without significant operations of our own, we are dependent upon dividends and other payments from our operating subsidiaries to meet our obligations for paying principal and interest on outstanding debt obligations, for paying dividends to shareholders, for repurchasing shares of common stock and for corporate expenses. Legal and regulatory restrictions, foreign exchange controls, as well as operating requirements of our subsidiaries, may limit our ability to obtain cash from these subsidiaries. For example, Willis Limited, our U.K. brokerage subsidiary regulated by the FCA, is currently required to maintain \$140 million in unencumbered and available financial resources, of which at least \$79 million must be in cash, for regulatory purposes. In the event our operating subsidiaries are unable to pay dividends and other payments to the Company, we may not be able to service debt, pay obligations or pay dividends on, or repurchase shares of, common stock.

In the event we are unable to generate cash from our operating subsidiaries for any of the reasons discussed above, our overall liquidity could deteriorate.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

As of December 31, 2018, we operated offices in many countries throughout the world and believe that our properties are generally suitable and adequate for the purposes for which they are used. The principal properties are located in the United States and the United Kingdom. Operations of each of our segments are carried out in owned or leased offices under operating leases that typically do not exceed 10 years in length except for certain properties in key locations. We do not anticipate difficulty in meeting our space needs at lease expiration.

The fixed assets owned by us represented approximately 3% of total assets as of December 31, 2018 and consisted primarily of furniture and equipment, leasehold improvements, computer software, internally developed software and land and buildings.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we are party to various lawsuits, arbitrations or mediations that arise in the ordinary course of business. The disclosure called for by Item 3 regarding our legal proceedings is incorporated by reference herein from Note 14 — Commitments and Contingencies, within Item 8 in this Annual Report on Form 10-K.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Share Data

Our ordinary shares began trading on the NASDAQ Global Select Market under the symbol 'WLTW' on January 5, 2016. As of February 22, 2019, there were approximately 1,252 shareholders of record of our shares.

Dividends

We normally pay dividends on a quarterly basis to shareholders of record on March 31, June 30, September 30 and December 31. On February 27, 2019, the board of directors approved a regular quarterly cash dividend of \$0.65 per common share. The dividend is payable on or about April 15, 2019 to shareholders of record at the close of business on March 31, 2019.

There are no governmental laws, decrees or regulations in Ireland that restrict the remittance of dividends or other payments to non-resident holders of the Company's shares.

In circumstances where one of Ireland's many exemptions from dividend withholding tax ('DWT') does not apply, dividends paid by the Company will be subject to Irish DWT (currently 20 percent). Residents of the United States should be exempt from Irish DWT provided relevant documentation supporting the exemption has been put in place. While the U.S.-Ireland Double Tax Treaty contains provisions reducing the rate of Irish DWT in prescribed circumstances, it should generally be unnecessary for U.S. residents to rely on the provisions of this treaty due to the wide scope of exemptions from Irish DWT available under Irish domestic law. Irish income tax may also arise in respect of dividends paid by the Company. However, U.S. residents entitled to an exemption from Irish DWT generally have no Irish income tax liability on dividends.

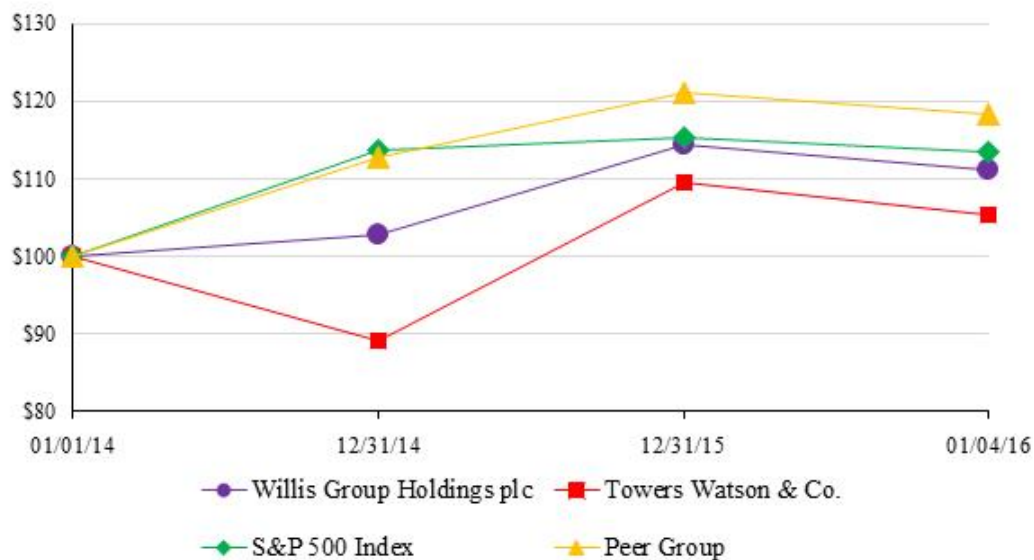
With respect to non-corporate U.S. shareholders, certain dividends from a qualified foreign corporation may be subject to reduced rates of taxation. A foreign corporation is treated as a qualified foreign corporation with respect to dividends received from that corporation on shares that are readily tradeable on an established securities market in the United States, such as our shares. Non-corporate U.S. shareholders that do not meet a minimum holding period requirement for our shares during which they are not protected from the risk of loss or that elect to treat the dividend income as investment income pursuant to section 163(d)(4) of the Code will not be eligible for the reduced rates of taxation regardless of our status as a qualified foreign corporation. In addition, the rate reduction will not apply to dividends if the recipient of a dividend is obligated to make related payments with respect to positions in substantially similar or related property. This disallowance applies even if the minimum holding period has been met. U.S. shareholders should consult their own tax advisors regarding the application of these rules given their particular circumstances.

Total Shareholder Return

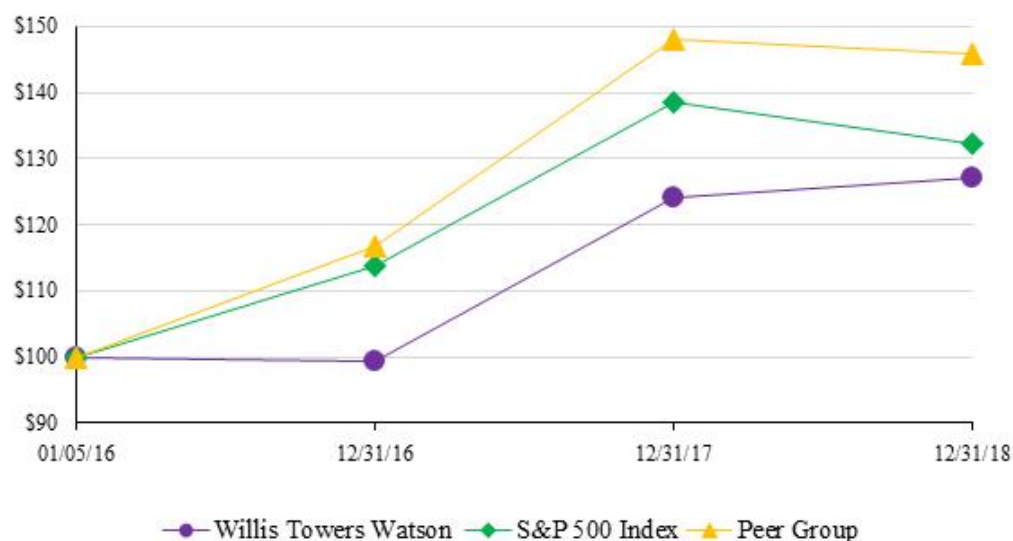
The graphs below depict cumulative total shareholder returns for (i) Legacy Willis and Legacy Towers Watson for the period from January 1, 2014 through January 4, 2016, the day prior to the commencement of trading of Willis Towers Watson's ordinary shares, and (ii) Willis Towers Watson for the period from January 5, 2016 through December 31, 2018.

Each graph also depicts the total return for the S&P 500 and for a peer group for Willis Towers Watson comprised of Accenture plc, Aon plc, Arthur J. Gallagher & Co., Brown & Brown Inc., Cognizant Technology Solutions Corporation, Marsh & McLennan Companies, Inc. and Robert Half International Inc. The comparisons chart the performance of \$100 invested on the initial dates indicated (January 1, 2014 and January 5, 2016, respectively), assuming full dividend reinvestment.

Comparison of Cumulative Total Return Among Willis Group Holdings, Towers Watson & Co., S&P 500, and a Peer Group



Comparison of Cumulative Total Return Among Willis Towers Watson, S&P 500, and a Peer Group



Unregistered Sales of Equity Securities and Use of Proceeds

During the year ended December 31, 2018, no shares were issued by the Company without registration under the Securities Act of 1933, as amended.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

The Company is authorized to repurchase shares, by way of redemption, and will consider whether to do so from time to time, based on many factors, including market conditions.

On April 20, 2016, the Willis Towers Watson board reconfirmed, reapproved and reauthorized the remaining portion of the Legacy Willis program to repurchase the Company's ordinary shares on the open market or by way of redemption or otherwise.

On November 10, 2016, the Company announced that the board of directors approved an increase to the existing share repurchase program of \$1 billion. The \$1 billion increase is in addition to the remaining authority on the Legacy Willis program discussed in the preceding paragraph.

On February 23, 2018, the board of directors approved an increase to the existing share repurchase program of \$400 million to a total authorization of \$1 billion.

There are no expiration dates for these repurchase plans or programs. The following table presents specified information about the Company's repurchases of ordinary shares in the fourth quarter and the Company's repurchase authority.

Period	Total number of shares purchased	Average price paid per share	Total number of shares purchased as part of publicly announced plans or programs	Maximum number of shares that may yet be purchased under the plans or programs
October 1, 2018 through October 31, 2018	—	\$ —	—	3,888,336
November 1, 2018 through November 30, 2018	1,260,608	\$ 158.65	1,260,608	2,627,728
December 1, 2018 through December 31, 2018	—	\$ —	—	2,627,728
	<u>1,260,608</u>	<u>\$ 158.65</u>	<u>1,260,608</u>	

The maximum number of shares that may be purchased under the existing stock repurchase plan is 2,627,728. During the year ended December 31, 2018, the Company repurchased its ordinary shares for an aggregate cost (excluding broker costs) of \$602 million. At December 31, 2018, approximately \$399 million remained on the open-ended repurchase authorities granted by the board. An estimate of the maximum number of shares under the existing authority was determined using the closing price of our ordinary shares on December 31, 2018 of \$151.86.

ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The selected consolidated financial data presented below should be read in conjunction with the audited consolidated financial statements of the Company and the related notes and Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations within this Annual Report on Form 10-K. In 2018, we adopted ASC 606, *Revenue From Contracts With Customers* (‘ASC 606’), which had a material impact on the amount, timing and classification of certain revenue and cost data included in our consolidated financial statements. Since the Company adopted the guidance using the modified retrospective method, the 2018 financial information is presented on the basis of the ASC 606 adoption, however the 2017 and prior comparative financial data has not been restated, in accordance with the new standard.

The selected historical consolidated financial data presented below for the years ended December 31, 2018, 2017 and 2016 and as of December 31, 2018 and 2017 has been derived from the audited consolidated financial statements of Willis Towers Watson, which have been prepared in accordance with U.S. GAAP and included elsewhere in this Annual Report. Financial data set forth below as of and for the years ended December 31, 2015 and 2014 has been derived from audited consolidated financial statements of Legacy Willis, which are not included in this Annual Report, and are presented with adjustment for the reverse stock split on January 4, 2016. The Merger affects the comparability of this data for the years ended December 31, 2015 and prior.

	Years ended December 31,				
	2018	2017	2016	2015	2014
	(in millions of U.S. dollars, except per share data)				
Statement of Comprehensive Income Data					
Revenue	\$ 8,513	\$ 8,202	\$ 7,887	\$ 3,829	\$ 3,802
Income from operations (i)	809	516	348	313	586
Income from operations before income taxes (ii)	851	492	342	354	536
Net income	715	592	438	384	373
Net income attributable to Willis Towers Watson	\$ 695	\$ 568	\$ 420	\$ 373	\$ 362
Earnings per share — basic	\$ 5.29	\$ 4.21	\$ 3.07	\$ 5.49	\$ 5.40
Earnings per share — diluted	\$ 5.27	\$ 4.18	\$ 3.04	\$ 5.41	\$ 5.32
Average number of shares outstanding					
— basic	131	135	137	68	67
— diluted	132	136	138	69	68
Balance Sheet Data (end of year)					
Goodwill	\$ 10,465	\$ 10,519	\$ 10,413	\$ 3,737	\$ 2,937
Other intangible assets, net	3,318	3,882	4,368	1,115	450
Total assets (iii)	32,385	32,458	30,253	18,839	15,421
Total equity	9,971	10,249	10,183	2,360	2,007
Long-term debt	4,389	4,450	3,357	2,278	2,130
Short-term debt and current portion of long-term debt	186	85	508	988	167
Additional paid-in capital	10,615	10,538	10,596	1,672	1,524
Total Willis Towers Watson shareholders’ equity	9,852	10,126	10,065	2,229	1,985
Other Financial Data					
Capital expenditures (excluding capitalized software and capital leases)	\$ 268	\$ 300	\$ 218	\$ 146	\$ 110
Cash dividends declared per share	\$ 2.40	\$ 2.12	\$ 1.92	\$ 3.28	\$ 3.18

- (i) In January 2018, the Company adopted ASU 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*, which resulted in the Company reclassifying certain pension costs from Salaries and benefits to Other income, net within its consolidated statements of comprehensive income. This reclassification resulted in a change to the Company’s Income from operations for 2017 and prior. See Note 2 — Basis of Presentation, Significant Accounting Policies and Recent Accounting Pronouncements within Item 8 of this Annual Report on Form 10-K for further details.
- (ii) Beginning in 2018, the Company reclassified its Interest in earnings of associates from its own line item to Other income, net within its consolidated statements of comprehensive income. The pre-tax impact of this reclassification resulted in an immaterial change to the Company’s Income from operations before income taxes for 2017 and prior.
- (iii) We collect premiums from insureds and, after deducting our commissions, remit the premiums to the respective insurers; the Company also collects claims or refunds from insurers which it then remits to insureds. Uncollected premiums from insureds and uncollected claims or refunds from insurers (‘fiduciary receivables’) are recorded as fiduciary assets on the Company’s consolidated balance sheet. Unremitted insurance premiums, claims or refunds (‘fiduciary funds’) are recorded within fiduciary liabilities.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This discussion includes forward-looking statements. See 'Disclaimer Regarding Forward-looking Statements' for certain cautionary information regarding forward-looking statements and 'Risk Factors' in Item 1A for a list of factors that could cause actual results to differ materially from those predicted in those statements.

This discussion includes references to non-GAAP financial measures as defined in the rules of the Securities and Exchange Commission ('SEC'). We present such non-GAAP financial measures, specifically, adjusted, constant currency and organic non-GAAP financial measures, as we believe such information is of interest to the investment community because it provides additional meaningful methods of evaluating certain aspects of the Company's operating performance from period to period on a basis that may not be otherwise apparent under U.S. GAAP, and these provide a measure against which our businesses may be assessed in the future.

Our methods of calculating these measures may differ from those used by other companies and therefore comparability may be limited. These financial measures should be viewed in addition to, not in lieu of, the consolidated financial statements for the year ended December 31, 2018.

See 'Non-GAAP Financial Measures' below for further discussion of our adjusted, constant currency and organic non-GAAP financial measures.

Executive Overview

Business Overview

Willis Towers Watson is a global advisory, broking and solutions company that helps clients around the world turn risk into a path for growth. With roots dating to 1828, Willis Towers Watson has more than 43,000 employees and services clients in more than 140 countries. We design and deliver solutions that manage risk, optimize benefits, cultivate talent, and expand the power of capital to protect and strengthen institutions and individuals. We believe our unique perspective allows us to see the critical intersections between talent, assets and ideas - the dynamic formula that drives business performance.

We offer clients a broad range of services to help them to identify and control their risks, and to enhance business performance by improving their ability to attract, retain and engage a talented workforce. Our risk control services range from strategic risk consulting (including providing actuarial analysis), to a variety of due diligence services, to the provision of practical on-site risk control services (such as health and safety or property loss control consulting), as well as analytical and advisory services (such as hazard modeling and reinsurance optimization studies). We assist clients in planning how to manage incidents or crises when they occur. These services include contingency planning, security audits and product tampering plans. We help our clients enhance their business performance by delivering consulting services, technology and solutions that help organizations anticipate, identify and capitalize on emerging opportunities in human capital management as well as investment advice to help our clients develop disciplined and efficient strategies to meet their investment goals.

As an insurance broker, we act as an intermediary between our clients and insurance carriers by advising our clients on their risk management requirements, helping them to determine the best means of managing risk and negotiating and placing insurance with insurance carriers through our global distribution network. We operate a private Medicare exchange in the U.S. Through this exchange and those for active employees, we help our clients move to a more sustainable economic model by capping and controlling the costs associated with healthcare benefits.

We are not an insurance company, and therefore we do not underwrite insurable risks for our own account.

We derive the majority of our revenue from either commissions or fees for broking or consulting services. No single client represented a significant concentration of our consolidated revenue for any of the periods presented.

Our shares are traded on the NASDAQ Global Select Market.

Market Conditions

Due to the cyclical nature of the insurance market and the impact of other market conditions on insurance premiums, commission revenue may vary widely between accounting periods. A period of low or declining premium rates, generally known as a 'soft' or 'softening' market, generally leads to downward pressure on commission revenue and can have a material adverse impact on our revenue and operating margin. A 'hard' or 'firming' market, during which premium rates rise, generally has a favorable impact on our revenue and operating margin. Rates, however, vary by geography, industry and client segment. As a result, and due to the global and diverse nature of our business, we view rates in the aggregate.

Market conditions in the broking industry in which we operate are generally defined by factors such as the strength of the economies in the various geographic regions in which we serve around the world, insurance rate movements, and insurance and reinsurance buying patterns of our clients.

Management has considered the U.K. referendum vote on June 23, 2016 to depart from the E.U., the triggering of Article 50 of the Treaty of Lisbon (providing the right to and procedures for a member to leave the E.U.) on March 29, 2017, the early general election held on June 8, 2017, and the uncertainties about the near-term and longer-term effects of Brexit on the Company. The terms of Brexit, and its impact, remain uncertain, and the Company is currently in the process of establishing appropriate arrangements for the continued servicing of client business. For a further discussion of the risks of Brexit to the Company, see Part I, Item 1A Risk Factors within this Annual Report on Form 10-K.

Typically, our business benefits from regulatory change, political risk or economic uncertainty. Insurance broking generally tracks the economy, but demand for both insurance broking and consulting services usually remains steady during times of uncertainty. We have some businesses, such as our health and benefits and administration businesses, which can be counter cyclical during the early period of a significant economic change.

Although approximately 23% of our revenue is generated in the U.K. on an annual basis, only about 13% of revenue is denominated in Pounds sterling as much of the insurance business is transacted in U.S. dollars. Approximately 21% of our expenses is denominated in Pounds sterling, thus we generally benefit from a weakening Pound sterling in our income from operations. However, we have a Company hedging strategy for this aspect of our business, which is designed to mitigate significant fluctuations in currency.

The markets for our consulting, technology and solutions, and marketplace services are subject to changes as a result of economic, regulatory and legislative changes, technological developments, and increased competition from established and new competitors. We believe that the primary factors in selecting a human resources or risk management consulting firm include reputation, the ability to provide measurable increases to shareholder value and return on investment, global scale, quality of service and the ability to tailor services to clients' unique needs. With regard to the market for exchanges, we believe that clients base their decisions on a variety of factors that include the ability of the provider to deliver measurable cost savings for clients, a strong reputation for efficient execution and an innovative service delivery model and platform. Part of the employer-sponsored insurance market has matured and become more fragmented while other segments remain in the entry phase. As these market segments continue to evolve, we may experience growth in intervals, with periods of accelerated expansion balanced by periods of modest growth. In recent years, growth in the market for exchanges has slowed, and we expect this trend may continue during 2019.

See Part I, Item 1A. Risk Factors in this Annual Report on Form 10-K for discussions of risks that may affect our ability to compete.

Financial Statement Overview

The tables below set forth our summarized consolidated statements of comprehensive income and data as a percentage of revenue for the periods indicated. In accordance with the modified retrospective adoption requirements of ASC 606 (see Note 4 — Revenue within Item 8 of this Annual Report on Form 10-K), we have also provided our results for the year ended December 31, 2018 without the adoption of ASC 606 to show comparability to the years ended December 31, 2017 and 2016.

Consolidated Statements of Comprehensive Income (\$ in millions, except per share data)

	Years ended December 31,							
	2018		2017		2016			
	As reported	Without adoption of ASC 606	As reported	As reported	As reported	As reported	As reported	As reported
Revenue	\$ 8,513	100%	\$ 8,613	100%	\$ 8,202	100%	\$ 7,887	100%
Costs of providing services								
Salaries and benefits	5,123	60%	5,098	59%	4,967	61%	4,849	61%
Other operating expenses	1,637	19%	1,637	19%	1,534	19%	1,551	20%
Depreciation	208	2%	235	3%	203	2%	178	2%
Amortization	534	6%	534	6%	581	7%	591	7%
Restructuring costs	—	—%	—	—%	132	2%	193	2%
Transaction and integration expenses	202	2%	202	2%	269	3%	177	2%
Total costs of providing services	7,704		7,706		7,686		7,539	
Income from operations	809	10%	907	11%	516	6%	348	4%
Interest expense	(208)	(2)%	(208)	(2)%	(188)	(2)%	(184)	(2)%
Other income, net	250	3%	250	3%	164	2%	178	2%
(Provision for)/benefit from income taxes	(136)	(2)%	(154)	(2)%	100	1%	96	1%
Income attributable to non-controlling interests	(20)	—%	(20)	—%	(24)	—%	(18)	—%
NET INCOME ATTRIBUTABLE TO WILLIS TOWERS WATSON	\$ 695	8%	\$ 775	9%	\$ 568	7%	\$ 420	5%
Diluted earnings per share	<u>\$ 5.27</u>		<u>\$ 5.87</u>		<u>\$ 4.18</u>		<u>\$ 3.04</u>	

Consolidated Revenue

We derive the majority of our revenue from commissions from our brokerage businesses and fees for consulting and administration services. No single client represented a significant concentration of our consolidated revenue for any of our three most recent fiscal years.

The following table details our top five markets based on percentage of consolidated revenue (in U.S. dollars) from the countries where work was performed for the year ended December 31, 2018. These figures do not represent the currency of the related revenue, which is presented in the next table.

Geographic Region	% of Revenue
United States	47%
United Kingdom	23%
France	5%
Canada	3%
Germany	3%

The table below details the percentage of our revenue and expenses by transactional currency for the year ended December 31, 2018.

Transactional Currency	Revenue	Expenses (i)
U.S. dollars	54%	48%
Pounds sterling	13%	21%
Euro	16%	13%
Other currencies	17%	18%

(i) These percentages exclude certain expenses for significant items which will not be settled in cash, or which we believe to be items that are not core to our current or future operations. These items include Merger-related amortization of intangible assets, restructuring costs, and transaction and integration expenses.

The following table sets forth the total revenue for the years ended December 31, 2018 and 2017 and the components of the change in total revenue for the year ended December 31, 2018, as compared to the prior year:

	Years ended December 31,		As Reported Change	Components of Revenue Change (i)				
	2018	2017		Currency Impact	Constant Currency Change	Impact of ASC 606	Acquisitions/ Divestitures	Organic Change
	(in millions)							
Revenue	\$ 8,513	\$ 8,202	4%	1%	3%	(1)%	(1)%	5%

(i) Components of revenue change may not add due to rounding.

Revenue for the year ended December 31, 2018 was \$8.5 billion, compared to \$8.2 billion for the year ended December 31, 2017, an increase of \$311 million or 4%. This growth in revenue was driven by strong performances in all segments.

Our revenue can be materially impacted by changes in currency conversions, which can fluctuate significantly over the course of a calendar year. For the year ended December 31, 2018, currency translation increased our consolidated revenue by \$89 million. The primary currencies driving this change were the Euro and Pound sterling.

Divestitures in the latter part of 2017 and in the first quarter of 2018 reduced revenue for the year ended December 31, 2018. There were no significant impacts to revenue resulting from any acquisitions for the year ended December 31, 2018.

The following table sets out the total revenue for the years ended December 31, 2017 and 2016 and the components of the change in total revenue for the year ended December 31, 2017, as compared to the prior year:

	Years ended December 31,		As Reported Change	Components of Change (i)			
	2017	2016		Currency Impact	Constant Currency Change	Acquisitions/ Divestitures	Organic Change
	(in millions)						
Revenue	\$ 8,202	\$ 7,887	4%	—%	4%	—%	5%

(i) Components of revenue change may not add due to rounding.

Revenue for the year ended December 31, 2017 was \$8.2 billion, compared to \$7.9 billion for the year ended December 31, 2016, an increase of \$315 million or 4%. This growth in revenue was driven by strong performances in all segments.

For the year ended December 31, 2017, currency translation decreased our consolidated revenue by \$27 million. The decrease was driven primarily by a weaker Pound sterling during the first half of the year, partially offset by increases in the Pound sterling, Euro, the Brazilian real and Canadian dollar in the second half of the year.

The impact of acquisitions and divestitures did not have a significant impact on the change in total revenue for the year ended December 31, 2017 since most of these transactions happened in the latter part of the year.

Definitions of Constant Currency Change and Organic Change are included in the section entitled ‘Non-GAAP Financial Measures’ elsewhere within this Form 10-K.

Segment Revenue

We manage our business across four integrated reportable operating segments: Human Capital and Benefits; Corporate Risk and Broking; Investment, Risk and Reinsurance; and Benefits Delivery and Administration.

In 2018, we made certain changes that affect our segment results that are not material. These changes include the realignment of certain businesses within our segments, as well as changes to certain allocation methodologies to better reflect the ongoing nature of our businesses. The prior period comparatives included in the tables below have been retrospectively adjusted to reflect our current segment presentation. See Note 5 — Segment Information within Item 8 in this Annual Report on Form 10-K for a further discussion of these changes.

Segment revenue excludes amounts that were directly incurred on behalf of our clients and reimbursed by them (reimbursed expenses); however, these amounts are included in consolidated revenue.

The Company experiences seasonal fluctuations in its revenue. Revenue is typically higher during the Company’s first and fourth quarters due primarily to the timing of broking-related activities. Although the mix of quarterly income changed as a result of the adoption of ASC 606, we expect our revenue to remain highest in our first and fourth quarters.

Human Capital and Benefits (‘HCB’)

The HCB segment provides an array of advice, broking, solutions and software for our clients.

HCB is the largest segment of the Company, generating approximately 38% of our segment revenue for the year ended December 31, 2018. HCB is focused on addressing our clients’ people and risk needs to help them take on the challenges of operating in a global marketplace. HCB is further strengthened with teams of international consultants that provide support through each of our business units to the global headquarters of multinational clients and their foreign subsidiaries.

The HCB segment provides services through four business units:

- *Retirement* — The Retirement business provides actuarial support, plan design, and administrative services for traditional pension and retirement savings plans. Our colleagues help our clients assess the costs and risks of retirement plans on cash flow, earnings and the balance sheet, the effects of changing workforce demographics on their retirement plans and retiree benefit adequacy and security.
- *Health and Benefits* — The Health & Benefits business provides plan management consulting, broking and administration across the full spectrum of health and group benefit programs, including medical, dental, disability, life and other coverage.
- *Talent & Rewards* — Our Talent & Rewards business provides advice, data, software and products to address clients’ total rewards and talent issues.
- *Technology and Administration Solutions* — Our Technology and Administration Solutions business provides benefits outsourcing services to clients outside of the U.S.

The following table sets forth HCB segment revenue for the years ended December 31, 2018 and 2017, and the components of the change in revenue for the year ended December 31, 2018 from the year ended December 31, 2017.

	Years ended December 31,		As Reported Change	Components of Revenue Change (i)				
	2018	2017		Currency Impact	Constant Currency Change	Impact of ASC 606	Acquisitions/ Divestitures	Organic Change
	(\$ in millions)							
Segment revenue	\$ 3,233	\$ 3,176	2%	1%	1%	(2)%	(1)%	3%

(i) Components of revenue change may not add due to rounding.

HCB segment revenue for both years ended December 31, 2018 and 2017 was \$3.2 billion. On an organic basis, HCB experienced growth globally across all businesses. Health and Benefits led the segment with growth in North America related to increased consulting work and product revenue growth, while outside of North America revenue was positively impacted by global benefits management appointments. Talent and Rewards also generated strong revenue growth, primarily from increased demand for advisory projects in Western Europe and International, as well as compensation surveys on a global basis. Retirement revenue increased, driven by higher consulting and project work across all geographies. The Technology and Administration Solutions business experienced growth in Great Britain and Western Europe as a result of new administration clients and project activity.

The following table sets forth HCB segment revenue for the years ended December 31, 2017 and 2016, and the components of the change in revenue for the year ended December 31, 2017 from the year ended December 31, 2016.

	Years ended December 31,		As Reported Change	Components of Revenue Change (i)			
	2017	2016		Currency Impact	Constant Currency Change	Acquisitions/Divestitures	Organic Change
	(\$ in millions)						
Segment revenue	\$ 3,176	\$ 3,100	2%	—%	3%	(1)%	3%

(i) Components of revenue change may not add due to rounding.

HCB segment revenue for the years ended December 31, 2017 and 2016 was \$3.2 billion and \$3.1 billion, respectively. Retirement revenue increased in Western Europe, International and Great Britain and was partially offset by a decline in North America. The decline in North America was expected as bulk lump sum projects declined year over year. Actuarial consulting projects in Great Britain increased due to regulation changes. The growth in Talent & Rewards was flat. Healthcare consulting revenue in Health and Benefits was up significantly for all markets globally. North America grew due to increased consulting and product demand and Great Britain grew due to global benefits management implementations. Revenue in the Technology and Administration Solutions business in Great Britain experienced strong growth as a result of new administration clients and project activity.

Corporate Risk and Broking ('CRB')

The CRB segment provides a broad range of risk advice, insurance broking and consulting services to clients worldwide ranging from small businesses to multinational corporations. The segment delivers integrated global solutions tailored to client needs and underpinned by data and analytics.

CRB generated approximately 34% of Willis Towers Watson segment revenue for the year ended December 31, 2018, and places more than \$20 billion of premiums into the insurance markets, annually.

CRB operates as an integrated global team comprising both functional and geographic leadership with three global offerings:

- *Property and Casualty* — Property and Casualty provides property and liability insurance brokerage services across a wide range of industries including construction, real estate, healthcare and natural resources.
- *Financial Lines* — Financial Lines specializes in brokerage services for financial, political and credit risks.
- *Transport* — Transport provides specialist expertise to the transportation, aerospace, marine and inspace industries.

The following table sets forth CRB segment revenue for the years ended December 31, 2018 and 2017, and the components of the change in revenue for the year ended December 31, 2018 from the year ended December 31, 2017.

	Years ended December 31,		As Reported Change	Components of Revenue Change (i)				
	2018	2017		Currency Impact	Constant Currency Change	Impact of ASC 606	Acquisitions/ Divestitures	Organic Change
	(\$ in millions)							
Segment revenue	\$ 2,852	\$ 2,709	5%	1%	4%	—%	—%	4%

(i) Components of revenue change may not add due to rounding.

CRB segment revenue for the years ended December 31, 2018 and 2017 was \$2.9 billion and \$2.7 billion, respectively. Revenue growth was experienced in every region. The primary drivers of the growth for the segment were new business generation and strong management of the renewal book portfolio.

The following table sets forth CRB segment revenue for the years ended December 31, 2017 and 2016, and the components of the change in revenue for the year ended December 31, 2017 from the year ended December 31, 2016.

	Years ended December 31,		As Reported Change	Components of Revenue Change (i)			
	2017	2016		Currency Impact	Constant Currency Change	Acquisitions/ Divestitures	Organic Change
	(\$ in millions)						
Segment revenue	\$ 2,709	\$ 2,608	4%	—%	4%	—%	4%

(i) Components of revenue change may not add due to rounding.

CRB segment revenue for the years ended December 31, 2017 and 2016 was \$2.7 billion and \$2.6 billion, respectively. All regions contributed to the strong revenue growth led by International followed by Western Europe, North America and Great Britain. International's growth was fueled by excellent client retention and strong new business. Western Europe, North America and Great Britain experienced good client retention and solid new business growth.

Investment, Risk and Reinsurance ('IRR')

The IRR segment uses a sophisticated approach to risk, which helps clients free up capital and manage investment complexity. The segment works closely with investors, reinsurers and insurers to manage the equation between risk and return. Blending advanced analytics with deep institutional knowledge, IRR identifies new opportunities to maximize performance. IRR provides investment consulting and discretionary management services and insurance specific services and solutions through reserves opinions, software, ratemaking, risk underwriting and reinsurance broking.

This segment is our third largest segment and generated approximately 19% of segment revenue for the Company for the year ended December 31, 2018. With approximately 76% of the revenue for this segment split between North America and the U.K., this segment includes the following businesses and offerings:

- *Willis Re* — Willis Re provides reinsurance industry clients with an understanding of how risk affects capital and financial performance and advises on the best ways to manage related outcomes.
- *Insurance Consulting and Technology* — Insurance Consulting and Technology is a global business that provides advice and technology solutions to the insurance industry. Services include software and technology, risk and capital management, products and pricing, financial and regulatory reporting, financial and capital modeling, M&A, outsourcing and business management.
- *Investments* — Investments provides advice and discretionary management solutions to improve investment outcomes for asset owners using a broad and sophisticated framework for managing risk.

- *Wholesale Insurance Broking* — Wholesale Insurance Broking provides specialist broking services primarily to retail and wholesale brokers.
- *Underwriting and Capital Management* — Underwriting and Capital Management, formerly Portfolio and Underwriting Services, acts on behalf of our insurance carrier partners and self-insured entities in product marketing and distribution, risk underwriting and selection, claims management and other general administrative responsibilities.
- *Willis Towers Watson Securities* — Willis Towers Watson Securities provides capital markets services to companies involved in the insurance and reinsurance industries.
- *Max Matthiessen* — Max Matthiessen is a leading advisor and broker within insurance, benefits, human resources and savings in the Nordic region. The business specializes in providing human capital and benefits administration together with providing market leading savings and insurance solutions.

The following table sets forth IRR segment revenue for the years ended December 31, 2018 and 2017, and the components of the change in revenue for the year ended December 31, 2018 from the year ended December 31, 2017.

	Years ended December 31,		As Reported Change	Components of Revenue Change (i)				
	2018	2017		Currency Impact	Constant Currency Change	Impact of ASC 606	Acquisitions/ Divestitures	Organic Change
	(\$ in millions)							
Segment revenue	\$ 1,556	\$ 1,474	6%	2%	3%	—%	(2)%	6%

(i) Components of revenue change may not add due to rounding.

IRR segment revenue for the years ended December 31, 2018 and 2017 was \$1.6 billion and \$1.5 billion, respectively. Reinsurance revenue increased, reflecting strong new business and renewal performance. Insurance Consulting and Technology, Wholesale, Investment, and Max Matthiessen also posted revenue growth resulting from a combination of increased sales and favorable market returns. Underwriting and Capital Management experienced a decline as a result of the divestiture of a portion of the U.S. programs business in 2017 and the Loan Protector businesses in the first quarter of 2018.

The following table sets forth IRR segment revenue for the years ended December 31, 2017 and 2016, and the components of the change in revenue for the year ended December 31, 2017 from the year ended December 31, 2016.

	Years ended December 31,		As Reported Change	Components of Revenue Change (i)			
	2017	2016		Currency Impact	Constant Currency Change	Acquisitions/ Divestitures	Organic Change
	(\$ in millions)						
Segment revenue	\$ 1,474	\$ 1,473	—%	(2)%	2%	—%	2%

(i) Components of revenue change may not add due to rounding.

IRR segment revenue for both years ended December 31, 2017 and 2016, was \$1.5 billion. Total segment revenue for the year ended December 31, 2016 included £28 million (\$41 million) received for a settlement related to the Fine Arts, Jewellery and Specie Team. Wholesale Insurance Broking, Investments, Insurance Consulting and Technology, Max Matthiessen and Willis Re all posted revenue growth, primarily as a result of strong sales and increased performance fees. Willis Towers Watson Securities' growth was flat. The reduction in Underwriting and Capital Management revenue was driven by a loss of profit commissions following the Atlantic hurricanes, the cancellation of a key contract and the divestiture of small programs in the portfolio.

Benefit Delivery and Administration ('BDA')

The BDA segment provides primary medical and ancillary benefit exchange and outsourcing services to active employees and retirees across both the group and individual markets. A significant portion of the revenue in this segment is recurring in

nature, driven by either the commissions from the policies we sell, or from long-term service contracts with our clients that typically range from three to five years. Revenue across this segment may be seasonal, driven by the magnitude and timing of client enrollment activities, which often occur during the fourth quarter, with increased membership levels typically effective January 1, after calendar year-end benefits elections.

BDA generated approximately 9% of our segment revenue for the year ended December 31, 2018. BDA provides services across four integrated or related offerings to customers primarily in the U.S.:

- *Individual Marketplace* — This business provides solutions through a proprietary technology platform, Via Benefits Retiree, formerly OneExchange Retiree, which enables our employer clients to transition their retirees to individual, defined contribution health plans that provide individuals with a tax-free allowance or contribution to spend on healthcare services at an annual cost that the employer controls, as opposed to group-based, defined benefit health plans that provide groups of individuals with healthcare benefits at uncertain annual costs.
- *Group Marketplace* — This business is focused on delivering group benefit exchanges, serving the active employees of employers across the United States through our proprietary BenefitConnect or Bright Choices exchange platforms.
- *Benefits Outsourcing* — Through our proprietary BenefitConnect technology, this business provides a broad suite of health and welfare outsourcing services as well as decision support and modeling tools for pension users within the U.S.
- *Benefits Accounts* — This business uses its SaaS-based technology and related services to deliver consumer-driven healthcare and reimbursement accounts, including health savings accounts, health reimbursement arrangements and other consumer-directed accounts.

The following table sets forth BDA segment revenue for the years ended December 31, 2018 and 2017, and the components of the change in revenue for the year ended December 31, 2018 from the year ended December 31, 2017.

	Years ended December 31,		As Reported Change	Components of Revenue Change (i)				
	2018	2017		Currency Impact	Constant Currency Change	Impact of ASC 606	Acquisitions/Divestitures	Organic Change
	(\$ in millions)							
Segment revenue	\$ 758	\$ 734	3%	—%	3%	(6)%	—%	9%

(i) Components of revenue change may not add due to rounding.

BDA segment revenue for the years ended December 31, 2018 and 2017 was \$758 million and \$734 million, respectively. Anchored by a solid client base, increased membership and enrollments across all businesses helped to drive the segment forward on an organic basis.

The following table sets forth BDA segment revenue for the years ended December 31, 2017 and 2016, and the components of the change in revenue for the year ended December 31, 2017 from the year ended December 31, 2016.

	Years ended December 31,		As Reported Change	Components of Revenue Change (i)			
	2017	2016		Currency Impact	Constant Currency Change	Acquisitions/Divestitures	Organic Change
	(\$ in millions)						
Segment revenue	\$ 734	\$ 660	11%	—%	11%	—%	11%

(i) Components of revenue change may not add due to rounding.

BDA segment revenue for the years ended December 31, 2017 and 2016 was \$734 million and \$660 million, respectively. Individual Marketplace revenue increased by 10%, and the rest of the segment grew by 14%, led by Group Marketplace and

Benefits Outsourcing. Growth in the Individual and Group Marketplaces resulted from the additional 2017 enrollments, and Benefits Outsourcing's growth was a result of new client wins and special projects.

Costs of Providing Services

Total costs of providing services were \$7.7 billion for the year ended December 31, 2018, compared to \$7.7 billion for the year ended December 31, 2017, an increase of \$18 million. Total costs of providing services were \$7.7 billion for the year ended December 31, 2017, compared to \$7.5 billion for the year ended December 31, 2016, an increase of \$147 million. See the following discussion for further details.

Salaries and Benefits

Salaries and benefits for the year ended December 31, 2018 were \$5.1 billion, compared to \$5.0 billion for the year ended December 31, 2017, an increase of \$156 million. This increase was primarily a result of higher base salary adjustments, increased medical benefits costs and incentive accruals. Salaries and benefits for the year ended December 31, 2017 were \$5.0 billion, compared to \$4.8 billion for the year ended December 31, 2016, an increase of \$118 million. The increase was primarily due to higher incentive accruals as compared to the prior year.

Salaries and benefits, as a percentage of revenue, represented 60%, 61% and 61% for the years ended December 31, 2018, 2017 and 2016, respectively.

Other Operating Expenses

Other operating expenses include occupancy, legal, marketing, licenses, royalties, supplies, technology, printing and telephone costs, as well as insurance, including premiums on excess insurance and losses on professional liability claims, non-client-reimbursed travel by colleagues, publications, professional subscriptions and development, recruitment, other professional fees and irrecoverable value added and sales taxes.

Other operating expenses for the year ended December 31, 2018 were \$1.6 billion, compared to \$1.5 billion for the year ended December 31, 2017, an increase of \$103 million, or 7%. This increase was primarily due to higher professional services expenses, partially offset by lower occupancy costs. Other operating expenses for the year ended December 31, 2017 was \$1.5 billion, compared to \$1.6 billion for the year ended December 31, 2016, a decrease of \$17 million, or 1%. The decrease was due primarily to the Stanford litigation provision of \$50 million in 2016, partially offset by reserves for the City of Houston and CalPERS litigations and increases in other litigation reserves and professional services in 2017.

Depreciation

Depreciation represents the expense incurred over the useful lives of our tangible fixed assets and internally developed software. Depreciation for the year ended December 31, 2018 was \$208 million, compared to \$203 million for the year ended December 31, 2017, an increase of \$5 million. Depreciation for the year ended December 31, 2017 was \$203 million, compared to \$178 million for the year ended December 31, 2016, an increase of \$25 million. These year-over-year increases were due primarily to higher depreciable assets bases resulting from additional assets placed in service in the previous years.

Amortization

Amortization includes amortization of acquired intangible assets, including acquired internally developed software. Amortization for the year ended December 31, 2018 was \$534 million, compared to \$581 million for the year ended December 31, 2017, a decrease of \$47 million, or 8%. Amortization for the year ended December 31, 2017 was \$581 million, compared to \$591 million for the year ended December 31, 2016, a decrease of \$10 million. Our intangible amortization is more heavily weighted to the initial years of the useful lives of the related intangibles, and therefore amortization expense will decrease over time.

Restructuring Costs

Restructuring costs were \$132 million and \$193 million for the years ended December 31, 2017 and 2016, respectively.

These costs were incurred during the prior years and were related to the Operational Improvement Program ("OIP") and Business Restructuring Program, which were completed, and for which costs were fully accrued, by the end of 2017. We spent a cumulative amount of \$441 million on restructuring charges for the OIP since it began in the second quarter of 2014.

Refer to Note 6 — Restructuring Costs within Item 8 of this Annual Report on Form 10-K for additional information regarding these costs.

Transaction and integration expenses

Transaction and integration expenses for the year ended December 31, 2018 were \$202 million, compared to \$269 million for the year ended December 31, 2017, a decrease of \$67 million, or 25%. The higher costs in the prior year primarily resulted from the settlement of the Merger-related appraisal demand lawsuit which was settled in the third quarter of 2017 (see Part II, Item 8, Note 14, *Commitments and Contingencies*, in our Annual Report on Form 10-K, filed with the SEC on February 28, 2018, as amended on June 6, 2018, for more details). The decrease in expenses in 2018 was also due to the completion of certain integration activities in connection with the Merger. Transaction and integration expenses for the year ended December 31, 2017 were \$269 million, which consists of costs associated with our information technology and finance initiatives and rationalization, property consolidation, benefits harmonization and costs associated with the settlement of the Merger-related appraisal demand lawsuit. Transaction and integration expenses for the year ended December 31, 2016 were \$177 million. Approximately \$162 million of these expenses were related to the Merger and \$15 million were related to the acquisition of Gras Savoye.

Income from Operations

Income from operations for the year ended December 31, 2018 was \$809 million, compared to \$516 million for the year ended December 31, 2017, an increase of \$293 million. Adjusting for the impact of ASC 606, which reduced operating income in 2018 by \$98 million, income from operations would have increased by \$391 million. This increase was due to continued organic revenue growth across all segments. Income from operations for the year ended December 31, 2017 was \$516 million, compared to \$348 million for the year ended December 31, 2016, an increase of \$168 million, or 48%. This increase resulted primarily from additional revenue of \$315 million driven by growth across all segments, partially offset by additional costs resulting primarily from our integration activities and additional salary and benefits costs.

Interest Expense

Interest expense for the years ended December 31, 2018, 2017 and 2016 was \$208 million, \$188 million and \$184 million, respectively. Interest expense is primarily related to interest on our senior notes and term loans. Interest expense increased by \$20 million for the year ended December 31, 2018, which resulted from higher average outstanding debt balances during the year, higher interest rates attributable to the variable-rate portion of our outstanding debt, and higher fixed-rate interest associated with the issuance of new senior notes during the current year. Interest expense increased by \$4 million for the year ended December 31, 2017 over the prior year, which primarily resulted from additional levels of indebtedness.

Other Income, Net

As a result of the adoption of ASU 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*, which was retrospectively applied to our 2017 and 2016 presentations as well, we now classify all components of net periodic benefit cost, except service cost, resulting from our defined benefit plans, in this line item. Other income, net, additionally includes other gains and losses, including gains and losses on foreign currency transactions.

Other income, net for the year ended December 31, 2018 was \$250 million, compared to \$164 million for the year ended December 31, 2017, an increase of \$86 million. The additional income in 2018 as compared to the prior year primarily related to increased pension benefit income of \$58 million for full year 2018, in comparison with the prior year, and favorable foreign exchange activity, primarily occurring in the second quarter of 2018, of approximately \$48 million. Other income, net for the year ended December 31, 2017 was \$164 million, compared to \$178 million for the year ended December 31, 2016. The lower income was primarily due to unfavorable foreign exchange activity of approximately \$43 million.

(Provision for)/Benefit from Income Taxes

(Provision for)/benefit from income taxes for the year ended December 31, 2018 was a provision of \$136 million, compared with benefits of \$100 million and \$96 million for the years ended December 31, 2017 and 2016, respectively. The benefit in 2017 was primarily due to the impact of U.S. Tax Reform, which included a net benefit of \$204 million due to the reduction in the federal corporate tax rate and re-measurement of net U.S. deferred tax liabilities primarily related to acquisition-based intangibles. The benefit from income taxes in 2016 was primarily due to the release of a portion of U.S. valuation allowances and shifts in the global mix of income as a result of the Merger. This shift resulted in additional deductions in jurisdictions with high statutory income tax rates, which reduced the global effective tax rate. The effective tax rates for the years ended

December 31, 2018, 2017 and 2016 were 16.0%, (20.5)% and (28.1)%, respectively. These effective tax rates are calculated using extended values from our consolidated statements of comprehensive income, and are therefore more precise tax rates than can be calculated from rounded values.

Prior to U.S. Tax Reform, our effective tax rate was lower than the U.S. statutory tax rate of 35%, primarily due to our global mix of income and deductions in jurisdictions with high statutory income tax rates. For 2018, while the U.S. federal corporate income tax rate has decreased as a result of U.S. Tax Reform, certain deferred tax benefits realized as a result of both the Merger and deductions in jurisdictions with high statutory income tax rates have now been reduced as well. This offsets, in part, the benefit of U.S. Tax Reform, thus increasing our income tax rate.

Net income attributable to Willis Towers Watson

Net income attributable to Willis Towers Watson for the year ended December 31, 2018 was \$695 million, compared to \$568 million for the year ended December 31, 2017, an increase of \$127 million, or 22%. Adjusting for the impact of ASC 606, which reduced net income in 2018 by \$80 million, net income attributable to Willis Towers Watson would have increased by \$207 million. This increase was due to strong organic revenue growth across all segments. Net income attributable to Willis Towers Watson for the year ended December 31, 2017 was \$568 million, compared to \$420 million for the year ended December 31, 2016. The increase was primarily driven by an improvement of \$168 million in income from operations, partially offset by a \$14 million decrease in other income, net.

Supplemental Information – Adoption of New Revenue Standard

As discussed in Note 4 — Revenue, within Item 8 in this Annual Report on Form 10-K, the Company adopted ASC 606 as of January 1, 2018. Since the Company adopted the guidance using the modified retrospective method, we have provided the impact to the affected financial statement line items within the consolidated financial statements for 2018; the 2017 and 2016 comparative financial statement line items have not been restated in accordance with the new standard. In an effort to help the readers of this Form 10-K better understand the impact that this guidance has on our reported segment results, we have included below the revenue and operating income by segment as reported, as well as without the adoption of ASC 606, and brief explanations of the changes (amounts exclude results not allocated to the operating segments):

	Year Ended December 31, 2018		
	As Reported	Balances Without Adoption of ASC 606	Effect of Change
	(in millions)		
HCB			
Revenue	\$ 3,233	\$ 3,292	\$ (59) <i>a</i>
Operating income	789	849	(60) <i>a, e</i>
CRB			
Revenue	2,852	2,855	(3) <i>b</i>
Operating income	528	529	(1) <i>b, f</i>
IRR			
Revenue	1,556	1,552	4 <i>c</i>
Operating income	384	377	7 <i>c, f</i>
BDA			
Revenue	758	799	(41) <i>d</i>
Operating income	144	190	(46) <i>d, e</i>

Explanation of Changes

Revenue and operating expense amounts differ due to the adoption of ASC 606 as well as how the new standard reflects the timing of our operating results. Therefore, the following significant changes may also reflect differences between quarters as well as fiscal years:

- a. Revenue for certain arrangements in our Health and Benefits broking business will now be recognized more evenly over the year to reflect the nature of the ongoing obligations to our customers, as well as receipt of the monthly commissions. These contracts are monthly or annual in nature and are considered complete as of the transition date for all contracts entered into for 2017 and prior years. The total change to revenue as a result of this accounting change for the year ended December 31, 2018 was a decrease of \$57 million.

- b. Revenue for certain affinity broking arrangements that was recognized at a point in time on the effective date of the policy is now being recognized over the policy year to reflect the ongoing nature of our services.
- c. The most significant change in our IRR segment results is due to the change in accounting for our proportional treaty reinsurance broking arrangements. The revenue recognition for proportional treaty reinsurance broking commissions has moved from recognition upon the receipt of the monthly or quarterly treaty statements from the ceding insurance carriers, to the recognition of an estimate of expected commissions upon the policy effective date. For the year ended December 31, 2018, ASC 606 revenue was higher than ASC 605 revenue by approximately \$2 million related to this adjustment.
- d. The majority of revenue recognition within our Medicare broking arrangements in Individual Marketplace has moved from monthly ratable recognition over the policy period, to recognition upon placement of the policy. Consequently, the Company will now recognize approximately two-thirds of one calendar year of expected commissions during the fourth quarter of the preceding calendar year. The remainder of the revenue is recognized consistently with methods used prior to the adoption of ASC 606. During the year ended December 31, 2018, the revenue timing changes from ASC 606 resulted in a reduction of revenue from ASC 605 of approximately \$38 million.
- e. *System implementation activities* — For those portions of the business that previously deferred costs, the length of time over which we amortize those costs will extend to a longer estimated contract term. For the 2017 calendar year and prior, these costs were amortized over a typical period of 3-5 years in accordance with the initial stated terms of the customer agreements. Additionally, the composition of deferred costs has been adjusted to reflect the guidance in ASC 606. These adjustments resulted in an increase in expense of \$6 million for the year ended December 31, 2018.
- f. *Other Arrangements* — This guidance now applies to our broking arrangements. The costs deferred for our broking arrangements will typically be amortized within one year. For the year ended December 31, 2018, these changes resulted in a decrease in expense of approximately \$8 million.

Impact of U.S. Tax Reform

On December 22, 2017, the U.S. government enacted comprehensive tax legislation, commonly referred to as 'U.S. Tax Reform'. U.S. Tax Reform makes broad and complex changes to the U.S. tax code, including, but not limited to: (1) requiring a one-time transition tax on certain unremitted earnings of foreign subsidiaries that may be payable over eight years; (2) bonus depreciation that will allow for full expensing of qualified property; (3) reduction of the federal corporate tax rate from 35% to 21%; (4) a new provision designed to tax global intangible low-taxed income ('GILTI'), which allows for the possibility of using foreign tax credits ('FTCs') and a deduction of up to 50% to offset the income tax liability (subject to some limitations); (5) a new limitation on deductible interest expense; (6) limitations on the deductibility of certain executive compensation; (7) limitations on the use of FTCs to reduce the U.S. income tax liability; (8) the creation of the base erosion anti-abuse tax ('BEAT'), a new minimum tax; and (9) a general elimination of U.S. federal income taxes on dividends from foreign subsidiaries.

Also on December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ('SAB 118'), which provided guidance on accounting for the tax effects of the U.S. Tax Reform. SAB 118 provided a measurement period that should not extend beyond one year from the U.S. Tax Reform enactment date for companies to complete the accounting under ASC 740, *Income Taxes* ('ASC 740'). In accordance with SAB 118, a company was required to reflect the income tax effects of those aspects of U.S. Tax Reform for which the accounting under ASC 740 was complete. Adjustments to incomplete and unknown amounts were required to be recorded and disclosed during the measurement period. To the extent that a company's accounting for certain income tax effects of U.S. Tax Reform was incomplete but it was able to determine a reasonable estimate, a provisional estimate in the financial statements was required to be recorded. If a company was unable to determine a provisional estimate, it was required to continue to apply ASC 740 on the basis of the provisions of the tax laws that were in effect immediately before the enactment of U.S. Tax Reform.

While the measurement period under SAB 118 is now closed, the Company may in future periods need to further refine its U.S. federal and state calculations related to U.S. Tax Reform as the taxing authorities provide additional guidance and clarification. However, as of December 31, 2018, the Company's accounting for U.S. Tax Reform is complete based on its interpretation of the guidance issued as of the balance sheet date.

As such, the Company has revised and finalized the provisional adjustments for the following items:

Reduction of the federal corporate tax rate – Beginning January 1, 2018, the Company’s U.S. income is taxed at a 21% federal corporate tax rate. Under ASC 740, deferred tax assets or liabilities must be recalculated as of the enactment date using current tax laws and rates expected to be in effect when the deferred tax items reverse in future periods, which is 21%. Consequently, the Company recorded a provisional decrease in its net deferred tax liabilities of \$208 million, with a corresponding deferred income tax benefit of \$208 million during the year ended December 31, 2017. On October 12, 2018, the Company filed its 2017 U.S. federal corporate income tax return. After refining our analysis of those items directly related to U.S. Tax Reform, the Company recorded additional deferred tax benefit of approximately \$8 million related to deferred tax items that are now subject to tax at 21%. The effect of the measurement period adjustment on the 2018 effective tax rate is approximately 1%.

One-time transition tax – The one-time transition tax is based on the Company’s total post-1986 earnings and profits (‘E&P’) that it previously deferred from U.S. income taxes. At December 31, 2017, the Company recorded a provisional amount for the one-time transition tax liability for our foreign subsidiaries owned by U.S. corporate shareholders, resulting in an increase in U.S. Federal income tax expense of \$70 million and state income tax expense of \$2 million. This transition tax liability was recorded as a long-term liability in the 2017 financial statements. Subsequent to the December 31, 2017 reporting period, the Internal Revenue Service (‘IRS’) clarified the application of the ‘with’ and ‘without’ approach for calculating the transition tax liability in determining the amount payable over eight years. Based on this guidance the Company revised its provisional estimate for the U.S. federal transition tax liability in the first quarter of 2018, which was reduced by \$64 million due to the utilization of interest loss carryforwards resulting from the transition tax income inclusion. This reduction has no impact on the 2018 effective tax rate. Additionally, on the basis of revised E&P computations that were completed during the year ended December 31, 2018, we recognized an additional increase to income tax expense of \$8 million, which was recorded in current income tax payable. This has an approximate 1% impact on the Company’s 2018 effective tax rate. The tax expense recorded includes the final measurement period adjustment related to the Company’s November 30, 2018 foreign subsidiaries. While the measurement period under SAB 118 is now closed, we may in future periods need to further refine the U.S. federal and state transition tax calculations of the November 30, 2018 foreign subsidiaries as the taxing authorities provide additional guidance and clarification.

Indefinite reinvestment assertion – Beginning in 2018, U.S. Tax Reform provides a 100% deduction for dividends received from 10-percent owned foreign corporations by U.S. corporate shareholders, subject to a one-year holding period. Although dividend income is now exempt from U.S. federal tax for U.S. corporate shareholders, companies must still account for the tax consequences of outside basis differences and other tax impacts of their investments in non-U.S. subsidiaries. At December 31, 2017, we analyzed our global working capital and cash requirements and the potential tax liabilities attributable to a repatriation and determined we might repatriate up to \$219 million which was previously deemed indefinitely reinvested. For those investments from which we were able to make a reasonable estimate of the tax effects of such repatriation, we recorded a provisional estimate for foreign withholding and state income taxes of \$1 million. In addition, we re-measured the existing deferred tax liability accrued on certain acquired Towers Watson subsidiaries and released the associated deferred tax liability. This resulted in an income tax benefit of \$76 million as these foreign earnings were subject to the one-time transition tax. These estimates are now considered final and no further adjustments have been made in the year ended December 31, 2018 as a result of U.S. Tax Reform.

Bonus Depreciation – The Company completed its determination of all capital expenditures that qualify for immediate expensing. For the year ended December 31, 2017, the Company recorded a provisional deduction of \$40 million based on its current intent to fully expense all qualifying expenditures. This resulted in an increase of approximately \$14 million to the Company’s U.S. federal current income taxes receivable and a corresponding increase in its net deferred tax liabilities of approximately \$14 million. However, as a result of further analysis on assets placed in service after September 27, 2017, the Company concluded its tax deduction to be \$8 million. The tax deduction was reflected on the Company’s 2017 U.S. federal corporate income tax return filed on October 12, 2018. The effect of the measurement-period adjustment on the 2018 effective tax rate is included in the reduction of the federal corporate tax rate above.

Executive compensation – Starting with compensation paid in 2018, Section 162(m) will limit the Company from deducting compensation, including performance-based compensation, in excess of \$1 million paid to anyone who, starting in 2018, serves as the Chief Executive Officer or Chief Financial Officer, or who is among the three most highly compensated executive officers. The only exception to this rule is for compensation that is paid pursuant to a

binding contract in effect on November 2, 2017 that would have otherwise been deductible under the prior Section 162(m) rules. Accordingly, any compensation paid in the future pursuant to new compensation arrangements entered into after November 2, 2017, even if performance-based, will count towards the \$1 million deduction limit if paid to a covered executive. The Company recorded a provisional income tax expense of \$8 million relating to our compensation plans not qualifying as a binding contract exception. During the fourth quarter the Company finalized its analysis and review of the executive compensation plans and IRS guidance released throughout the year. The Company has concluded that the reviewed plans are not subject to future limitation under the binding contract exception and grandfathering rules. This resulted in the re-establishment of the deferred tax asset through the recording of an income tax benefit of \$8 million. The effect of the measurement period adjustment on the 2018 effective tax rate is approximately 1%.

GILTI – U.S. Tax Reform creates a new requirement that certain income (i.e., GILTI) earned by controlled foreign corporations ('CFCs') must be included currently in the gross income of the CFCs' U.S. shareholders. GILTI is the excess of the shareholder's 'net CFC tested income' over the net deemed tangible income return, which is currently defined as the excess of (1) 10 percent of the aggregate of the U.S. shareholder's pro rata share of the qualified business asset investment of each CFC with respect to which it is a U.S. shareholder over (2) the amount of certain interest expense taken into account in the determination of net CFC-tested income. Under U.S. GAAP, the Company is allowed to make an accounting policy choice of either (1) treating taxes due on future U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the 'period cost method') or (2) factoring such amounts into a company's measurement of its deferred taxes (the 'deferred method'). The Company has concluded it is treating the taxes due on U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the 'period cost method'). The estimated tax impact of GILTI, net of available foreign tax credits, is approximately \$15 million at December 31, 2018.

Valuation allowances – The Company has concluded there have been no changes to valuation allowances as a result of U.S. Tax Reform.

Liquidity and Capital Resources

Executive Summary

Our principal sources of liquidity are funds generated by operating activities, available cash and cash equivalents and amounts available under our revolving credit facilities or new debt offerings.

Based on our balance sheets, cash flows, current market conditions and information available to us at this time, we believe that Willis Towers Watson has sufficient liquidity, which includes our undrawn revolving credit facilities, to meet our cash needs for the next twelve months, including investing in the business for growth, creating value through the integration of Willis, Towers Watson and Gras Savoye, scheduled debt repayments, dividend payments, and contemplated share repurchases, subject to market conditions and other factors.

The Company recognizes deferred tax balances related to the undistributed earnings of subsidiaries when the Company expects that it will recover those undistributed earnings in a taxable manner, such as through receipt of dividends or sale of the investments. Beginning in 2016, as a result of our plan to restructure or distribute accumulated earnings of certain acquired Towers Watson foreign operations, we accrued deferred taxes on the historical and current year earnings of those subsidiaries. The historical cumulative earnings of our other subsidiaries had been reinvested indefinitely and therefore we had not provided deferred tax liabilities on these amounts.

At December 31, 2018, we analyzed our global working capital and cash requirements and the potential tax liabilities attributable to a repatriation. For those investments from which we were able to make a reasonable estimate of the tax effects of such repatriation, we have recorded an estimate for foreign withholding and state income taxes. If future events, including material changes in estimates of cash, working capital, long-term investment requirements or additional guidance relating to U.S. Tax Reform necessitate that these earnings be distributed, an additional provision for income and foreign withholding taxes, net of credits, may be necessary. Other potential sources of cash may be through the settlement of intercompany loans or return of capital distributions in a tax-efficient manner.

Events that could change the historical cash flow dynamics discussed above include significant changes in operating results, potential future acquisitions or divestitures, material changes in geographic sources of cash, unexpected adverse impacts from litigation or regulatory matters, or future pension funding during periods of severe downturn in the capital markets.

During the year ended December 31, 2018, we completed an offering of \$600 million of 4.500% senior notes due 2028 and \$400 million of 5.050% senior notes due 2048. Net proceeds of \$989 million were used to prepay in full \$127 million outstanding under our term loan due December 2019, and to repay a portion of the amount outstanding under our \$1.25 billion revolving credit facility.

Assets and liabilities associated with non-U.S. entities have been translated into U.S. dollars as of December 31, 2018 at U.S. dollar rates that fluctuate compared to historical periods. As a result, cash flows derived from changes in the consolidated balance sheets include the impact of the change in foreign exchange translation rates.

Cash and Cash Equivalents

Our cash and cash equivalents at both December 31, 2018 and 2017 totaled \$1.0 billion.

Additionally, at December 31, 2018, \$1.1 billion was available to draw against our \$1.25 billion revolving credit facility as compared to \$362 million, which was available to draw against the facility at December 31, 2017.

Included within cash and cash equivalents at December 31, 2018 and 2017 are amounts held for regulatory capital adequacy requirements, including \$90 million held within our regulated U.K. entities at both balance sheet dates presented.

Summarized Consolidated Cash Flows

The following table presents the summarized consolidated cash flow information for the years ended:

	Years ended December 31,		
	2018	2017	2016
	(in millions)		
Net cash from/(used in):			
Operating activities	\$ 1,288	\$ 862	\$ 933
Investing activities	(341)	(335)	195
Financing activities	(903)	(479)	(775)
INCREASE IN CASH AND CASH EQUIVALENTS	44	48	353
Effect of exchange rate changes on cash and cash equivalents	(41)	112	(15)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	1,030	870	532
CASH AND CASH EQUIVALENTS, END OF YEAR	\$ 1,033	\$ 1,030	\$ 870

Cash Flows From Operating Activities

Cash flows from operating activities were \$1.3 billion for 2018, compared to cash flows from operating activities of \$862 million for 2017. The \$1.3 billion net cash from operating activities for 2018 included net income of \$715 million, adjusted for \$570 million of non-cash adjustments, and changes in operating assets and liabilities of \$3 million. The \$570 million non-cash adjustments primarily include depreciation, amortization, and the benefit from deferred income taxes. The \$426 million increase in cash from operations in 2018 compared to 2017 primarily resulted from increased cash collections from customers and other working capital improvements.

Cash flows from operating activities were \$862 million for 2017, compared to cash flows from operating activities of \$933 million for 2016. The \$862 million net cash from operating activities for 2017 included net income of \$592 million, adjusted for \$548 million of non-cash adjustments, partially offset by changes in operating assets and liabilities of \$278 million. The \$548 million of non-cash adjustments primarily include depreciation, amortization, and the benefit from deferred income taxes. The \$71 million decrease in cash from operations in 2017 compared to 2016 primarily resulted from changes in working capital and higher discretionary compensation payments made in 2017 for the 2016 compensation cycle. These discretionary compensation payments were lower in 2016 because they included only a partial payment to Legacy Towers Watson colleagues due to the timing of the Merger.

Cash flows from operating activities were \$933 million for 2016, compared to cash flows from operating activities of \$244 million for 2015. The \$933 million net cash from operating activities for 2016 included net income of \$438 million, adjusted for \$590 million of non-cash adjustments, partially offset by changes in operating assets and liabilities of \$95 million. The \$590 million of non-cash adjustments primarily include depreciation, amortization, net defined benefit pension credits, share-based compensation, and the benefit from deferred income taxes. The \$689 million increase in cash from operations in 2016 compared to 2015 was primarily due to cash from operations from Legacy Towers Watson and Gras Savoye.

Cash Flows (Used In)/From Investing Activities

Cash flows used in investing activities for 2018 and 2017 were \$341 million and \$335 million, respectively, primarily driven by capital expenditures and capitalized software additions.

Cash flows from investing activities for 2016 were \$195 million, largely driven by \$476 million of cash acquired as a result of our Merger with Towers Watson, which was a non-cash transaction as it was consummated through the issuance of shares. Cash inflows were partially offset by \$303 million of fixed assets and software for internal use and capitalized software costs.

Cash Flows Used In Financing Activities

Cash flows used in financing activities for 2018 were \$903 million. The significant financing activities included share repurchases of \$602 million and dividend payments of \$306 million, which were partially offset by net borrowings of \$66 million.

Cash flows used in financing activities for 2017 were \$479 million. The significant financing activities included the payment of \$177 million related to the cancellation of Towers Watson shares in connection with the settlement of the Merger-related appraisal demand lawsuit (consisting of the portion of the settlement equal to the value of consideration that would have been due to the shareholders at the closing of the Merger if they had exchanged their shares), share repurchases of \$532 million and dividend payments of \$277 million, which were partially offset by net borrowings of \$580 million.

Cash flows used in financing activities in 2016 were \$775 million. The primary drivers during the period were debt issuance of \$2.0 billion, debt repayments of \$1.9 billion, net payments on the revolving credit facility of \$237 million, dividend payments of \$199 million, and share repurchases of \$396 million.

Indebtedness

Total debt, total equity, and the capitalization ratio at December 31, 2018 and December 31, 2017 were as follows:

	December 31,	
	2018	2017
	(in millions)	
Long-term debt	\$ 4,389	\$ 4,450
Short-term debt and current portion of long-term debt	186	85
Total debt	\$ 4,575	\$ 4,535
Total Willis Towers Watson shareholders' equity	\$ 9,852	\$ 10,126
Capitalization ratio	31.7%	30.9%

At December 31, 2018, our mandatory debt repayment over the next twelve months is a scheduled repayment of \$186 million on our outstanding 7.000% senior notes due in 2019.

In September 2018, we completed an offering of \$600 million of 4.500% senior notes due 2028 and \$400 million of 5.050% senior notes due 2048. Net proceeds of \$989 million were used to prepay in full the amount outstanding under our term loan due December 2019, and to repay a portion of the amount outstanding under our revolving credit facility.

At December 31, 2018 and December 31, 2017, we were in compliance with all financial covenants.

Fiduciary Funds

As an intermediary, we hold funds, generally in a fiduciary capacity, for the account of third parties, typically as the result of premiums received from clients that are in transit to insurers and claims due to clients that are in transit from insurers. We report premiums, which are held on account of, or due from, clients as assets with a corresponding liability due to the insurers. Claims held by, or due to, us which are due to clients are also shown as both Fiduciary assets and Fiduciary liabilities on our balance sheets.

Fiduciary funds are generally required to be kept in regulated bank accounts subject to guidelines which emphasize capital preservation and liquidity; such funds are not available to service the Company's debt or for other corporate purposes. Notwithstanding the legal relationships with clients and insurers, the Company is entitled to retain investment income earned on fiduciary funds in accordance with industry custom and practice and, in some cases, as supported by agreements with insureds.

At both December 31, 2018 and 2017, we had fiduciary funds of \$3.3 billion.

Share Repurchase Program

The Company is authorized to repurchase shares, by way of redemption, and will consider whether to do so from time to time, based on many factors, including market conditions.

On April 20, 2016, the Willis Towers Watson board reconfirmed, reapproved and reauthorized the remaining portion of the Legacy Willis program to repurchase the Company's ordinary shares on the open market or by way of redemption or otherwise.

On November 10, 2016, the Company announced the board of directors approved an increase to the existing share repurchase program of \$1 billion. The \$1 billion increase was in addition to the remaining authority on the Legacy Willis program discussed in the preceding paragraph.

On February 23, 2018, the board of directors approved an increase to the existing share repurchase program of \$400 million.

At December 31, 2018, approximately \$399 million remained on the current repurchase authority. The maximum number of shares that could be repurchased based on the closing price of our ordinary shares on December 31, 2018 of \$151.86 was 2,627,728.

There are no expiration dates for these repurchase plans or programs. The following table presents specified information about the Company's repurchases of ordinary shares for the year ended December 31, 2018:

	Year ended December 31, 2018
Shares repurchased	3,918,689
Average price per share	\$153.54
Aggregate repurchase cost (excluding broker costs)	\$602 million

Capital Commitments

The Company has no material commitments for capital expenditures. Our capital expenditures for fixed assets and software for internal use were \$268 million for the year ended December 31, 2018. Expected capital expenditures for fixed assets and software for internal use are approximately \$250 million for the year ended December 31, 2019. We expect cash from operations to adequately provide for these cash needs.

Dividends

Total cash dividends of \$306 million were paid during the year ended December 31, 2018. In February 2019, the board of directors approved a quarterly cash dividend of \$0.65 per share (\$2.60 per share annualized rate), which will be paid on or about April 15, 2019 to shareholders of record as of March 31, 2019.

Off-Balance Sheet Arrangements and Contractual Obligations

Off-Balance Sheet Transactions

Apart from commitments, guarantees and contingencies, as disclosed herein and Note 14 — Commitments and Contingencies located within Item 8 of this Annual Report on Form 10-K and incorporated herein by reference, as of December 31, 2018, the Company had no off-balance sheet arrangements that have, or are reasonably likely to have, a current or future material effect on the Company's financial condition, results of operations or liquidity.

Contractual Obligations

The Company's material contractual obligations as of December 31, 2018 are as follows:

	Payments due by				
	Total	2019	2020-2021	2022-2023	After 2023
	(in millions)				
Debt and related interest obligations					
Senior notes	\$ 4,479	\$ 187	\$ 950	\$ 867	\$ 2,475
Revolving \$1.25 billion credit facility	130	—	—	130	—
Interest on senior notes	1,791	191	334	247	1,019
Total debt and related interest obligations	6,400	378	1,284	1,244	3,494
Operating leases	1,351	197	339	273	542
U.K. pension contractual obligations	359	71	139	106	43
Acquisition liabilities	86	63	23	—	—
Other contractual obligations (i)	90	40	11	12	27
Total contractual obligations	\$ 8,286	\$ 749	\$ 1,796	\$ 1,635	\$ 4,106

(i) Other contractual obligations include capital lease commitments, put option obligations and investment fund capital call obligations, the timing of which are included at the earliest point they may fall due.

Debt obligations and facilities — The Company's material debt and related interest obligations at December 31, 2018 are shown in the above table. The Company's mandatory debt repayment over the next 12 months is a scheduled repayment of its outstanding 7.000% senior notes due in 2019. The Company also has the right, at its option, to prepay indebtedness under the credit facility without further penalty and to redeem the senior notes by paying a 'make-whole' premium as provided under the applicable debt instrument.

Operating Leases — We lease office space and furniture under operating lease agreements with terms typically ranging from three to ten years. We have determined that there is not a large concentration of leases that will expire in any one fiscal year. Consequently, management anticipates that any increase in future rent expense on leases will be mainly market-driven. We also lease cars and selected computer equipment under operating lease agreements, although this activity is relatively insignificant. For acquired operating leases, intangible assets or liabilities have been recognized for the difference between the contractual cash obligations and the estimated market rates at the time of acquisition. These intangibles are amortized to rent expense but do not affect our contractual cash obligations. See further discussion in Item 8, Note 14 — Commitments and Contingencies in this Annual Report on Form 10-K.

Pension Contributions — The Company has agreed with Trustees of certain plans in the U.K. to contribute deficit funding and minimum ongoing accrual of benefits funding and presented those obligations in the table above. These obligations exclude employee contributions and any potential funding level contributions, which are dependent on future funding level assessments. There are no contractual obligations for our U.S. pension plans. Our total expected contributions to all qualified pension plans, including amounts presented above, for the year ending December 31, 2019 are projected to be \$162 million. Additionally, the Company expects to pay \$60 million in benefits directly to participants for the year ended 2019.

Tax Related Liabilities —

- *Uncertain Tax Positions* — The table above does not include liabilities for uncertain tax positions under ASC 740, *Income Taxes*. The settlement period for the \$49 million liability, which excludes interest and penalties, cannot be reasonably estimated since it depends on the timing and possible outcomes of tax examinations with various tax authorities.
- *Transition Tax* — The table above excludes a \$4 million transition tax payable resulting from U.S. Tax Reform. The Company elects to pay this one-time tax liability over an eight-year period without interest. Future guidance may be released which could also impact this estimate.

Guarantees, Acquisition Liabilities and Other Contractual Obligations — Information regarding guarantees and other contractual obligations and their impact on the financial statements is set forth in Item 8, Note 14 — Commitments and Contingencies in this Annual Report on Form 10-K.

Claims, Lawsuits and Other Proceedings, including Stanford Financial Group Litigation — Information regarding claims, lawsuits and other proceedings, including the Stanford Financial Group litigation, and their impact on the consolidated financial statements is set forth in Item 8, Note 14 — Commitments and Contingencies in this Annual Report on Form 10-K.

Non-GAAP Financial Measures

In order to assist readers of our consolidated financial statements in understanding the core operating results that Willis Towers Watson's management uses to evaluate the business and for financial planning purposes, we present the following non-GAAP measures and their most directly comparable U.S. GAAP measure:

Most Directly Comparable U.S. GAAP Measure	Non-GAAP Measure
Revenue	Adjusted revenue
As reported change	Constant currency change
As reported change	Organic change
Income from operations	Adjusted operating income
Net income	Adjusted EBITDA
Net income attributable to Willis Towers Watson	Adjusted net income
Diluted earnings per share	Adjusted diluted earnings per share
Income from operations before income taxes	Adjusted income before taxes
Provision for income taxes/U.S. GAAP tax rate	Adjusted income taxes/tax rate
Net cash from operating activities	Free cash flow

The Company believes that these measures are relevant and provide useful information widely used by analysts, investors and other interested parties in our industry to provide a baseline for evaluating and comparing our operating performance, and in the case of free cash flow, our liquidity results.

Additionally in 2018, we adopted ASC 606, which has a material impact on the amount, timing and classification of certain revenue and costs included in our consolidated financial statements. Since the Company adopted the guidance using the modified retrospective method, the 2018 financial information is presented on the basis of the ASC 606 adoption, however, the 2017 and prior comparative financial data has not been restated in accordance with the new standard. In an effort to help the readers of this Form 10-K better understand the impact that this guidance had on our non-GAAP measures, we have presented these measures as reported, as well as without the adoption of ASC 606, and a brief explanation of the changes.

Furthermore, the compensation for senior executives under certain long-term incentive programs is determined based on the results of our non-GAAP measures for the period 2016 through 2018 calculated without the adoption of ASC 606. Therefore, to ensure transparency, we consider it necessary to also provide the non-GAAP measures without the adoption of ASC 606. This will enable financial statement users the ability to evaluate management's performance based on the same elements utilized for performance-based remuneration.

Within the measures referred to as ‘adjusted’, we adjust for significant items which will not be settled in cash, or which we believe to be items that are not core to our current or future operations. These items include the following:

- Restructuring costs and transaction and integration expenses - Management believes it is appropriate to adjust for restructuring costs and transaction and integration expenses when they relate to a specific significant program with a defined set of activities and costs that are not expected to continue beyond a defined period of time, or one-time Merger-related transaction expenses. We believe the adjustment is necessary to present how the Company is performing, both now and in the future when these programs will have concluded.
- Gains and losses on disposals of operations - Adjustment to remove the gain or loss resulting from disposed operations.
- Pension settlement and curtailment gains and losses - Adjustment to remove significant pension settlement and curtailment gains and losses to better present how the Company is performing.
- Fair value adjustment to deferred revenue - Adjustment in 2016 to normalize for the deferred revenue written down as part of the purchase accounting for the Merger.
- Provisions for significant litigation - We will include provisions for litigation matters which we believe are not representative of our core business operations.
- Venezuelan currency devaluation - Foreign exchange losses incurred as a consequence of the Venezuelan government’s enforced changes to exchange rate mechanisms.
- Tax effects of internal reorganizations - Relates to the U.S. income tax expense resulting from the completion of internal reorganizations of the ownership of certain businesses that reduced the investments held by our U.S.-controlled subsidiaries.
- Tax effects of U.S. Tax Reform - Relates to the (1) U.S. income tax adjustment of deferred taxes upon the change in the federal corporate tax rate, (2) the impact of the one-time transition tax on accumulated foreign earnings net of foreign tax credits, and (3) the re-measurement of our net deferred tax liabilities associated with the U.S. tax on certain foreign earnings offset with a write-off of deferred tax assets that will no longer be realizable under U.S. Tax Reform.
- Deferred tax valuation allowance - Adjustment to remove the effects of a release of the valuation allowance against certain U.S. deferred tax assets.

These non-GAAP measures are not defined in the same manner by all companies and may not be comparable to other similarly titled measures of other companies. Non-GAAP measures should be considered in addition to, and not as a substitute for, the information contained within our consolidated financial statements.

Adjusted Revenue

We consider adjusted revenue to be an important financial measure, which is used to internally evaluate and assess our core operations and to benchmark our operating results against our competitors.

Adjusted revenue is defined as total revenue adjusted for the fair value adjustment for deferred revenue that would otherwise have been recognized but for the purchase accounting treatment of these transactions. U.S. GAAP accounting requires the elimination of this revenue.

We have included the reconciliation of total revenue to adjusted revenue in the table below, together with our reconciliation of the resulting revenue change to the constant currency and organic changes.

Constant Currency Change and Organic Change

We evaluate our revenue on an as reported (U.S. GAAP), constant currency and organic basis. We believe presenting constant currency and organic information provides valuable supplemental information regarding our comparable results, consistent with how we evaluate our performance internally.

- *Constant Currency Change* - Represents the year-over-year change in revenue excluding the impact of foreign currency fluctuations. To calculate this impact, the prior year local currency results are first translated using the current year monthly average exchange rates. The change is calculated by comparing the prior year revenue, translated at the current year monthly average exchange rates, to the current year as reported revenue, for the same period. We believe constant currency measures provide useful information to investors because they provide transparency to performance by excluding the effects that foreign currency exchange rate fluctuations have on period-over-period comparability given volatility in foreign currency exchange markets.
- *Organic Change* - Excludes the impact of fluctuations in foreign currency exchange rates as described above, the period-over-period impact of acquisitions and divestitures and the impact of adopting ASC 606 on 2018 revenue. We believe that excluding transaction-related items from our U.S. GAAP financial measures provides useful supplemental information to our investors, and it is important in illustrating what our core operating results would have been had we not included these transaction-related items, since the nature, size and number of these transaction-related items can vary from period to period.

The constant currency and organic change results, and a reconciliation from the reported results for consolidated revenue, are included in the 'Consolidated Revenue' section within this Form 10-K. These measures are also reported by segment in the 'Segment Revenue' section within this Form 10-K.

A reconciliation of the reported changes to the constant currency and organic changes for the years ended December 31, 2018 and 2017 is as follows:

	Years ended December 31,		As Reported Change	Components of Revenue Change (i)				
	2018	2017		Currency Impact	Constant Currency Change	Impact of ASC 606	Acquisitions/ Divestitures	Organic Change
	(\$ in millions)							
Revenue	\$ 8,513	\$ 8,202	4%	1%	3%	(1)%	(1)%	5%

(i) Components of revenue change may not add due to rounding.

A reconciliation of revenue to adjusted revenue and reconciliation of the reported changes to the constant currency and organic changes for the years ended December 31, 2017 and 2016 is as follows:

	Years ended December 31,		As Reported Change	Components of Change (i)			
	2017	2016		Currency Impact	Constant Currency Change	Acquisitions/ Divestitures	Organic Change
	(in millions)						
Revenue	\$ 8,202	\$ 7,887	4%	—%	4%	—%	5%
Fair value adjustment for deferred revenue	—	58					
Adjusted revenue	\$ 8,202	\$ 7,945	3%	—%	4%	—%	4%

(i) Components of revenue change may not add due to rounding.

Adjusted Operating Income

We consider adjusted operating income to be an important financial measure, which is used to internally evaluate and assess our core operations and to benchmark our operating results against our competitors.

Adjusted operating income is defined as income from operations adjusted for amortization, restructuring costs, transaction and integration expenses, and non-recurring items that, in management's judgment, significantly affect the period-over-period assessment of operating results.

Reconciliations of income from operations to adjusted operating income for the years ended December 31, 2018, 2017 and 2016 are as follows:

	Years Ended December 31,				
	2018		2017		2016
	As reported	Without adoption of ASC 606	As reported	As reported	
	(in millions)				
Income from operations	\$ 809	\$ 907	\$ 516	\$ 348	
Adjusted for certain items:					
Amortization	534	534	581	591	
Restructuring costs	—	—	132	193	
Transaction and integration expenses	202	202	269	177	
Provisions for significant litigation	—	—	11	50	
Fair value adjustment for deferred revenue	—	—	—	58	
Adjusted operating income	\$ 1,545	\$ 1,643	\$ 1,509	\$ 1,417	

Adjusted operating income without the adoption of ASC 606 increased for the year ended December 31, 2018 to \$1.6 billion, from \$1.5 billion for the year ended December 31, 2017, as a result of strong organic revenue growth from increased client demand across all segments. Additionally, on a year-to-date basis, salaries and benefits expense as a percentage of revenue decreased.

Adjusted operating income for the year ended December 31, 2017 increased to \$1.5 billion, from \$1.4 billion for the year ended December 31, 2016, an increase of \$92 million, or 6%. Income from operations increased by \$168 million, primarily due to revenue growth across all segments, partially offset by higher salaries and benefits costs. The year ended December 31, 2016 also included settlement income of £28 million (\$41 million) related to the Fine Arts, Jewellery and Specie team.

Adjusted EBITDA

We consider adjusted EBITDA to be an important financial measure, which is used to internally evaluate and assess our core operations, to benchmark our operating results against our competitors, and to evaluate and measure our performance-based compensation plans.

Adjusted EBITDA is defined as net income adjusted for provision for income taxes, interest expense, depreciation and amortization, restructuring costs, transaction and integration expenses, (gain)/loss on disposal of operations and non-recurring items that, in management's judgment, significantly affect the period-over-period assessment of operating results.

Reconciliations of net income to adjusted EBITDA for the years ended December 31, 2018, 2017 and 2016 are as follows:

	Years Ended December 31,				
	2018		2017		2016
	As reported	Without adoption of ASC 606	As reported	As reported	
	(in millions)				
NET INCOME	\$ 715	\$ 795	\$ 592	\$ 438	
Provision for/(benefit from) income taxes	136	154	(100)	(96)	
Interest expense	208	208	188	184	
Depreciation	208	235	203	178	
Amortization	534	534	581	591	
Restructuring costs	—	—	132	193	
Transaction and integration expenses	202	202	269	177	
Provisions for significant litigation	—	—	11	50	
Fair value adjustment for deferred revenue	—	—	—	58	
Pension settlement and curtailment gains and losses	24	24	36	—	
Loss/(gain) on disposal of operations	9	9	(13)	(2)	
Venezuela currency devaluation	—	—	2	—	
Adjusted EBITDA	<u>\$ 2,036</u>	<u>\$ 2,161</u>	<u>\$ 1,901</u>	<u>\$ 1,771</u>	

Adjusted EBITDA without the adoption of ASC 606 for the year ended December 31, 2018 was \$2.2 billion, compared to \$1.9 billion for the year ended December 31, 2017. This increase was primarily due to organic revenue growth across all segments, increased pension credits and lower foreign exchange losses on a year-to-date basis.

Adjusted EBITDA for the year ended December 31, 2017 was \$1.9 billion, compared to \$1.8 billion for the year ended December 31, 2016. The increase in Adjusted EBITDA for the year ended December 31, 2017 was primarily due to revenue growth across all segments, partially offset by higher salary and benefits costs. The year ended December 31, 2016 also included settlement income of £28 million (\$41 million) related to the Fine Arts, Jewellery and Specie team.

Adjusted Net Income and Adjusted Diluted Earnings Per Share

Adjusted net income is defined as net income attributable to Willis Towers Watson adjusted for amortization, restructuring costs, transaction and integration expenses, (gain)/loss on disposal of operations and non-recurring items that, in management's judgment, significantly affect the period-over-period assessment of operating results, the related tax effect of those adjustments and the tax effects of internal reorganizations and U.S. Tax Reform. This measure is used solely for the purpose of calculating adjusted diluted earnings per share.

Adjusted diluted earnings per share is defined as adjusted net income divided by the weighted-average number of shares of common stock, diluted. Adjusted diluted earnings per share is used to internally evaluate and assess our core operations and to benchmark our operating results against our competitors.

Reconciliations of net income attributable to Willis Towers Watson to adjusted diluted earnings per share for the years ended December 31, 2018, 2017 and 2016 are as follows:

	Years Ended December 31,				
	2018		2017		2016
	As reported	Without adoption of ASC 606	As reported	As reported	
(\$ and weighted-average shares in millions)					
NET INCOME ATTRIBUTABLE TO WILLIS TOWERS WATSON					
TOWERS WATSON	\$ 695	\$ 775	\$ 568	\$ 420	
Adjusted for certain items:					
Amortization	534	534	581	591	
Restructuring costs	—	—	132	193	
Transaction and integration expenses	202	202	269	177	
Provisions for significant litigation	—	—	11	50	
Fair value adjustment for deferred revenue	—	—	—	58	
Pension settlement and curtailment gains and losses	24	24	36	—	
Loss/(gain) on disposal of operations	9	9	(13)	(2)	
Venezuela currency devaluation	—	—	2	—	
Tax effect on certain items listed above (i)	(184)	(184)	(275)	(320)	
Tax effects of internal reorganizations	4	4	48	—	
Tax effect of U.S. Tax Reform	—	—	(204)	—	
Deferred tax valuation allowance	—	—	—	(69)	
Adjusted net income	\$ 1,284	\$ 1,364	\$ 1,155	\$ 1,098	
Weighted-average shares of common stock — diluted	132	132	136	138	
Diluted earnings per share, as reported from operations	\$ 5.27	\$ 5.87	\$ 4.18	\$ 3.04	
Adjusted for certain items (ii):					
Amortization	4.04	4.04	4.28	4.28	
Restructuring costs	—	—	0.97	1.40	
Transaction and integration expenses	1.53	1.53	1.98	1.28	
Provisions for significant litigation	—	—	0.08	0.36	
Fair value adjustment for deferred revenue	—	—	—	0.42	
Pension settlement and curtailment gains and losses	0.18	0.18	0.27	—	
Loss/(gain) on disposal of operations	0.07	0.07	(0.09)	(0.01)	
Venezuela currency devaluation	—	—	0.01	—	
Tax effect on certain items listed above (i)	(1.39)	(1.39)	(2.02)	(2.31)	
Tax effects of internal reorganizations	0.03	0.03	0.35	—	
Tax effect of U.S. Tax Reform	—	—	(1.50)	—	
Deferred tax valuation allowance	—	—	—	(0.50)	
Adjusted diluted earnings per share	\$ 9.73	\$ 10.33	\$ 8.51	\$ 7.96	

(i) The tax effect was calculated using an effective tax rate for each item.

(ii) Per share values and totals may differ due to rounding.

Our adjusted diluted earnings per share without the adoption of ASC 606 increased for the year ended December 31, 2018 as compared to the year ended December 31, 2017 primarily due to organic revenue growth across all segments, increased pension credits and lower foreign exchange losses on a year-to-date basis.

Our adjusted diluted earnings per share increased for the year ended December 31, 2017 as compared to the prior year primarily due to revenue growth across all segments partially offset by higher salary and benefits costs. The prior year also included settlement income of £28 million (\$41 million) related to the Fine Arts, Jewellery and Specie team.

Adjusted Income Before Taxes and Adjusted Income Taxes/Tax Rate

Adjusted income before taxes is defined as income from operations before income taxes adjusted for amortization, restructuring costs, transaction and integration expenses, (gain)/loss on disposal of operations and non-recurring items that, in management's judgment, significantly affect the period-over-period assessment of operating results. Adjusted income before taxes is used solely for the purpose of calculating the adjusted income tax rate.

Adjusted income taxes/tax rate is defined as the provision for income taxes adjusted for taxes on certain items of amortization, restructuring costs, transaction and integration expenses, (gain)/loss on disposal of operations, the tax effects of internal reorganizations and U.S. Tax Reform and non-recurring items that, in management's judgment, significantly affect the period-over-period assessment of operating results, divided by adjusted income before taxes. Adjusted income taxes is used solely for the purpose of calculating the adjusted income tax rate.

Management believes that the adjusted income tax rate presents a rate that is more closely aligned to the rate that we would incur if not for the reduction of pre-tax income for the adjusted items, the tax effects of our internal reorganizations, and the tax effect of U.S. Tax Reform, which are not core to our current and future operations.

Reconciliations of income from operations before income taxes to adjusted income before taxes and provision for/(benefit from) income taxes to adjusted income taxes for the years ended December 31, 2018, 2017 and 2016 are as follows:

	Years Ended December 31,					
	2018		2017		2016	
	As reported	Without adoption of ASC 606	As reported	As reported	As reported	As reported
	(\$ in millions)					
INCOME FROM OPERATIONS BEFORE INCOME TAXES	\$ 851	\$ 949	\$ 492	\$ 492	\$ 342	\$ 342
Adjusted for certain items:						
Amortization	534	534	581	581	591	591
Restructuring costs	—	—	132	132	193	193
Transaction and integration expenses	202	202	269	269	177	177
Provisions for significant litigation	—	—	11	11	50	50
Fair value adjustment for deferred revenue	—	—	—	—	58	58
Pension settlement and curtailment gains and losses	24	24	36	36	—	—
Loss/(gain) on disposal of operations	9	9	(13)	(13)	(2)	(2)
Venezuela currency devaluation	—	—	2	2	—	—
Adjusted income before taxes	\$ 1,620	\$ 1,718	\$ 1,510	\$ 1,510	\$ 1,409	\$ 1,409
Provision for/(benefit from) income taxes	\$ 136	\$ 154	\$ (100)	\$ (100)	\$ (96)	\$ (96)
Tax effect on certain items listed above (i)	184	184	275	275	320	320
Tax effects of internal reorganizations	(4)	(4)	(48)	(48)	—	—
Tax effect of U.S. Tax Reform	—	—	204	204	—	—
Deferred tax valuation allowance	—	—	—	—	69	69
Adjusted income taxes	\$ 316	\$ 334	\$ 331	\$ 331	\$ 293	\$ 293
U.S. GAAP tax rate	16.0%	16.2%	(20.5)%	(20.5)%	(28.1)%	(28.1)%
Adjusted income tax rate	19.5%	19.4%	21.9%	21.9%	20.8%	20.8%

(i) The tax effect was calculated using an effective tax rate for each item.

Our U.S. GAAP tax rate is lower than the U.S. statutory tax rate of 21%. Prior to U.S. Tax Reform, this was primarily due to our global mix of income and deductions in jurisdictions with high statutory income tax rates. For 2018, while the U.S. federal corporate income tax rate has decreased as a result of U.S. Tax Reform, certain deferred tax benefits realized as a result of both the Merger and deductions in jurisdictions with high statutory income tax rates have now been reduced as well. This offsets, in part, the benefit of U.S. Tax Reform, thus increasing our income tax rate.

Our U.S. GAAP tax rates without the adoption of ASC 606 were 16.2%, (20.5)% and (28.1)% for the years ended December 31, 2018, 2017 and 2016, respectively.

Our adjusted income tax rates without the adoption of ASC 606 were 19.4%, 21.9% and 20.8% for the years ended December 31, 2018, 2017 and 2016, respectively.

Free Cash Flow

Free cash flow is defined as cash flows from operating activities less cash used to purchase fixed assets and software for internal use. Free cash flow is a liquidity measure and is not meant to represent residual cash flow available for discretionary expenditures.

Reconciliations of cash flows from operating activities to free cash flow for the years ended December 31, 2018, 2017 and 2016 are as follows:

	Years ended December 31,			
	2018		2017	2016
	As reported	Without adoption of ASC 606	As reported	As reported
	(in millions)			
Cash flows from operating activities	\$ 1,288	\$ 1,338	\$ 862	\$ 933
Less: Additions to fixed assets and software for internal use	(268)	(268)	(300)	(218)
Free cash flow	\$ 1,020	\$ 1,070	\$ 562	\$ 715

The increase in free cash flows in 2018 as compared to 2017 primarily resulted from increased cash from operations and cash collections from our customers as compared to the prior year.

The decrease in free cash flows in 2017 as compared to 2016 primarily resulted from higher capital expenditures and higher discretionary compensation payments made in 2017 for the 2016 compensation cycle. These discretionary compensation payments were lower in 2016 because they included only a partial payment to Legacy Towers Watson colleagues due to the timing of the Merger.

Critical Accounting Policies and Estimates

These consolidated financial statements conform to U.S. GAAP, which requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Our estimates, judgments and assumptions are continually evaluated based on available information and experience. Because of the use of estimates inherent in the financial reporting process, actual results could differ from those estimates. The areas that we believe are critical accounting policies include revenue recognition, costs to fulfill broking contracts, valuation of billed and unbilled receivables from clients, discretionary compensation, income taxes, commitments, contingencies and accrued liabilities, pension assumptions, and goodwill and intangible assets. The critical accounting policies discussed below involve making difficult, subjective or complex accounting estimates that could have a material effect on our financial condition and results of operations. These critical accounting policies require us to make assumptions about matters that are highly uncertain at the time of the estimate or assumption. Different estimates that we could have used, or changes in estimates that are reasonably likely to occur, may have a material effect on our financial condition and results of operations.

Revenue Recognition (effective January 1, 2018)

We use significant estimates related to revenue recognition most commonly during our estimation of the transaction prices or where we recognize revenue over time on a proportional performance basis. A brief description of these policies and estimates is included below:

Estimation of transaction prices — This process occurs most frequently in certain broking transactions. In situations in which our fees are not fixed but are variable, we must estimate the likely commission per policy, taking into account the likelihood of cancellation before the end of the policy. For Medicare broking, Affinity arrangements and proportional treaty reinsurance broking, the commissions to which we will be entitled can vary based on the underlying individual insurance policies that are placed. For Medicare broking and proportional treaty reinsurance in particular, we base the estimates of transaction prices on supportable evidence from an analysis of past transactions, and only include amounts that are probable of being received or not refunded (referred to as applying ‘constraint’ under ASC 606). This results in us estimating a transaction price that may be significantly lower than the ultimate amount of commissions we may collect. The transaction price is then adjusted over time as we receive confirmation of our remuneration through receipt of treaty statements, or as other information becomes available.

Proportional performance basis over time recognition — Where we recognize revenue on a proportional performance basis, primarily in our consulting and outsourced administration arrangements, the amount we recognize is affected by a number of factors that can change the estimated amount of work required to complete the project, such as the staffing on the engagement and/or the level of client participation. Our periodic engagement evaluations require us to make judgments and estimates regarding the overall profitability and stages of project completion that, in turn, affect how we recognize revenue. We recognize a loss on an engagement when estimated revenue to be received for that engagement is less than the total estimated costs associated with the engagement. Losses are recognized in the period in which the loss becomes probable and the amount of the loss is reasonably estimable.

Costs to Fulfill Broking Contracts (effective January 1, 2018)

For our broking business, the Company must estimate the fulfillment costs incurred during the pre-placement of the broking contracts. These judgments include:

- which activities in the pre-placement process should be eligible for capitalization;
- the amount of time and effort expended on those pre-placement activities;
- the amount of payroll and related costs eligible for capitalization; and,
- the monthly or quarterly timing of underlying insurance and reinsurance policy inception dates.

Valuation of Billed and Unbilled Receivables from Clients

We maintain allowances for doubtful accounts to reflect estimated losses resulting from a client’s failure to pay for the services after the services have been rendered, which are recorded in other operating expenses. We also maintain allowances related to our unbilled receivables for such items as client disputes, the related provision for which is recorded as a reduction to revenue. Our allowance policy is based on the aging of the billed and unbilled client receivables and has been developed based on our write-off history. Facts and circumstances such as the average length of time the receivables are past due, general market conditions, current economic trends and our clients’ ability to pay may cause fluctuations in our valuation of billed and unbilled receivables.

Discretionary Compensation

Our compensation program includes a discretionary bonus that is determined by management and has historically been paid once per fiscal year in the form of cash and/or deferred stock units after our annual operating results are finalized.

An estimated annual bonus amount is initially developed at the beginning of each fiscal year in conjunction with our budgeting process. Estimated annual operating performance is reviewed quarterly and the discretionary annual bonus amount is then adjusted, if necessary, by management to reflect changes in the forecast of pre-bonus profitability for the year.

Income Taxes

The Company recognizes deferred tax assets and liabilities for the estimated future tax consequences of events attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating and capital loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using enacted rates in effect for the year in which the differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of changes in tax rates is recognized in the statement of comprehensive income in the period in which the change is enacted. Deferred tax assets are reduced through the establishment of a valuation allowance at such time as, based

on available evidence, it is more likely than not that the deferred tax assets will not be realized. The Company adjusts valuation allowances to measure deferred tax assets at the amount considered realizable in future periods if the Company's facts and assumptions change. In making such determinations, the Company considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax planning strategies and the results of recent financial operations. We place more reliance on evidence that is objectively verifiable.

Commitments, Contingencies and Accrued Liabilities

We have established provisions against various actual and potential claims, lawsuits and other proceedings relating principally to alleged errors and omissions in connection with the placement of insurance and reinsurance and consulting services in the ordinary course of business. Such provisions cover claims that have been reported but not paid and also claims that have been incurred but not reported. These provisions are established based on actuarial estimates together with individual case reviews and are believed to be adequate in the light of current information and legal advice. In certain cases, where a range of loss exists, we accrue the minimum amount in the range if no amount within the range is a better estimate than any other amount.

See Note 14 — Commitments and Contingencies in Item 8 within this Annual Report on Form 10-K.

Pension Assumptions

We maintain defined benefit pension plans for employees in several countries, with the most significant defined benefit plans offered in the U.S. and U.K. Our disclosures in Note 13 — Retirement Benefits contain additional information about our other less significant but material retirement plans. Within our critical accounting policy discussion, we have excluded analysis for plans outside of those noted in the description below, as any variance of recorded information based on management's estimates would be immaterial.

Descriptions of our U.S. and U.K. plans, which comprise 90% of our projected benefit obligations and 94% of our plan assets, are below:

United States

Legacy Willis – This plan was frozen in 2009. Approximately one-quarter of the Legacy Willis employees in the United States have a frozen accrued benefit under this plan.

Willis Towers Watson Plan – Substantially all U.S. employees are eligible to participate in this plan. Benefits are provided under a stable value pension plan design. The original stable value design came into effect on January 1, 2012. Existing plan participants as of July 1, 2017 earn benefits without having to make employee contributions, and all newly eligible employees after that date are required to contribute 2% of pay to participate in the plan.

United Kingdom

Legacy Willis – This plan covers approximately one-third of the Legacy Willis employees in the United Kingdom. The plan is now closed to new entrants. New employees in the United Kingdom are offered the opportunity to join a defined contribution plan.

Legacy Towers Watson – Benefit accruals earned under the Legacy Watson Wyatt defined benefit plan (predominantly pension benefits) ceased on February 28, 2015, although benefits earned prior to January 1, 2008 retain a link to salary until the employee leaves the Company. Benefit accruals earned under the legacy Towers Perrin defined benefit plan (predominantly lump sum benefits) were frozen on March 31, 2008. All participants now accrue defined contribution benefits.

Legacy Miller – The plan provides retirement benefits based on members' salaries at the point at which they ceased to accrue benefits under the scheme.

The determination of the Company's obligations and annual expense under the plans is based on a number of assumptions that, given the longevity of the plans, are long-term in focus. A change in one or a combination of these assumptions could have a material impact on our projected benefit obligation. However, certain of these changes, such as changes in the discount rates and other actuarial assumptions, are not recognized immediately in net income, but are instead recorded in other comprehensive income. The accumulated gains and losses not yet recognized in net income are amortized into net income as a component of the net periodic benefit cost/(income) generally based on the average working life expectancy of each of the plan's active participants to the extent that the net gains or losses as of the beginning of the year exceed 10% of the greater of the market-related value of plan assets or the projected benefit obligation.

Willis Towers Watson considers several factors prior to the start of each fiscal year when determining the appropriate annual assumptions, including economic forecasts, relevant benchmarks, historical trends, portfolio composition and peer company comparisons. These assumptions, used to determine our pension liabilities and pension expense are reviewed annually by senior management and changed when appropriate. A discount rate will be changed annually if underlying rates have moved, whereas an expected long-term return on assets will be changed less frequently as longer term trends in asset returns emerge or long-term target asset allocations are revised. To calculate the discount rate, we use the granular approach to determining service cost and interest cost. The expected rate of return assumptions for all plans are supported by an analysis of the weighted-average yield expected to be achieved with the anticipated makeup of investments. Other material assumptions include rates of participant mortality, and the expected long-term rate of compensation and pension increases.

Funding is based on actuarially determined contributions and is limited to amounts that are currently deductible for tax purposes, or as agreed to with the plan trustees for the U.K. plans. Since funding calculations are based on different measurements than those used for accounting purposes, pension contributions are not equal to net periodic benefit cost.

We recorded a combined \$173 million net periodic benefit income for our U.S. and U.K. plans for the year ended December 31, 2018. For the U.S. and U.K. plans, the following table presents our estimated net periodic benefit income for 2019 and the impact to both plans of a 0.25% increase and decrease to both the expected return on assets ('EROA') and the discount rate assumptions, and the projected benefit obligations as of December 31, 2018 and the impact of a 0.25% increase and decrease to the discount rates:

	Totals - current estimates	Impact of 0.25% change to EROA		Impact of 0.25% change to discount rate	
		Increase	Decrease	Increase	Decrease
Estimated 2019 (income):					
U.S. Plans	\$ (12)	\$ (9)	\$ 8	\$ (4)	\$ 7
U.K. Plans	\$ (135)	\$ (11)	\$ 11	\$ (1)	\$ 1
Projected benefit obligation at December 31, 2018:					
U.S. Plans	\$ 4,187	N/A	N/A	\$ (118)	\$ 124
U.K. Plans	\$ 3,666	N/A	N/A	\$ (169)	\$ 155

Economic factors and conditions often affect multiple assumptions simultaneously and the effects of changes in key assumptions are not necessarily linear.

Goodwill and Intangible Assets — Impairment Review

In applying the acquisition method of accounting for business combinations, amounts assigned to identifiable assets and liabilities acquired were based on estimated fair values as of the date of acquisition, with the remainder recorded as goodwill. Intangible assets are initially valued at fair value using generally accepted valuation methods appropriate for the type of intangible asset. Intangible assets with definite lives are amortized over their estimated useful lives and are reviewed for impairment if indicators of impairment arise. Intangible assets with indefinite lives are tested for impairment annually as of October 1, and whenever indicators of impairment arise. The fair value of the intangible assets is compared with their carrying value and an impairment loss would be recognized for the amount by which the carrying amount exceeds the fair value. Goodwill is tested for impairment annually as of October 1, and whenever indicators of impairment arise.

Goodwill is tested at the reporting unit level, and the Company had nine reporting units as of October 1, 2018.

During fiscal year 2018, the Company performed Step 1 of the two-step impairment test for all reporting units. Each of the reporting units' estimated fair values were in excess of their carrying values. To perform the test, we used valuation

techniques to estimate the fair value of a reporting unit that fall under income or market approaches. Under the discounted cash flow method, an income approach, the business enterprise value is determined by discounting to present value the terminal value which is calculated using debt-free after-tax cash flows for a finite period of years. Key estimates in this approach were internal financial projection estimates prepared by management, business risk, and expected rates of return on capital. The guideline company method, a market approach, develops valuation multiples by comparing our reporting units to similar publicly-traded companies. Key estimates and determination of valuation multiples rely on the selection of similar companies, obtaining forecast revenue and EBITDA estimates for the similar companies and selection of valuation multiples as they apply to the reporting unit characteristics. Under the similar transactions method, a market approach, actual transaction prices and operating data from companies deemed reasonably similar to the reporting units are used to develop valuation multiples as an indication of how much a knowledgeable investor in the marketplace would be willing to pay for the business units.

If the Company was required to perform Step 2, we would determine the implied fair value of the reporting unit used in Step 1 to all of the assets and liabilities of that reporting unit (including any recognized or unrecognized intangible assets) as if the reporting unit had been acquired in a business combination. Then the implied fair value of goodwill would be compared to the carrying amount of goodwill to determine if goodwill is impaired. For the year ended December 31, 2018, we did not record any impairment losses of goodwill or intangibles.

Recent Accounting Pronouncements

While we are still in the process of analyzing the various ASUs issued by the FASB, those which we believe will have a material impact to our financial statements are listed below. See Note 2 — Basis of Presentation, Significant Accounting Policies and Recent Accounting Pronouncements within Item 8 of this Form 10-K for additional information.

ASU No. 2016-02 'Leases'

In February 2016, the FASB issued ASU No. 2016-02, *Leases*, which requires a lessee to recognize in the statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term. Additional ASUs have since been issued which provide amended and additional guidance for the implementation of ASU No. 2016-02. All related guidance has been codified into, and is now known as, ASC 842, *Leases* ('ASC 842'). ASC 842 became effective for the Company at the beginning of its 2019 calendar year, at which time the Company adopted it.

As a result of finalizing and analyzing our inventory of lease agreements to determine the full impact this standard will have on our consolidated financial statements, processes and systems, the Company has determined the following:

- The Company will adopt the standard using the modified retrospective approach whereby it will recognize a transition adjustment at the effective date of ASC 842, January 1, 2019, rather than at the beginning of the earliest comparative period presented.
- We will reflect additional operating lease liabilities at the transition date of approximately \$1.2 billion, as well as right-of-use assets of approximately \$1.0 billion, and an immaterial adjustment to retained earnings.
- We have assessed the transition practical expedients available under the guidance and, in addition to selecting the modified retrospective transition approach as noted above, we have made the following elections:
 - Practical expedient package - We have elected this package, and therefore we will not reassess lease classification for our existing or expired leases, whether any existing or expired contracts contain a lease, or our treatment of any initial direct costs.
 - Hindsight practical expedient – We have elected this practical expedient, and therefore will not revisit our estimate of lease terms upon transition to ASC 842.
 - Short-term lease exemption – We have elected this exemption, and will therefore not recognize any right-of-use assets or liabilities for short-term leases (generally defined as having a term of 12 months or less) on our consolidated balance sheet.

- Separation of lease and non-lease components – We have elected the practical expedient to not separate the cash flows associated with lease and non-lease components in our lease accounting and resulting amounts recorded in our consolidated financial statements.
- Additionally, to prepare for the other required disclosures and new accounting treatment, the Company has implemented additional tools for its lease accounting and data collection processes, which were in place and effective on January 1, 2019.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Financial Risk Management

We are exposed to market risk from changes in foreign currency exchange rates and interest rates. In order to manage the risk arising from these exposures, we enter into a variety of interest rate and foreign currency derivatives. We do not hold financial or derivative instruments for trading purposes.

A discussion of our accounting policies for financial and derivative instruments is included in Note 2 — Basis of Presentation, Significant Accounting Policies and Recent Accounting Pronouncements and Note 10 — Derivative Financial Instruments within Item 8 of this Form 10-K.

Foreign Exchange Risk

Because of the large number of countries and currencies we operate in, movements in currency exchange rates may affect our results.

We report our operating results and financial condition in U.S. dollars. Our U.S. operations earn revenue and incur expenses primarily in U.S. dollars. Outside the United States, we predominantly generate revenue and expenses in the local currency with the exception of our London market operations which earn revenue in several currencies but incur expenses predominantly in Pounds sterling.

The table below gives an approximate analysis of revenue and expenses by currency in 2018.

	U.S. dollars	Pounds sterling	Euro	Other currencies
Revenue	54%	13%	16%	17%
Expenses ⁽ⁱ⁾	48%	21%	13%	18%

(i) These percentages exclude certain expenses for significant items which will not be settled in cash, or which we believe to be items that are not core to our current or future operations. These items include Merger-related amortization of intangible assets, restructuring costs and transaction and integration expenses.

Our principal exposures to foreign exchange risk arise from:

- our London market operations;
- intercompany lending between subsidiaries; and
- translation.

London market operations

The Company's primary foreign exchange risks in its London market operations arise from changes in the exchange rate between the U.S. dollar and Pound sterling as its London market operations earn the majority of its revenue in U.S. dollars but incur expenses predominantly in Pounds sterling, and may also hold significant foreign currency asset or liability positions on its balance sheet. In addition, the London market operations earn significant revenue in Euro and Japanese yen.

The foreign exchange risks in our London market operations are hedged to the extent that:

- forecast Pounds sterling expenses exceed Pounds sterling revenue, in which case the Company limits its exposure to this exchange rate risk by the use of forward contracts matched to forecast Pounds sterling outflows arising in the ordinary course of business. In addition, we are also exposed to foreign exchange risk on any net Pounds sterling asset or liability position in our London market operations;
- the U.K. operations also earn significant revenue in Euro and Japanese yen. The Company limits its exposure to changes in the exchange rates between the U.S. dollar and these currencies by the use of foreign exchange contracts matched to a proportion of forecast cash inflows in these specific currencies and periods; and
- Miller Insurance Services LLP, which is a Pound sterling functional entity, earns significant non-functional currency revenue, in which case the Company limits its exposure to exchange rate changes by the use of foreign exchange contracts matched to a proportion of forecast cash inflows in specific currencies and periods.

Intercompany lending between subsidiaries

The Company engages in intercompany borrowing and lending between subsidiaries, primarily through our in-house banking operations which give rise to foreign exchange exposure. The Company mitigates these risks through the use of short-term foreign currency forward and swap transactions that offset the underlying exposure created when the borrower and lender have different functional currencies.

Translation risk

Outside our U.S. and London market operations, we predominantly earn revenue and incur expenses in the local currency. When we translate the results and net assets of these operations into U.S. dollars for reporting purposes, movements in exchange rates will affect reported results and net assets. For example, if the U.S. dollar strengthens against the Euro, the reported results of our Eurozone operations in U.S. dollar terms will be lower.

The table below provides information about our foreign currency forward exchange contracts (expiring in 2020), which are sensitive to exchange rate risk. The table summarizes the U.S. dollar equivalent amounts of each currency bought and sold forward and the weighted-average contractual exchange rates. All forward exchange contracts mature within three years.

December 31, 2018	Settlement date before December 31,			
	2019		2020	
	Contract amount (millions)	Average contractual exchange rate	Contract amount (millions)	Average contractual exchange rate
Foreign currency sold				
U.S. dollars sold for Pounds sterling	\$ 243	\$1.36 = £1	\$ 98	\$1.37 = £1
Euros sold for U.S. dollars	48	€1 = \$1.20	15	€1 = \$1.23
Japanese yen sold for U.S. dollars	17	¥105.13 = \$1	4	¥104.11 = \$1
Euros sold for Pounds sterling	9	€1 = £1.13	4	€1 = £1.10
Total	\$ 317		\$ 121	
Fair value (i)	\$ (11)		\$ (4)	

(i) Represents the difference between the contract amount and the cash flow in U.S. dollars which would have been receivable had the foreign currency forward exchange contracts been entered into on December 31, 2018 at the forward exchange rates prevailing at that date.

Income earned within foreign subsidiaries outside of the United Kingdom is generally offset by expenses in the same local currency but the Company does have exposure to foreign exchange movements on the net income of these entities.

Interest Rate Risk

The Company has access to \$1.25 billion under a revolving credit facility expiring March 7, 2022. As of December 31, 2018, \$130 million was drawn on this facility. We are also subject to market risk from exposure to changes in interest rates based on our investing activities where our primary interest rate risk arises from changes in short-term interest rates in U.S. dollars, Pounds sterling and Euros.

As a result of our operating activities, we receive cash for premiums and claims which we deposit in short-term investments denominated in U.S. dollars and other currencies. We earn interest on these funds, which is included in our consolidated financial statements as interest income. These funds are regulated in terms of access and the instruments in which they may be invested, most of which are short-term in maturity. At December 31, 2018, we held \$1.4 billion of fiduciary funds invested in interest-bearing accounts. If short-term interest rates increased or decreased by 25 basis points, interest earned on these invested fiduciary funds, and therefore our interest income recognized, would increase or decrease by approximately \$4 million on an annualized basis.

The table below provides information about our financial instruments that are sensitive to changes in interest rates. The Company's previously-held interest rate swap derivatives matured during 2018, and it has not entered into additional interest rate hedging contracts as of December 31, 2018.

	Expected to mature before December 31,						Total	Fair Value (i)
	2019	2020	2021	2022	2023	Thereafter		
	(\$ in millions)							
Fixed rate debt								
Principal	\$ 187	—	\$ 950	\$ 617	\$ 250	\$ 2,475	\$ 4,479	\$ 4,519
Fixed rate payable	7.000%	—	4.684%	2.125%	4.625%	4.511%	4.329%	
Floating rate debt								
Principal	—	—	—	\$ 130	—	—	\$ 130	\$ 130
Variable rate payable (ii)	—	—	—	3.971%	—	—	3.971%	

(i) Represents the net present value of the expected cash flows discounted at current market rates of interest or quoted market rates as appropriate.

(ii) Represents the estimated interest rate payable.

Credit Risk and Concentrations of Credit Risk

Credit risk represents the loss that would be recognized at the reporting date if counterparties failed to perform as contracted. The Company currently does not anticipate non-performance by its counterparties. The Company generally does not require collateral or other security to support financial instruments with credit risk.

Concentrations of credit risk that arise from financial instruments exist for groups of customers or counterparties when they have similar economic characteristics that would cause their ability to meet contractual obligations to be similarly affected by changes in economic or other conditions. Financial instruments on the balance sheet that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents, fiduciary funds, accounts receivable and derivatives which are recorded at fair value.

The Company maintains a policy providing for the diversification of cash and cash equivalent investments and places such investments in an extensive number of financial institutions to limit the amount of credit risk exposure. These financial institutions are monitored on an ongoing basis for credit quality predominantly using information provided by credit agencies.

Concentrations of credit risk with respect to receivables are limited due to the large number of clients and markets in which the Company does business, as well as the dispersion across many geographic areas. Management does not believe that significant risk exists in connection with the Company's concentrations of credit as of December 31, 2018.

WILLIS TOWERS WATSON

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Willis Towers Watson Public Limited Company

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Willis Towers Watson Public Limited Company and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of comprehensive income, changes in equity and cash flows, for the two years then ended, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for the two years then ended, in conformity with accounting principles generally accepted in the United States of America.

The consolidated financial statements of the Company for the year ended December 31, 2016 (the "2016 financial statements"), before the effects of the adjustments to retrospectively apply the changes in accounting discussed in Note 2, before the effects of the retrospective adjustments to the disclosures for changes in the composition of reportable segments discussed in Note 5, and before the effects of the retrospective adjustments to the presentation of financial information for issuers and other guarantor subsidiaries as discussed in Note 22 to the financial statements, were audited by other auditors whose report, dated March 1, 2017, expressed an unqualified opinion on those statements. We have also audited the adjustments to the 2016 financial statements to retrospectively apply the changes in accounting related to net periodic pension and postretirement benefit cost and stock compensation as discussed in Note 2, the retrospective adjustments to the disclosures for changes in the composition of reportable segments as discussed in Note 5, and the retrospective adjustments to the presentation of financial information for issuers and other guarantor subsidiaries as discussed in Note 22 to the financial statements. In our opinion, such retrospective adjustments are appropriate and have been properly applied. However, we were not engaged to audit, review, or apply any procedures to the 2016 financial statements of the Company other than with respect to the retrospective adjustments, and accordingly, we do not express an opinion or any other form of assurance on the 2016 financial statements taken as a whole.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 27, 2019, expressed an unqualified opinion on the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 2 to the financial statements, the Company has changed its method of accounting for revenue from contracts with customers in the year ended December 31, 2018 due to adoption of Accounting Standard Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers*.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

/s/ **Deloitte & Touche LLP**

Philadelphia, PA

February 27, 2019

We have served as the Company's auditor since 2017.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

**To the Shareholders and Board of Directors of Willis Towers Watson Public Limited Company
Dublin, Ireland**

We have audited, before the effects of the adjustments to retrospectively apply the changes in accounting discussed in Note 2, the adjustment to the disclosures for changes in the composition of reportable segments discussed in Note 5 and the change in presentation of the financial information for issuers and other guarantor subsidiaries discussed in Note 22 to the consolidated financial statements, the consolidated statement of income, comprehensive income, stockholders' equity, and cash flows for the year ended December 31, 2016 of Willis Towers Watson Public Limited Company and subsidiaries (the "Company") (the 2016 consolidated financial statements before the effects of the retrospective adjustments discussed in Notes 2, 5 and 22 to the consolidated financial statements are not presented herein). These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provide a reasonable basis for our opinion.

In our opinion, such 2016 consolidated financial statements, before the effects of the adjustments to retrospectively apply the changes in accounting discussed in Note 2, the adjustment to the disclosures for changes in the composition of reportable segments discussed in Note 5 and the change in presentation of the financial information for issuers and other guarantor subsidiaries discussed in Note 22 to the consolidated financial statements, present fairly, in all material respects, the results of operations and cash flows of Willis Towers Watson Public Limited Company and subsidiaries for the year ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

We were not engaged to audit, review, or apply any procedures to the adjustments to retrospectively apply the changes in accounting discussed in Note 2, the adjustment to the disclosures for changes in the composition of reportable segments discussed in Note 5 and the change in presentation of the financial information for issuers and other guarantor subsidiaries discussed in Note 22 to the consolidated financial statements and, accordingly, we do not express an opinion or any other form of assurance about whether such retrospective adjustments are appropriate and have been properly applied. Those retrospective adjustments were audited by other auditors.

/s/ Deloitte LLP
London, United Kingdom
March 1, 2017

WILLIS TOWERS WATSON
Consolidated Statements of Comprehensive Income
(In millions of U.S. dollars, except per share data)

	Years ended December 31,		
	2018	2017	2016
Revenue	\$ 8,513	\$ 8,202	\$ 7,887
Costs of providing services			
Salaries and benefits	5,123	4,967	4,849
Other operating expenses	1,637	1,534	1,551
Depreciation	208	203	178
Amortization	534	581	591
Restructuring costs	—	132	193
Transaction and integration expenses	202	269	177
Total costs of providing services	<u>7,704</u>	<u>7,686</u>	<u>7,539</u>
Income from operations	809	516	348
Interest expense	(208)	(188)	(184)
Other income, net	250	164	178
INCOME FROM OPERATIONS BEFORE INCOME TAXES	<u>851</u>	<u>492</u>	<u>342</u>
(Provision for)/benefit from income taxes	(136)	100	96
NET INCOME	<u>715</u>	<u>592</u>	<u>438</u>
Income attributable to non-controlling interests	(20)	(24)	(18)
NET INCOME ATTRIBUTABLE TO WILLIS TOWERS WATSON	<u>\$ 695</u>	<u>\$ 568</u>	<u>\$ 420</u>
EARNINGS PER SHARE			
Basic earnings per share	<u>\$ 5.29</u>	<u>\$ 4.21</u>	<u>\$ 3.07</u>
Diluted earnings per share	<u>\$ 5.27</u>	<u>\$ 4.18</u>	<u>\$ 3.04</u>
NET INCOME	\$ 715	\$ 592	\$ 438
Other comprehensive (loss)/income, net of tax:			
Foreign currency translation	\$ (251)	\$ 295	\$ (353)
Defined pension and post-retirement benefits	(199)	14	(439)
Derivative instruments	<u>2</u>	<u>75</u>	<u>(75)</u>
Other comprehensive (loss)/income, net of tax, before non-controlling interests	<u>(448)</u>	<u>384</u>	<u>(867)</u>
Comprehensive income/(loss) before non-controlling interests	267	976	(429)
Comprehensive (income)/loss attributable to non-controlling interests	(20)	(37)	2
Comprehensive income/(loss) attributable to Willis Towers Watson	<u>\$ 247</u>	<u>\$ 939</u>	<u>\$ (427)</u>

See accompanying notes to the consolidated financial statements

WILLIS TOWERS WATSON
Consolidated Balance Sheets
(In millions of U.S. dollars, except share data)

	December 31, 2018	December 31, 2017
ASSETS		
Cash and cash equivalents	\$ 1,033	\$ 1,030
Fiduciary assets	12,604	12,155
Accounts receivable, net	2,379	2,246
Prepaid and other current assets	404	430
Total current assets	16,420	15,861
Fixed assets, net	942	985
Goodwill	10,465	10,519
Other intangible assets, net	3,318	3,882
Pension benefits assets	773	764
Other non-current assets	467	447
Total non-current assets	15,965	16,597
TOTAL ASSETS	\$ 32,385	\$ 32,458
LIABILITIES AND EQUITY		
Fiduciary liabilities	\$ 12,604	\$ 12,155
Deferred revenue and accrued expenses	1,647	1,711
Short-term debt and current portion of long-term debt	186	85
Other current liabilities	864	804
Total current liabilities	15,301	14,755
Long-term debt	4,389	4,450
Liability for pension benefits	1,170	1,259
Deferred tax liabilities	559	615
Provision for liabilities	540	558
Other non-current liabilities	429	544
Total non-current liabilities	7,087	7,426
TOTAL LIABILITIES	22,388	22,181
COMMITMENTS AND CONTINGENCIES		
REDEEMABLE NON-CONTROLLING INTEREST	26	28
EQUITY (i)		
Additional paid-in capital	10,615	10,538
Retained earnings	1,201	1,104
Accumulated other comprehensive loss, net of tax	(1,961)	(1,513)
Treasury shares, at cost, 17,519 in 2018 and 2017 and 40,000 shares, €1 nominal value, in 2018 and 2017	(3)	(3)
Total Willis Towers Watson shareholders' equity	9,852	10,126
Non-controlling interests	119	123
Total equity	9,971	10,249
TOTAL LIABILITIES AND EQUITY	\$ 32,385	\$ 32,458

(i) Equity includes (a) Ordinary shares \$0.000304635 nominal value; Authorized 1,510,003,775; Issued 128,921,530 (2018) and 132,139,581 (2017); Outstanding 128,921,530 (2018) and 132,139,581 (2017); (b) Ordinary shares, €1 nominal value; Authorized and Issued 40,000 shares in 2018 and 2017; and (c) Preference shares, \$0.000115 nominal value; Authorized 1,000,000,000 and Issued none in 2018 and 2017.

See accompanying notes to the consolidated financial statements

WILLIS TOWERS WATSON
Consolidated Statements of Cash Flows
(In millions of U.S. dollars)

	Years ended December 31,		
	2018	2017	2016
CASH FLOWS FROM OPERATING ACTIVITIES			
NET INCOME	\$ 715	\$ 592	\$ 438
Adjustments to reconcile net income to total net cash from operating activities:			
Depreciation	213	252	178
Amortization	534	581	591
Net periodic benefit of defined benefit pension plans	(163)	(91)	(93)
Provision for doubtful receivables from clients	8	17	36
Benefit from deferred income taxes	(115)	(285)	(244)
Share-based compensation	50	67	123
Non-cash foreign exchange loss/(gain)	26	77	(28)
Net loss/(gain) on disposal of operations	9	(13)	—
Other, net	8	(57)	27
Changes in operating assets and liabilities, net of effects from purchase of subsidiaries:			
Accounts receivable	68	(64)	(101)
Fiduciary assets	(839)	(1,167)	(249)
Fiduciary liabilities	839	1,167	249
Other assets	(22)	(128)	(233)
Other liabilities	(20)	(51)	174
Provisions	(23)	(35)	65
Net cash from operating activities	<u>1,288</u>	<u>862</u>	<u>933</u>
CASH FLOWS (USED IN)/FROM INVESTING ACTIVITIES			
Additions to fixed assets and software for internal use	(268)	(300)	(218)
Capitalized software costs	(54)	(75)	(85)
Acquisitions of operations, net of cash acquired	(36)	(13)	476
Net proceeds from sale of operations	4	57	(1)
Other, net	13	(4)	23
Net cash (used in)/from investing activities	<u>(341)</u>	<u>(335)</u>	<u>195</u>
CASH FLOWS USED IN FINANCING ACTIVITIES			
Net (payments)/borrowings on revolving credit facility	(754)	642	(237)
Senior notes issued	998	649	1,606
Proceeds from issuance of other debt	—	32	404
Debt issuance costs	(8)	(9)	(14)
Repayments of debt	(170)	(734)	(1,901)
Repurchase of shares	(602)	(532)	(396)
Proceeds from issuance of shares	45	61	63
Payments related to share cancellation	—	(177)	—
Payments of deferred and contingent consideration related to acquisitions	(50)	(65)	(67)
Cash paid for employee taxes on withholding shares	(30)	(18)	(13)
Dividends paid	(306)	(277)	(199)
Acquisitions of and dividends paid to non-controlling interests	(26)	(51)	(21)
Net cash used in financing activities	<u>(903)</u>	<u>(479)</u>	<u>(775)</u>
INCREASE IN CASH AND CASH EQUIVALENTS	44	48	353
Effect of exchange rate changes on cash and cash equivalents	(41)	112	(15)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	1,030	870	532
CASH AND CASH EQUIVALENTS, END OF YEAR	\$ 1,033	\$ 1,030	\$ 870

See accompanying notes to the consolidated financial statements

WILLIS TOWERS WATSON
Consolidated Statements of Changes in Equity
(In millions of U.S. dollars and number of shares in thousands)

	Shares outstanding	Additional paid-in capital	Retained earnings	Treasury shares	AOCL (i)	Total WTW shareholders' equity	Non- controlling interests	Total equity	Redeemable Non- controlling interest (ii)	Total
Balance as of January 1, 2016	68,625	\$ 1,672	\$ 1,597	\$ (3)	\$ (1,037)	\$ 2,229	\$ 131	\$ 2,360	\$ 53	
Shares repurchased	(3,170)	—	(300)	(96)	—	(396)	—	(396)	—	
Net income	—	—	420	—	—	420	11	431	7	\$ 438
Dividends (\$1.92 per share)	—	—	(265)	—	—	(265)	(9)	(274)	(5)	
Other comprehensive loss	—	—	—	—	(847)	(847)	(16)	(863)	(4)	\$ (867)
Issuance of shares under employee stock compensation plans	1,342	66	—	—	—	66	—	66	—	
Issuance of shares for acquisitions	69,500	8,686	—	—	—	8,686	—	8,686	—	
Replacement share-based compensation awards issued on acquisition	—	37	—	—	—	37	—	37	—	
Share-based compensation	—	123	—	—	—	123	—	123	—	
Additional non-controlling interests	—	7	—	—	—	7	1	8	—	
Foreign currency translation	—	5	—	—	—	5	—	5	—	
Balance as of December 31, 2016	136,297	\$ 10,596	\$ 1,452	\$ (99)	\$ (1,884)	\$ 10,065	\$ 118	\$ 10,183	\$ 51	
Adoption of ASU 2016-16	—	—	(3)	—	—	(3)	—	(3)	—	
Shares repurchased	(3,797)	—	(532)	—	—	(532)	—	(532)	—	
Shares canceled	(1,415)	(177)	(96)	96	—	(177)	—	(177)	—	
Net income	—	—	568	—	—	568	16	584	8	\$ 592
Dividends (\$2.12 per share)	—	—	(285)	—	—	(285)	(15)	(300)	(3)	
Other comprehensive income	—	—	—	—	371	371	7	378	6	\$ 384
Issuance of shares under employee stock compensation plans	1,055	62	—	—	—	62	—	62	—	
Share-based compensation	—	67	—	—	—	67	—	67	—	
Acquisition of non-controlling interests	—	—	—	—	—	—	(3)	(3)	(34)	
Foreign currency translation	—	(10)	—	—	—	(10)	—	(10)	—	
Balance as of December 31, 2017	132,140	\$ 10,538	\$ 1,104	\$ (3)	\$ (1,513)	\$ 10,126	\$ 123	\$ 10,249	\$ 28	
Adoption of ASC 606 (See Note 2)	—	—	317	—	—	317	—	317	—	
Shares repurchased	(3,919)	—	(602)	—	—	(602)	—	(602)	—	
Net income	—	—	695	—	—	695	18	713	2	\$ 715
Dividends (\$2.40 per share)	—	—	(313)	—	—	(313)	(24)	(337)	(2)	
Other comprehensive (loss)/income	—	—	—	—	(448)	(448)	2	(446)	(2)	\$ (448)
Issuance of shares under employee stock compensation plans	701	45	—	—	—	45	—	45	—	
Share-based compensation	—	27	—	—	—	27	—	27	—	
Foreign currency translation	—	5	—	—	—	5	—	5	—	
Balance as of December 31, 2018	128,922	\$ 10,615	\$ 1,201	\$ (3)	\$ (1,961)	\$ 9,852	\$ 119	\$ 9,971	\$ 26	

(i) Accumulated other comprehensive loss, net of tax ('AOCL').

(ii) The non-controlling interest is related to Max Matthiessen Holding AB.

See accompanying notes to the consolidated financial statements

WILLIS TOWERS WATSON
Notes to the Consolidated Financial Statements
(Tabular amounts are in millions of U.S. dollars, except per share data)

Note 1 — Nature of Operations

Willis Towers Watson plc is a leading global advisory, broking and solutions company that helps clients around the world turn risk into a path for growth. The Company has more than 43,000 employees and services clients in more than 140 countries. We design and deliver solutions that manage risk, optimize benefits, cultivate talent, and expand the power of capital to protect and strengthen institutions and individuals. We believe our broad perspective allows us to see the critical intersections between talent, assets and ideas - the dynamic formula that drives business performance.

We offer our clients a broad range of services to help them identify and control their risks, and to enhance business performance by improving their ability to attract, retain and engage a talented workforce. Our risk control services range from strategic risk consulting (including providing actuarial analysis), to a variety of due diligence services, to the provision of practical on-site risk control services (such as health and safety or property loss control consulting), as well as analytical and advisory services (such as hazard modeling and reinsurance optimization studies). We assist clients in planning how to manage incidents or crises when they occur. These services include contingency planning, security audits and product tampering plans. We help our clients enhance their business performance by delivering consulting services, technology and solutions that help them anticipate, identify and capitalize on emerging opportunities in human capital management as well as offer investment advice to help them develop disciplined and efficient strategies to meet their investment goals.

As an insurance broker, we act as an intermediary between our clients and insurance carriers by advising our clients on their risk management requirements, helping them to determine the best means of managing risk and negotiating and placing insurance with insurance carriers through our global distribution network. We operate a private Medicare exchange in the U.S. Through this exchange and those for active employees, we help our clients move to a more sustainable economic model by capping and controlling the costs associated with healthcare benefits.

We are not an insurance company, and therefore we do not underwrite insurable risks for our own account.

Note 2 — Basis of Presentation, Significant Accounting Policies and Recent Accounting Pronouncements

Basis of Presentation

The accompanying audited consolidated financial statements of Willis Towers Watson and our subsidiaries are presented in accordance with the rules and regulations of the SEC for annual reports on Form 10-K and are prepared in accordance with U.S. GAAP. All intercompany accounts and transactions have been eliminated in consolidation. We have reclassified certain prior year amounts to conform to the current year presentation.

Significant Accounting Policies

Principles of Consolidation — The accompanying consolidated financial statements include the accounts of Willis Towers Watson and those of our majority-owned and controlled subsidiaries. Intercompany accounts and transactions have been eliminated.

We determine whether we have a controlling financial interest in an entity by first evaluating whether the entity is a voting interest entity or a variable interest entity ('VIE'). Variable interest entities are entities that lack one or more of the characteristics of a voting interest entity and therefore require a different approach in determining which party involved with the VIE should consolidate the entity. With a VIE, either the entity does not have sufficient equity at risk to finance its activities without additional subordinated financial support from other parties, or the equity holders, as a group, do not have the power to direct the activities that most significantly impact its financial performance, the obligation to absorb expected losses of the entity, or the right to receive the expected residual returns of the entity. The entity that has a controlling financial interest in a VIE is referred to as the primary beneficiary and is required to consolidate the VIE.

Voting interest entities are entities that have sufficient equity and provide equity investors voting rights that give them the power to make significant decisions related to the entity's operations. The usual condition for a controlling financial interest in a voting interest entity is ownership of a majority voting interest. Accordingly, we consolidate our voting interest entity investments in which we hold, directly or indirectly, more than 50% of the voting rights.

Use of Estimates — These consolidated financial statements conform to U.S. GAAP, which requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities as well as disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods. Our estimates, judgments and assumptions are continually evaluated based on available information and experience. Because of the use of estimates inherent in the financial reporting process, actual results could differ from those estimates. Estimates are used when accounting for revenue recognition and related costs, the selection of useful lives of fixed and intangible assets, impairment testing, valuation of billed and unbilled receivables from clients, discretionary compensation, income taxes, pension assumptions, incurred but not reported claims, legal reserves and goodwill and intangible assets.

Going Concern — Management evaluates at each annual and interim period whether there are conditions or events, considered in the aggregate, that raise substantial doubt about our ability to continue as a going concern within one year after the date that the consolidated financial statements are issued. Management's evaluation is based on relevant conditions and events that are known and reasonably knowable at the date that the consolidated financial statements are issued. Management has concluded that there are no conditions or events, considered in the aggregate, that raise substantial doubt about our ability to continue as a going concern within one year after the date of these financial statements.

Fair Value of Financial Instruments — The carrying values of our cash and cash equivalents, accounts receivable, accrued expenses, revolving lines of credit and term loans approximate their fair values because of the short maturity and liquidity of those instruments. We consider the difference between carrying value and fair value to be immaterial for our senior notes. The fair value of our senior notes are considered Level 2 financial instruments as they are corroborated by observable market data. See Note 12 — Fair Value Measurements for additional information about our measurements of fair value.

Investments in Associates — Investments are accounted for using the equity method of accounting, included within other non-current assets in the consolidated balance sheets, if the Company has the ability to exercise significant influence, but not control, over the investee. Significant influence is generally deemed to exist if the Company has an equity ownership in the voting stock of the investee between 20 and 50 percent, although other factors, such as representation on the board of directors, the existence of substantive participation rights, and the impact of commercial arrangements, are considered in determining whether the equity method of accounting is appropriate. Under the equity method of accounting, the investment is carried at the cost of acquisition, plus the Company's equity in undistributed net income since acquisition, less any dividends received since acquisition.

The Company periodically reviews its investments in associates for which fair value is less than cost to determine if the decline in value is other than temporary. If the decline in value is judged to be other than temporary, the cost basis of the investment is written down to fair value. The amount of any write-down is included in the consolidated statements of comprehensive income.

Common Shares Split — On January 4, 2016, the Company effected a 1 to 2.6490 reverse share split to shareholders of record as of January 4, 2016. All share and per share information has been retroactively adjusted to reflect the reverse share split and show the new number of shares. See Note 3 — Merger, Acquisitions and Divestitures for additional information about our Merger and reverse share split.

Cash and Cash Equivalents — Cash and cash equivalents primarily consist of time deposits with original maturities of 90 days or less. In certain of the countries in which we conduct business, we are subject to capital adequacy requirements. Most significantly, Willis Limited, our U.K. brokerage subsidiary regulated by the Financial Conduct Authority, is currently required to maintain \$140 million in unencumbered and available financial resources, of which at least \$79 million must be in cash, for regulatory purposes. Term deposits and certificates of deposits with original maturities greater than 90 days are considered to be short-term investments. There is no restricted cash included in our cash and cash equivalents balance, as these amounts are included in fiduciary assets.

Fiduciary Assets and Liabilities — The Company collects premiums from insureds and, after deducting commissions, remits the premiums to the respective insurers. The Company also collects claims or refunds from insurers on behalf of insureds. Certain of our health and welfare benefits administration outsourcing agreements require us to hold funds on behalf of clients to pay obligations on their behalf. Each of these transactions is reported on our consolidated balance sheet as assets and corresponding liabilities unless such balances are due to or from the same party and a right of offset exists, in which case the balances are recorded net.

Fiduciary assets on the consolidated balance sheets are comprised of both fiduciary funds and fiduciary receivables:

Fiduciary Funds – Unremitted insurance premiums and claims are recorded within fiduciary assets on the consolidated balance sheets. Fiduciary funds are generally required to be kept in certain regulated bank accounts subject to guidelines

which emphasize capital preservation and liquidity. Such funds are not available to service the Company's debt or for other corporate purposes. Notwithstanding the legal relationships with insureds and insurers, the Company is entitled to retain investment income earned on fiduciary funds in accordance with industry custom and practice and, in some cases, as supported by agreements with insureds. The period for which the Company holds such funds is dependent upon the date the insured remits the payment of the premium to the Company, or the date the Company receives refunds from the insurers, and the date the Company is required to forward such payments to the insurer or insured, respectively.

Fiduciary receivables – Uncollected premiums from insureds and uncollected claims or refunds from insurers are recorded as fiduciary assets on the consolidated balance sheets. In certain instances, the Company advances premiums, refunds or claims to insurance underwriters or insureds prior to collection. Such advances are made from fiduciary funds and are reflected in the consolidated balance sheets as fiduciary assets.

Fiduciary liabilities on the consolidated balance sheets represent the obligations to remit all fiduciary funds and fiduciary receivables to insurers or insureds.

Accounts Receivable — Accounts receivable includes both billed and unbilled receivables and is stated at estimated net realizable values. Provision for billed receivables is recorded, when necessary, in an amount considered by management to be sufficient to meet probable future losses related to uncollectible accounts. Accrued and unbilled receivables are stated at net realizable value which includes an allowance for accrued and unbillable amounts. See Note 4 — Revenue for additional information about our accounts receivable.

Income Taxes — The Company recognizes deferred tax assets and liabilities for the estimated future tax consequences of events attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating and capital loss and tax credit carry forwards. Deferred tax assets and liabilities are measured using enacted rates in effect for the year in which the differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of changes in tax rates is recognized in the consolidated statement of comprehensive income in the period in which the change is enacted. Deferred tax assets are reduced through the establishment of a valuation allowance at such time as, based on available evidence, it is more likely than not that the deferred tax assets will not be realized. The Company adjusts valuation allowances to measure deferred tax assets at the amounts considered realizable in future periods if the Company's facts and assumptions change. In making such determinations, the Company considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax planning strategies and the results of recent financial operations. We place more reliance on evidence that is objectively verifiable.

Positions taken in the Company's tax returns may be subject to challenge by the taxing authorities upon examination. The Company recognizes the benefit of uncertain tax positions in the financial statements when it is more likely than not that the position will be sustained on the basis of the technical merits of the position assuming the tax authorities have full knowledge of the position and all relevant facts. Recognition also occurs upon either the lapse of the relevant statute of limitations, or when positions are effectively settled. The benefit recognized is the largest amount of tax benefit that is greater than 50 percent likely to be realized on settlement with the tax authority. The Company adjusts its recognition of uncertain tax benefits in the period in which new information is available impacting either the recognition or measurement of its uncertain tax positions. Such adjustments are reflected as increases or decreases to income taxes in the period in which they are determined.

The Company recognizes interest and penalties relating to unrecognized tax benefits within income taxes. See Note 7 — Income Taxes for additional information regarding the Company's income taxes.

Foreign Currency — Transactions in currencies other than the functional currency of the entity are recorded at the rates of exchange prevailing at the date of the transaction. Monetary assets and liabilities in currencies other than the functional currency are translated at the rates of exchange prevailing at the balance sheet date and the related transaction gains and losses are reported as income or expense in the consolidated statements of comprehensive income. Certain intercompany loans are determined to be of a long-term investment nature. The Company records transaction gains and losses from re-measuring such loans as other comprehensive income in the consolidated statements of comprehensive income.

Upon consolidation, the results of operations of subsidiaries and associates whose functional currency is other than the U.S. dollar are translated into U.S. dollars at the average exchange rates and assets and liabilities are translated at year-end exchange rates. Translation adjustments are presented as a separate component of other comprehensive income in the

financial statements and are included in net income only upon sale or liquidation of the underlying foreign subsidiary or associated company.

Derivatives — The Company uses derivative financial instruments for other than trading purposes to alter the risk profile of an existing underlying exposure. Interest rate swaps have been used to manage interest risk exposures. Forward foreign currency exchange contracts are used to manage currency exposures arising from future income and expenses. The fair values of derivative contracts are recorded in other assets and other liabilities in the consolidated balance sheets. The effective portions of changes in the fair value of derivatives that qualify for hedge accounting as cash flow hedges are recorded in other comprehensive income. Amounts are reclassified from other comprehensive income into earnings when the hedged exposure affects earnings. If the derivative is designated and qualifies as an effective fair value hedge, the changes in the fair value of the derivative and of the hedged item associated with the hedged risk are both recognized in earnings. The amount of hedge ineffectiveness recognized in earnings is based on the extent to which an offset between the fair value of the derivative and hedged item is not achieved. Changes in fair value of derivatives that do not qualify for hedge accounting, together with any hedge ineffectiveness on those that do qualify, are recorded in other income, net or interest expense as appropriate.

The Company evaluates whether its contracts include clauses or conditions which would be required to be separately accounted for at fair value as embedded derivatives. See Note 10 — Derivative Financial Instruments for additional information about the Company's derivatives.

Commitments, Contingencies and Provisions for Liabilities — The Company establishes provisions against various actual and potential claims, lawsuits and other proceedings relating principally to alleged errors and omissions in the ordinary course of business. Such provisions cover claims that have been reported but not paid and also unasserted claims and related legal fees. These provisions are established based on actuarial estimates together with individual case reviews and are believed to be adequate in light of current information and legal advice. In certain cases, where a range of loss exists, we accrue the minimum amount in the range if no amount within the range is a better estimate than any other amount. To the extent such losses can be recovered under the Company's insurance programs, estimated recoveries are recorded when losses for insured events are recognized and the recoveries are likely to be realized. Significant management judgment is required to estimate the amounts of such unasserted claims and the related insurance recoveries. The Company analyzes its litigation exposure based on available information, including consultation with outside counsel handling the defense of these matters, to assess its potential liability. These contingent liabilities are not discounted. See Note 14 — Commitments and Contingencies and Note 15 — Supplementary Information for Certain Balance Sheet Accounts for additional information about our commitments, contingencies and provisions for liabilities.

Share-Based Compensation — The Company has equity-based compensation plans that provide for grants of restricted stock units and stock options to employees and non-employee directors of the Company. Additionally, the Company has cash-settled share-based compensation plans that provide for grants to employees.

The Company expenses equity-based compensation, which is included in Salaries and benefits in the consolidated statements of comprehensive income, primarily on a straight-line basis over the requisite service period. The significant assumptions underlying our expense calculations include the fair value of the award on the date of grant, the estimated achievement of any performance targets and estimated forfeiture rates. The awards under equity-based compensation are classified as equity and are included as a component of equity on the Company's consolidated balance sheets, as the ultimate payment of such awards will not be achieved through use of the Company's cash or other assets.

For the cash-settled share-based compensation, the Company recognizes a liability for the fair-value of the awards as of each reporting date included within other non-current liabilities in the consolidated balance sheets. Expense is recognized over the service period, and as the liability is remeasured at the end of each reporting period, changes in fair value are recognized as compensation cost within Salaries and benefits in the consolidated statements of comprehensive income. The significant assumptions underlying our expense calculations include the estimated achievement of any performance targets and estimated forfeiture rates.

See Note 18 — Share-based Compensation for additional information about the Company's share-based compensation.

Fixed Assets — Fixed assets are stated at cost less accumulated depreciation. Expenditures for improvements are capitalized; repairs and maintenance are charged to expense as incurred. Depreciation is computed primarily using the straight-line method based on the estimated useful lives of assets.

Depreciation on internally-developed software is amortized over the estimated useful life of the asset ranging from 3 to 10 years. Buildings include assets held under capital leases and are depreciated over the lesser of 50 years, the asset lives or the lease terms. Depreciation on leasehold improvements is calculated over the lesser of the useful lives of the assets or the remaining lease terms. Depreciation on furniture and equipment is calculated based on a range of 3 to 10 years. Land is not depreciated.

Long-lived assets are tested for recoverability whenever events or changes in circumstance indicate that their carrying amounts may not be recoverable. An impairment loss is recognized if the carrying amount of a long-lived asset is not recoverable and exceeds its fair value. Recoverability is determined based on the undiscounted cash flows expected to result from the use and eventual disposition of the asset or asset group. Long-lived assets and certain identifiable intangible assets to be disposed of are reported at the lower of carrying amount or fair value less cost to sell. See Note 8 — Fixed Assets for additional information about our fixed assets.

Operating Leases — Rentals payable on operating leases are charged on a straight-line basis to Other operating expenses in the consolidated statements of comprehensive income over the lease terms. See Note 14 — Commitments and Contingencies for additional information about our operating leases.

Goodwill and Other Intangible Assets — In applying the acquisition method of accounting for business combinations, amounts assigned to identifiable assets and liabilities acquired were based on estimated fair values as of the date of acquisition, with the remainder recorded as goodwill. Intangible assets are initially valued at fair value using generally accepted valuation methods appropriate for the type of intangible asset. Intangible assets with definite lives are amortized over their estimated useful lives and are reviewed for impairment if indicators of impairment arise. Intangible assets with indefinite lives are tested for impairment annually as of October 1, and whenever indicators of impairment exist. The fair values of intangible assets are compared with their carrying values, and an impairment loss would be recognized for the amount by which a carrying amount exceeds its fair value.

Acquired intangible assets are amortized over the following periods:

	Amortization basis	Expected life (years)
Client relationships	In line with underlying cash flows	5 to 20
Software	In line with underlying cash flows or straight-line basis	4 to 7
Product	In line with underlying cash flows	17.5
Trademark and trade name	Straight-line basis	14 to 25
Favorable agreements	Straight-line basis	7
Management contracts	Straight-line basis	18

Goodwill is tested for impairment annually as of October 1, and whenever indicators of impairment exist. Goodwill is tested at the reporting unit level, and the Company had nine reporting units as of October 1, 2018. In the first step of the impairment test, the fair value of each reporting unit is compared with its carrying value, including goodwill. If the carrying value of a reporting unit exceeds its fair value, the amount of an impairment loss, if any, is calculated in the second step of the impairment test by comparing the implied fair value of reporting unit goodwill with the carrying amount of that goodwill. The Company's goodwill impairment tests for the years ended December 31, 2018 and 2017 have not resulted in any impairment charges. See Note 9 — Goodwill and Other Intangible Assets for additional information about our goodwill and other intangible assets.

Pensions — The Company has multiple defined benefit pension and defined contribution plans. The net periodic cost of the Company's defined benefit plans is measured on an actuarial basis using various methods and actuarial assumptions. The most significant assumptions are the discount rates (calculated using the granular approach to calculating service and interest cost) and the expected long-term rates of return on plan assets. Other material assumptions include rates of participant mortality, the expected long-term rates of compensation and pension increases and rates of employee termination. Gains and losses occur when actual experience differs from actuarial assumptions. If such gains or losses exceed ten percent of the greater of the market-related value of plan assets or the projected benefit obligation, the Company amortizes those gains or losses over the average remaining service period or average remaining life expectancy, as appropriate, of the plan participants. In accordance with U.S. GAAP, the Company records on its consolidated balance sheets the funded status of its pension plans based on the projected benefit obligation.

Contributions to the Company's defined contribution plans are recognized as incurred. Differences between contributions payable in the year and contributions actually paid are shown as either other assets or other liabilities in the consolidated balance sheets. See Note 13 — Retirement Benefits for additional information about our pensions.

Revenue Recognition (effective from January 1, 2018) — The following policies were effective for the 2018 fiscal year as a result of the adoption, on January 1, 2018, of ASC 606, *Revenue From Contracts With Customers* ('ASC 606'). The revenue recognition policies in effect prior to 2018 are reflected in the next section.

We recognize revenue from a variety of services, with broking, consulting and outsourced administration representing our most significant offerings. All other revenue streams, which can be recognized at either point in time or over time, are individually less significant and are grouped in Other in our revenue disaggregation disclosures in Note 4 — Revenue. These Other revenue streams represent approximately 5% of customer contract revenue for the year ended December 31, 2018.

Broking — Representing approximately 48% of customer contract revenue for the year ended December 31, 2018, in our broking arrangements, we earn revenue by acting as an intermediary in the placement of effective insurance policies. Generally, we act as an agent and view our client to be the party looking to obtain insurance coverage for various risks, or an employer or sponsoring organization looking to obtain insurance coverage for its employees or members. Also, we act as an agent in reinsurance broking arrangements where our client is the party looking to cede risks to the reinsurance markets. Our primary performance obligation under the majority of these arrangements is to place an effective insurance or reinsurance policy, but there can also be significant post-placement obligations in certain contracts to which we need to allocate revenue. The most common of these is for claims handling or call center support. The revenue recognition method for these, after the relative fair value allocation, is described further as part of the 'Outsourced Administration' description below.

Due to the nature of the majority of our broking arrangements, no single document constitutes the contract for ASC 606 purposes. Our services may be governed by a mixture of different types of contractual arrangements depending on the jurisdiction or type of coverage, including terms of business agreements, broker-of-record letters, statements of work or local custom and practice. This is then confirmed by the client's acceptance of the underlying insurance contract. Prior to the policy inception date, the client has not accepted nor formally committed to perform under the arrangement (i.e. pay for the insurance coverage in place). Therefore in the majority of broking arrangements, the contract date is the date the insurance policy incepts. However, in certain instances such as Medicare broking or Affinity arrangements, where the employer or sponsoring organization is our customer, client acceptance of underlying individual policy placements is not required, and therefore the date at which we have a contract with a customer is not dependent upon placement.

As noted, our primary performance obligations typically consist of only the placement of an effective insurance policy which precedes the inception date of the policy. Therefore, most of our fulfillment costs are incurred before we can recognize revenue, and are thus deferred during the pre-placement process. Where we have material post-placement services obligations, we estimate the relative fair value of the post-placement services using either the expected cost-plus-margin or the market assessment approach.

Fees for our broking services consist of commissions or fees negotiated in lieu of commissions. At times, we may receive additional income for performing these services from the insurance and reinsurance carriers' markets, which is collectively referred to as 'market derived income'. In situations in which our fees are not fixed but are variable, we must estimate the likely commission per policy, taking into account the likelihood of cancellation before the end of the policy. For Medicare broking, Affinity arrangements and proportional treaty reinsurance broking, the commissions to which we will be entitled can vary based on the underlying individual insurance policies that are placed. For Medicare broking and proportional treaty reinsurance broking in particular, we base the estimates of transaction prices on supportable evidence from an analysis of past transactions, and only include amounts that are probable of being received or not refunded (referred to as applying 'constraint' under ASC 606). This is an area requiring significant judgment and results in us estimating a transaction price that may be significantly lower than the ultimate amount of commissions we may collect. The transaction price is then adjusted over time as we receive confirmation of our remuneration through receipt of treaty statements, or as other information becomes available.

We recognize revenue for most broking arrangements as of a point in time at the later of the policy inception date or when the policy placement is complete, because this is viewed as the date when control is transferred to the client. For Medicare broking, we recognize revenue over time, as we stand ready under our agreements to place retiree Medicare coverage. For this type of broking arrangement, we recognize the majority of our placement revenue in the fourth quarter of the calendar year when the majority of the placement or renewal activity occurs.

Consulting — We earn revenue for advisory and consulting work that may be structured as different types of service offerings, including annual recurring projects, projects of a short duration or stand-ready obligations. Collectively, our consulting arrangements represent approximately 34% of customer contract revenue for the year ended December 31, 2018.

We have engagement letters with our clients that specify the terms and conditions upon which the engagements are based. These terms and conditions can only be changed upon agreement by both parties.

In assessing our performance obligations, our consulting work is typically highly integrated, with the various promised services representing inputs of the combined overall output. We view these arrangements to represent a single performance obligation. To the extent we do not integrate our services, as is the case with unrelated services that may be sourced from different areas of our business, we consider these separate performance obligations.

Fee terms can be in the form of fixed-fees (including fixed-fees offset by commissions), time-and-expense fees, commissions, per-participant fees, or fees based on assets under management. Payment is typically due on a monthly basis as we perform under the contract, and we are entitled to be reimbursed for work performed to date in the event of termination.

The majority of our revenue from these consulting engagements is recognized over time, either because our clients are simultaneously receiving and consuming the benefits of our services, or because we have an enforceable right to payment for performance rendered to date. Additionally, from time to time, we may be entitled to an additional fee based on achieving certain performance criteria. To the extent that we cannot estimate with reasonable assurance the likelihood that we will achieve the performance target, we will ‘constrain’ this portion of the transaction price and recognize it when or as the uncertainty is resolved.

We use different progress measures to determine our revenue depending on the nature of the engagement:

- *Annual recurring projects and projects of short duration.* These projects are typically straightforward and highly predictable in nature with either time-and-expense or fixed fee terms. Time-and-expense fees are recognized as hours or expenses are incurred using the ‘right to invoice’ practical expedient allowed under ASC 606. For fixed-fee arrangements, to the extent estimates can be made of the remaining work required under the arrangement, revenue is based upon the proportional performance method, using the value of labor hours compared to the estimated total value of labor hours. We believe that cost represents a faithful depiction of transfer of value because the completion of these performance obligations is based upon the professional services of employees of differing experience levels and thereby costs. It is appropriate that satisfaction of these performance obligations considers both the number of hours incurred by each employee and the value of each labor hour worked (as opposed to simply the hours worked).
- *Stand-ready obligations.* These projects consist of repetitive monthly or quarterly services performed consistently each period. As none of the activities provided under these services are performed at specified times and quantities, but at the discretion of each customer, our obligation is to stand ready to perform these services on an as-needed basis. These arrangements represent a ‘series’ performance obligation in accordance with ASC 606. Each time increment (i.e. each month or quarter) of standing ready to provide the overall services is distinct and the customer obtains value from each period of service independent of the other periods of service.

Where we recognize revenue on a proportional performance basis, the amount we recognize is affected by a number of factors that can change the estimated amount of work required to complete the project such as the staffing on the engagement and/or the level of client participation. Our periodic engagement evaluations require us to make judgments and estimates regarding the overall profitability and stage of project completion that, in turn, affect how we recognize revenue. We recognize a loss on an engagement when estimated revenue to be received for that engagement is less than the total estimated costs associated with the engagement. Losses are recognized in the period in which the loss becomes probable and the amount of the loss is reasonably estimable.

Outsourced Administration — We provide customized benefits outsourcing and co-sourcing solutions services in relation to the administration of defined benefit, defined contribution, and health and welfare plans. These plans are sponsored by our clients to provide benefits to their active or retired employees. Additionally, these services include operating call centers, and may include providing access to, and managing a variety of consumer-directed savings accounts. The operation of call centers and consumer-directed accounts can be provisioned as part of an ongoing administration or solutions service, or separately as part of a broking arrangement. The products and services available to all clients are the same, but the selections by the client can vary and portray customized products and services based on the customer’s specific needs. Our services

often include the use of proprietary systems that are configured for each of our clients' needs. In total, our outsourced administration services represent approximately 12% of customer contract revenue for the year ended December 31, 2018.

These contracts typically consist of an implementation phase and an ongoing administration phase:

- *Implementation phase.* Work performed during the implementation phase is considered a set-up activity because it does not transfer a service to the customer, and therefore costs are deferred during this phase of the arrangement. Since these arrangements are longer term in nature and subject to more changes in scope as the project progresses, our contracts generally provide that if the client terminates a contract, we are entitled to an additional payment for services performed through the termination date designed to recover our up-front costs of implementation.
- *Ongoing administration phase.* The ongoing administration phase includes a variety of plan administration services, system hosting and support services. More specifically, these services include data management, calculations, reporting, fulfillment/communications, compliance services, call center support, and in our health and welfare arrangements, annual onboarding and enrollment support. While there are a variety of activities performed, the overall nature of the obligation is to provide an integrated outsourcing solution to the customer. The arrangement represents a stand-ready obligation to perform these activities on an as-needed basis. The customer obtains value from each period of service, and each time increment (i.e., each month, or each benefits cycle in our health and welfare arrangements) is distinct and substantially the same. Accordingly, the ongoing administration services represent a 'series' in accordance with ASC 606 and are deemed one performance obligation.

We have engagement letters with our clients that specify the terms and conditions upon which the engagements are based. These terms and conditions can only be changed upon agreement by both parties. Fees for these arrangements can be fixed, per-participant-per-month, or in the case of call center services provided in conjunction with our broking services, an allocation based on commissions. Our fees are not typically payable until the commencement of the ongoing administration phase. However, in our health and welfare arrangements, we begin transferring services to our customers approximately four months prior to payments being due as part of our annual onboarding and enrollment work. Although our per-participant-per-month and commission-based fees are considered variable, they are typically predictable in nature, and therefore we generally do not 'constrain' any portion of our transaction price estimates. Once fees become payable, payment is typically due on a monthly basis as we perform under the contract, and are entitled to be reimbursed for work performed to date in the event of termination.

Revenue is recognized over time as the services are performed because our clients are simultaneously receiving and consuming the benefits of our services. For our health and welfare arrangements where each benefits cycle represents a time increment under the series guidance, revenue is recognized based on proportional performance. We use an input measure (value of labor hours worked) as the measure of progress. Given that the service is stand-ready in nature, it can be difficult to predict the remaining obligation under the benefits cycle. Therefore, the input measure is based on the historical effort expended each month, which is measured as labor cost. This results in slightly more revenue being recognized during periods of annual onboarding since we are performing both our normal monthly services and our annual services during this portion of the benefits cycle.

For all other outsourced administration arrangements where a month represents our time increment under the series guidance, we allocate transaction price to the month we are performing our services. Therefore, the amount recognized each month is the variable consideration related to that month plus the fixed monthly or annual fee. The fixed monthly or annual fee is recognized on a straight-line basis. Revenue recognition for these types of arrangements is therefore more consistent throughout the year.

Reimbursed expenses — Client reimbursable expenses, including those relating to travel, other out-of-pocket expenses and any third-party costs, are included in revenue, and an equivalent amount of reimbursable expenses is included in other operating expenses as a cost of revenue as incurred. Reimbursed expenses represented approximately 1% of customer contract revenue for the year ended December 31, 2018. Taxes collected from customers and remitted to government authorities are recorded net and are excluded from revenue.

Revenue Recognition (effective before January 1, 2018) — Revenue included insurance commissions, fees in lieu of commission, fees for consulting services rendered, hosted and delivered software, survey sales, interest and other income.

Revenue recognized in excess of billings was recorded as unbilled accounts receivable. Cash collections in excess of revenue recognized were recorded as deferred revenue until the revenue recognition criteria were met. Client reimbursable expenses,

including those relating to travel, other out-of-pocket expenses and any third-party costs, were included in revenue, and an equivalent amount of reimbursable expenses was included in other operating expenses as a cost of revenue. Taxes collected from customers and remitted to government authorities were recorded net and were excluded from revenue.

Commissions revenue. Brokerage commissions and fees negotiated in lieu of commissions were recognized at the later of the policy inception date or when the policy placement was complete. In situations in which our fees were not fixed and determinable due to the uncertainty of the commission fee per policy, we recognized revenue as the fees were determined. Commissions on additional premiums and adjustments were recognized when approved by or agreed between the parties and collectability was reasonably assured.

Consulting revenue. The majority of our consulting revenue consisted of fees earned from providing consulting services. We recognized revenue from these consulting engagements when hours were worked, either on a time-and-expense basis or on a fixed-fee basis, depending on the terms and conditions defined at the inception of an engagement with a client. We had engagement letters with our clients that specified the terms and conditions upon which the engagements were based. These terms and conditions could only be changed upon agreement by both parties. Individual billing rates were principally based on a multiple of salary and compensation costs.

Revenue for fixed-fee arrangements was based upon the proportional performance method to the extent estimates could be made of the remaining work required under the arrangement. If we did not have sufficient information to estimate proportional performance, we recognized the fees straight-line over the contract period. We typically had four types of fixed-fee arrangements: annual recurring projects, projects of a short duration, stand-ready obligations and non-recurring system projects.

- *Annual recurring projects and projects of short duration.* These projects were typically straightforward and highly predictable in nature. As a result, the project manager and financial staff were able to identify, as the project status was reviewed and bills were prepared monthly, the occasions when cost overruns could lead to the recording of a loss accrual.
- *Stand-ready obligations.* Where we were entitled to fees (whether fixed or variable based on assets under management or a per-participant per-month basis) regardless of the hours, we generally recognized this revenue on either a straight-line basis or as the variable fees were calculated.
- *Non-recurring system projects.* These projects were longer in duration and subject to more changes in scope as the project progressed. Certain software or outsourced administration contracts generally provided that if the client terminated a contract, we were entitled to an additional payment for services performed through termination designed to recover our up-front cost of implementation.

Revenue recognition for fixed-fee engagements was affected by a number of factors that changed the estimated amount of work required to complete the project such as changes in scope, the staffing on the engagement and/or the level of client participation. The periodic engagement evaluations required us to make judgments and estimates regarding the overall profitability and stage of project completion that, in turn, affected how we recognized revenue. We recognized a loss on an engagement when estimated revenue to be received for that engagement was less than the total estimated costs associated with the engagement. Losses were recognized in the period in which the loss became probable and the amount of the loss was reasonably estimable.

Hosted software. We develop various software programs and technologies that we provide to clients in connection with consulting services. In most instances, such software is hosted and maintained by us and ownership of the technology and rights to the related code remain with us. We deferred costs for software developed to be utilized in providing services to a client, but for which the client did not have the contractual right to take possession, during the implementation stage. We recognized these deferred costs from the go-live date, signaling the end of the implementation stage, until the end of the initial term of the contract with the client. We determined that the system implementation and customized ongoing administrative services were one combined service. Revenue was recognized over the service period, after the go-live date, on a straight-line basis. As a result, we did not recognize revenue during the implementation phase of an engagement.

Delivered software. We deliver software under arrangements with clients who take possession of our software. The maintenance associated with the initial software fees is a fixed percentage which enabled us to determine the stand-alone value of the delivered software separate from the maintenance. We recognized the initial software fees as software was delivered to the client, and we recognized the maintenance fees ratably over the contract period based on each element's

relative fair value. For software arrangements in which initial fees were received in connection with mandatory maintenance for the initial software license to remain active, we determined that the initial maintenance period was substantive. Therefore, we recognized the fees for the initial license and maintenance bundle ratably over the initial contract term, which was generally one year. Each subsequent renewal fee was recognized ratably over the contractually-stated renewal period.

Surveys. We collect, analyze and compile data in the form of surveys for our clients who have the option of participating in the survey. The surveys are published online via a web tool that provides simplistic functionality. We determined that the web tool was inconsequential to the overall arrangement. We recorded the survey revenue when the results were delivered online and made available to our clients who had a contractual right to the data. If the data was updated more frequently than annually, we recognized the survey revenue ratably over the contractually-stated period.

Interest income— Interest income is recognized as earned.

Other income— Other income includes gains on disposal of intangible assets, which primarily arise from settlements through enforcing non-compete agreements in the event of losing accounts through producer defection or the disposal of books of business.

Cost to obtain or fulfill contracts (effective from January 1, 2018)— Costs to obtain customers include commissions for brokers under specific agreements that would not be incurred without a contract being signed and executed. The Company has elected to apply the ASC 606 ‘practical expedient’ which allows us to expense these costs as incurred if the amortization period related to the resulting asset would be one year or less. The Company has no significant instances of contracts that would be amortized for a period greater than a year, and therefore has no contract costs capitalized for these arrangements.

Costs to fulfill include costs incurred by the Company that are expected to be recovered within the expected contract period. The costs associated with our system implementation activities and consulting contracts are recorded through time entry.

For our broking business, the Company must estimate the fulfillment costs incurred during the pre-placement of the broking contracts. These judgments include:

- which activities in the pre-placement process should be eligible for capitalization;
- the amount of time and effort expended on those pre-placement activities;
- the amount of payroll and related costs eligible for capitalization; and,
- the monthly timing of underlying insurance and reinsurance policy inception dates.

We amortize costs to fulfill over the period we receive the related benefits. For broking pre-placement costs, this is typically less than a year. In our system implementation and consulting arrangements, we include the likelihood of contract renewals in our estimate of the amortization period, resulting in most costs being amortized for a greater length of time than the initial contract term.

Recent Accounting Pronouncements

Not yet adopted

In February 2016, the FASB issued ASU No. 2016-02, *Leases*, which requires a lessee to recognize in the statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term. Additional ASUs have since been issued which provide amended and additional guidance for the implementation of ASU No. 2016-02. All related guidance has been codified into, and is now known as, ASC 842, *Leases* (‘ASC 842’). ASC 842 became effective for the Company at the beginning of its 2019 calendar year, at which time the Company adopted it.

As a result of finalizing and analyzing our inventory of lease agreements to determine the full impact this standard will have on the consolidated financial statements, processes and systems, the Company has determined the following:

- The Company will adopt the standard using the modified retrospective approach whereby it will recognize a transition adjustment at the effective date of ASC 842, January 1, 2019, rather than at the beginning of the earliest comparative period presented.
- We will reflect additional operating lease liabilities at the transition date of approximately \$1.2 billion, as well as right-of-use assets of approximately \$1.0 billion and an immaterial adjustment to retained earnings.
- We have assessed the transition practical expedients available under the guidance and, in addition to selecting the modified retrospective transition approach as noted above, we have made the following elections:
 - Practical expedient package - We have elected this package, and therefore we will not reassess lease classification for our existing or expired leases, whether any existing or expired contracts contain a lease, or our treatment of any initial direct costs.
 - Hindsight practical expedient – We have elected this practical expedient, and therefore will not revisit our estimate of lease terms upon transition to ASC 842.
 - Short-term lease exemption – We have elected this exemption, and will therefore not recognize any right-of-use assets or liabilities for short-term leases (generally defined as having a term of 12 months or less) on our consolidated balance sheet.
 - Separation of lease and non-lease components – We have elected the practical expedient to not separate the cash flows associated with lease and non-lease components in our lease accounting and resulting amounts recorded in our consolidated financial statements.
- Additionally, to prepare for the other required disclosures and new accounting treatment, the Company has implemented additional tools for its lease accounting and data collection processes, which were in place and effective on January 1, 2019.

In January 2017, the FASB issued ASU No. 2017-04, *Simplifying the Test for Goodwill Impairment*, which simplifies the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. In computing the implied fair value of goodwill under Step 2, current U.S. GAAP requires the performance of procedures to determine the fair value at the impairment testing date of assets and liabilities (including unrecognized assets and liabilities) following the procedure that would be required in determining the fair value of assets acquired and liabilities assumed in a business combination. Instead, the amendments under this ASU require the goodwill impairment test to be performed by comparing the fair value of a reporting unit with its carrying amount. An impairment charge would be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The ASU becomes effective for the Company on January 1, 2020. The amendments in this ASU should be applied on a prospective basis. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017, and the Company is still evaluating when to adopt this ASU. The Company does not expect an immediate impact to its consolidated financial statements upon adopting this ASU since the most recent Step 1 goodwill impairment test resulted in fair values in excess of carrying values for all reporting units at October 1, 2018.

In August 2017, the FASB issued ASU No. 2017-12, *Derivatives and Hedging: Targeted Improvements to Accounting for Hedging Activities*, which provides amendments under six specific objectives to better align risk management activities and financial reporting, and to simplify disclosure, presentation, hedging and the testing and measurement of ineffectiveness. The ASU became effective for the Company on January 1, 2019, at which time we adopted it. The Company does not believe adopting this ASU will have a material impact on its consolidated financial statements.

In February 2018, the FASB issued ASU No. 2018-02, *Income Statement - Reporting Comprehensive Income: Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*, which allows for a reclassification from accumulated other comprehensive income to retained earnings for 'stranded' tax effects (those tax effects of items within accumulated other comprehensive income resulting from the historical corporate income tax rate reduction) resulting from U.S. Tax Reform. The amendments within this ASU also require certain disclosures about stranded tax effects. The

ASU became effective for the Company on January 1, 2019, at which time we adopted it. This ASU did not have a material impact on our consolidated financial statements.

In August 2018, the FASB issued two ASU's as part of its disclosure framework project. The focus of this project is to improve the effectiveness of disclosures in the notes to the financial statements by facilitating clear communication of the information required by GAAP that is most important to users of an entity's financial statements. Both of these ASU's remove certain disclosure requirements and add or modify other requirements. The two ASU's are as follows:

- ASU No. 2018-13, *Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement* – effective for the Company on January 1, 2020, although early adoption is permitted immediately. Additionally, companies are permitted to immediately adopt the removal or modifications of disclosures as provided in this ASU, and adopt the additional disclosures on the effective date of the ASU. Certain provisions of the ASU must be adopted retrospectively, while others must be adopted prospectively. The Company is still assessing when and how it will adopt this ASU, but does not expect there to be a material impact to the notes to the consolidated financial statements.
- ASU No. 2018-14, *Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans* – this ASU will impact certain 10-K disclosures and will be effective for the Company for its 2020 Annual Report on Form 10-K. Early adoption is permitted and must be applied on a retrospective basis. The Company is still assessing when it will adopt this ASU, but does not expect there to be a material impact to the notes to the consolidated financial statements.

Adopted

In August 2018, the FASB issued ASU No. 2018-15, *Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*, which requires implementation costs, in a hosting arrangement that is a service contract, to be capitalized consistent with the rules in ASC 350-40, *Intangibles—Goodwill and Other—Internal-Use Software*. Costs incurred during the application development stage are to be capitalized and expensed according to their nature, while costs incurred during the preliminary project and post-implementation stages are to be expensed. This ASU also contains guidance with regard to the amortization period, impairment and presentation within the financial statements. The ASU is required to be adopted by the Company during 2020, however early adoption is allowed in an interim period before then, and may be applied retrospectively or prospectively to applicable costs on the Company's consolidated financial statements. The Company adopted this ASU prospectively during the fourth quarter of 2018, which began on October 1. The impact of this ASU is not material.

In August 2018, the SEC issued a final rule that amended certain of its disclosure requirements that have become redundant, duplicative or superseded in light of other SEC disclosure requirements, changes in U.S. GAAP, or other information that has become widely available. As part of the SEC's overall effort to improve the effectiveness of financial reporting requirements, the amendments contained in the final rule were intended to facilitate the disclosure of information to investors and simplify compliance without significantly altering the total mix of information provided to investors. Certain amendments affect this Annual Report on Form 10-K, while others were reflected initially in our Quarterly Report on Form 10-Q filed on November 2, 2018. Specifically, the final rule changes to annual requirements which have been reflected in this Form 10-K include the elimination of the ratio of earnings to fixed charges schedule, as well as changes to the market price information and geographic data contained in Parts I and II of this Form 10-K. None of these changes have a significant impact to our Form 10-K.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue From Contracts With Customers*. The new standard supersedes most current revenue recognition guidance and eliminates most industry-specific guidance. The ASU is based on the principle that an entity should recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The ASU also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to fulfill a contract. Entities had the option of using either a full retrospective or a modified retrospective approach for the adoption of the new standard. Additional ASUs have since been issued which provide further guidance, examples and technical corrections for the implementation of ASU No. 2014-09. All related guidance has been codified into, and is now known as, ASC 606. The guidance was effective for, and was adopted by, the Company as of January 1, 2018 using the modified retrospective method, and has a material impact on the consolidated financial statements and their accompanying

notes containing our 2018 information. A full description of each impact, as well as the new disclosures required by ASC 606, is discussed in Note 4 — Revenue.

In March 2017, the FASB issued ASU No. 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*, which requires entities to (1) disaggregate the current service-cost component from the other components of net benefit cost (the ‘other components’) and present it in the income statement with other current compensation costs for related employees and (2) present the other components elsewhere in the income statement and outside of income from operations if that subtotal is presented. In addition, the ASU requires entities to disclose the income statement lines that contain the other components if they are not presented or included in appropriately-described separate lines. The ASU became effective for the Company on January 1, 2018, and it has applied the standard retrospectively in this Annual Report on Form 10-K. As a result of adopting this ASU, the Company classified or reclassified net periodic pension and postretirement benefit credits totaling \$280 million, \$222 million and \$203 million for the years ended December 31, 2018, 2017 and 2016, respectively, from salaries and benefits expense to other income, net, in the consolidated statements of comprehensive income.

In May 2017, the FASB issued ASU No. 2017-09, *Stock Compensation - Scope of Modification Accounting*, which provides guidance on which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting. The ASU requires that an entity should account for the effects of a modification unless the fair value (or calculated value or intrinsic value, if used), vesting conditions and classification (as equity or liability) of the modified award are all the same as for the original award immediately before the modification. The ASU became effective for the Company on January 1, 2018 and will be applied prospectively to any award modified on or after this date. There is no immediate impact to the accompanying consolidated financial statements, until such time as an award may be modified in 2019 or beyond.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows - Classification of Certain Cash Receipts and Cash Payments*, which amends guidance on presentation and classification of eight specific cash flow issues with the objective of reducing diversity in practice. The ASU became effective for the Company on January 1, 2018 on a prospective basis. While there was no impact to the consolidated statement of cash flows for the year ended December 31, 2018, the Company will reflect the new guidance prospectively as applicable transactions occur.

Note 3 — Merger, Acquisitions and Divestitures

The following paragraphs describe significant transactions during the three year period ending December 31, 2018. There have been other less significant transactions during this time period which have not been discussed.

Merger

On January 4, 2016, pursuant to the Agreement and Plan of Merger, dated June 29, 2015, as amended on November 19, 2015, between Willis, Towers Watson, and Citadel Merger Sub, Inc., a wholly-owned subsidiary of Willis formed for the purpose of facilitating this transaction ('Merger Sub'), Merger Sub merged with and into Towers Watson, with Towers Watson continuing as the surviving corporation and as a wholly-owned subsidiary of Willis.

Towers Watson was a leading global professional services firm operating throughout the world, dating back more than 100 years. The Merger allows the combined firm to go to market with complementary strategic product and services offerings.

At the effective time of the Merger (the 'Effective Time'), each issued and outstanding share of Towers Watson common stock (the 'Towers Watson shares'), was converted into the right to receive 2.6490 validly issued, fully paid and nonassessable ordinary shares of Willis (the 'Willis ordinary shares'), \$0.000115 nominal value per share, other than any Towers Watson shares owned by Towers Watson, Willis or Merger Sub at the Effective Time and the Towers Watson shares held by stockholders who are entitled to and who properly exercised dissenter's rights under Delaware law.

The Merger was accounted for using the acquisition method of accounting, with Willis considered the accounting acquirer of Towers Watson.

The table below presents the final calculation of aggregate Merger consideration.

	<u>January 4, 2016</u>
Number of shares of Towers Watson common stock outstanding as of January 4, 2016	69 million
Exchange ratio	2.6490
Number of Willis Group Holdings shares issued (prior to reverse stock split)	184 million
Willis Group Holdings price per share on January 4, 2016	\$ 47.18
Fair value of 184 million Willis ordinary shares	\$ 8,686
Value of equity awards assumed	37
Aggregate Merger consideration	<u>\$ 8,723</u>

The Company acquired cash and cash equivalents of \$476 million as a result of the Merger.

Acquisitions

Alston Gayler Acquisition

On December 21, 2018, the Company, through its majority-owned subsidiary, Miller, completed the transaction to acquire Alston Gayler, a U.K.-based insurance and reinsurance broker, for total consideration of \$67 million. Cash consideration of \$35 million was paid upon completion of the acquisition, with the remaining \$32 million deferred consideration to be paid in equal installments on the first, second and third anniversaries of the date of acquisition.

The Company has preliminarily recognized \$36 million of intangible assets, primarily arising from client relationships, and \$24 million of goodwill. The purchase price allocation as of the acquisition date and our accounting for the related tax assets and liabilities is not yet complete.

Divestitures

Related Party Transaction - In the third quarter of 2017, the Company divested its Global Wealth Solutions business through a sale to an employee of the business. As part of that transaction, we financed a \$50 million note payable from the employee to purchase the business. The note amortizes over 10 years, bears interest at a weighted-average rate of 3% and is guaranteed by \$3 million in assets. Following the sale, employees of this business are no longer employees of the Company, and the purchasing employee is no longer considered a related party. The current and non-current portions of the note receivable are

included in the tables found in Note 15 — Supplementary Information for Certain Balance Sheet Accounts to these consolidated financial statements as Other current assets and Other non-current assets.

2017 Cumulative Divestiture Impact - Including the divestiture of Global Wealth Solutions, we sold five businesses during the second half of 2017. For the year ended December 31, 2017, the total gain recognized related to business disposals was \$13 million, which was recorded in Other income, net on the accompanying consolidated statements of comprehensive income. Results from these disposals prior to the sales represented \$54 million of revenue and \$13 million of operating income for the year ended December 31, 2017.

Note 4 — Revenue

As of January 1, 2018, the Company adopted ASC 606. The adoption of this new guidance had a material impact to the amounts and classification of certain balances within our consolidated financial statements and disclosures in the accompanying notes.

We adopted ASC 606 using the modified retrospective approach, and elected to apply the following 'practical expedients' during adoption:

- We elected to apply the new standard only to contracts that were not completed as of the transition date. This had the net effect of reducing revenue recognized under ASC 606 due to the change in method in our Health and Benefits broking business. See a further discussion and quantification for the annual results below.
- We elected to reflect the aggregate effect of all modifications made to contracts prior to the transition date, January 1, 2018, rather than retrospectively restating the contracts for each of these modifications.

We recognized the cumulative effect of initially applying ASC 606 as an adjustment to the opening balance of retained earnings. The comparative periods included within this Annual Report on Form 10-K have not been restated and continue to be reported under the accounting standards in effect for those periods.

The cumulative effect of the changes made to our consolidated January 1, 2018 balance sheet for the adoption of ASC 606 were as follows:

Balance Sheet	Balance at December 31, 2017	Adjustments due to ASC 606	Balance at January 1, 2018
ASSETS			
Accounts receivable, net	\$ 2,246	\$ 309 <i>a</i>	\$ 2,555
Prepaid and other current assets	430	89 <i>b</i>	519
Fixed assets, net	985	(83) <i>c</i>	902
Other non-current assets	447	39 <i>c</i>	486
LIABILITIES			
Deferred revenue and accrued expenses	1,711	(74) <i>d</i>	1,637
Deferred tax liabilities	615	99 <i>e</i>	714
Provision for liabilities	558	12 <i>f</i>	570
EQUITY			
Retained earnings	1,104	317 <i>g</i>	1,421

In accordance with the modified retrospective adoption requirements of ASC 606, the following disclosures represent the impact of adoption on our consolidated statement of comprehensive income, balance sheet and statement of cash flows:

Statement of Comprehensive Income	Year Ended December 31, 2018		
	As Reported	Balances Without Adoption of ASC 606	Effect of Change
Revenue	\$ 8,513	\$ 8,613	\$ (100) <i>h</i>
Costs of providing services			
Salaries and benefits	5,123	5,098	25 <i>i</i>
Depreciation	208	235	(27) <i>i</i>
Income from operations	809	907	(98)
INCOME FROM OPERATIONS BEFORE INCOME TAXES	851	949	(98)
Provision for income taxes	(136)	(154)	18 <i>j</i>
NET INCOME	715	795	(80)
NET INCOME ATTRIBUTABLE TO WILLIS TOWERS WATSON	695	775	(80)

EARNINGS PER SHARE			
Basic earnings per share	\$ 5.29	\$ 5.90	\$ (0.61)
Diluted earnings per share	\$ 5.27	\$ 5.87	\$ (0.60)

Balance Sheet	As of December 31, 2018		
	As Reported	Balances Without Adoption of ASC 606	Effect of Change
ASSETS			
Accounts receivable, net	\$ 2,379	\$ 2,198	\$ 181 <i>a</i>
Prepaid and other current assets	404	302	102 <i>b</i>
Fixed assets, net	942	1,051	(109) <i>c</i>
Other non-current assets	467	419	48 <i>c</i>
LIABILITIES			
Deferred revenue and accrued expenses	1,647	1,754	(107) <i>d</i>
Other current liabilities	864	863	1 <i>e</i>
Deferred tax liabilities	559	479	80 <i>e</i>
Provision for liabilities	540	529	11 <i>f</i>
EQUITY			
Retained earnings	1,201	964	237 <i>g</i>

Statement of Cash Flows	Year Ended December 31, 2018			
	As Reported	Balances Without Adoption of ASC 606	Effect of Change	
Net cash from operating activities	\$ 1,288	\$ 1,338	\$ (50) k	
Capitalized software costs	(54)	(104)	50 k	

Explanation of Changes

The adoption of ASC 606 had the following impacts to our balance sheets at January 1, 2018 and December 31, 2018:

- Accounts receivable, net, now includes receivables that have been billed, not yet billed and short-term contract assets. This adjustment is the result of the cumulative adjustments to revenue that have not yet been collected from our customers, but are expected to be collected within the next twelve months. The most significant increases to this balance result from revenue acceleration under ASC 606 for Medicare and proportional treaty broking commissions.
- Prepaid and other current assets include the impact of costs deferred in connection with our broking pre-placement activities. These costs are being deferred while the related pre-placement work is performed, and amortized as the related revenue is recognized, typically upon policy inception. Since the amortization period associated with these fulfillment costs is less than one year, these deferred costs have been classified as a current asset.
- Prior to the adoption of ASC 606, costs that we deferred related to certain system implementation activities had been included in fixed assets, net. These costs, adjusted based on the guidance in ASC 606, have now been included in other non-current assets. Additionally we have included less significant impacts of adjustments to deferred tax assets and have classified non-current contract assets within non-current assets.
- Deferred revenue has been adjusted primarily to reflect revenue acceleration in our Medicare broking business. Additional adjustments were included to accelerate the license component of certain software arrangements and to net deferred revenue with contract assets.
- Other current liabilities, which include current taxes payable, and deferred tax liabilities, have been adjusted for the tax effects of the individual changes resulting from the adoption of ASC 606. The income tax expense was calculated based on the U.S. and foreign statutory rates applicable to adjustments made. Where applicable, a U.S. statutory rate of 21% was used.
- Provision for liabilities has been adjusted for additional reserves for long-term post-placement obligations in our broking business.
- Retained earnings has been adjusted for the net impact of the adoption of ASC 606. See the discussion of the significant pre-tax changes by revenue in the following section.

The following changes are now reflected in our consolidated statements of comprehensive income for the year ended December 31, 2018. Each description also includes a discussion of the impact to retained earnings as of the adoption date.

	Retained Earnings Increase/(Decrease) at January 1, 2018	Increase/(Decrease) for the Year Ended December 31, 2018
Revenue adjustments		
Medicare broking	\$ 311	\$ (38)
Proportional treaty reinsurance broking	50	2
Health and benefits broking	—	(57)
Other adjustments	28	(7)
Total adjustments related to revenue	389	(100)
Cost adjustments		
System implementation activities	(46)	6
Other cost adjustments	75	(8)
Total adjustments related to costs	29	(2)
Tax effect	(101)	(18)
Total net adjustments	\$ 317	\$ (80)

h. Revenue was adjusted for the following significant changes:

- Medicare broking* — The majority of revenue recognition for this offering, within our Individual Marketplace business, has moved from monthly ratable recognition over the policy period, to recognition upon placement of the policy. Consequently, the Company will now recognize approximately two-thirds of one calendar year of expected commissions during its fourth quarter of the preceding calendar year. The remainder of the revenue is recognized consistently with methods used prior to the adoption of ASC 606. Therefore, at the adoption date, we have reflected a \$271 million pre-tax increase to retained earnings for the portion of the revenue that would otherwise have been recognized during our 2018 calendar year since our earnings process was largely completed during the fourth quarter of 2017. Additionally, we have reflected a \$40 million pretax adjustment to increase retained earnings related to previously deferred contingent revenue from placements made prior to 2018 because the earnings process was complete under ASC 606. During the year ended December 31, 2018, the accounting for this revenue stream under ASC 606 represented a reduction of revenue from ASC 605, *Revenue Recognition* ('ASC 605') accounting methods of \$38 million.
- Proportional treaty reinsurance broking* — The revenue recognition for proportional treaty reinsurance broking commissions, within our Investment, Risk and Reinsurance segment, has moved from recognition upon the receipt of the monthly or quarterly treaty statements from the ceding insurance carriers, to the recognition of an estimate of expected commissions upon the policy effective date. Since the majority of revenue recognized historically based on these monthly or quarterly statements was received over a two-year period, we reflected a \$50 million pretax increase to retained earnings at the adoption date for the portion of revenue that would otherwise have been recognized during our 2018 calendar year related to policies effective in 2017 or prior years. For the year ended December 31, 2018, this accounting change resulted in a revenue increase of \$2 million related to this adjustment.
- Health and benefits broking* — Revenue for certain Health and Benefits broking arrangements, in our Human Capital and Benefits segment, will now be recognized evenly over the year to reflect the nature of the ongoing obligations to our customers as well as receipt of the monthly commissions. These contracts are monthly or annual in nature, and are considered complete as of the transition date. Therefore, no retained earnings adjustment is required. The total effect to revenue as a result of this accounting change for the year ended December 31, 2018 was a decrease of \$57 million.
- Other adjustments* — Certain other revenue changes with individually less significant adjustments were made to retained earnings as of the adoption date totaling a net \$28 million. The cumulative change to revenue for the year ended December 31, 2018 for other revenue streams not discussed above resulting from the ASC 606 adoption was a decrease of \$7 million.

- i. Salaries and benefits and depreciation expense have been impacted by the guidance for deferred costs. Our accounting for these deferred costs has changed for certain revenue streams with system implementation activities, and other types of arrangements with associated costs, that now meet the criteria for cost deferral under ASC 606:
- *System implementation activities* — For those portions of the business that previously deferred costs, the length of time over which we amortize those costs will extend to a longer estimated contract term. For 2017 and prior years, these costs were amortized over a typical period of 3-5 years in accordance with the initial stated terms of the customer agreements. Additionally, the composition of deferred costs has been adjusted to reflect the guidance in ASC 606. A reduction adjustment to retained earnings of \$46 million was recorded on the adoption date to reflect these changes. Further, the amortization of the costs are no longer classified as depreciation expense, but rather included in salaries and benefits. These adjustments resulted in an increase in expense of \$6 million for the year ended December 31, 2018.
 - *Other cost adjustments* — This guidance now applies to our broking arrangements and certain consulting engagements. While the costs deferred for our broking arrangements will typically be amortized within one year, costs now deferred related to certain consulting arrangements will be amortized over a longer term. We have increased pre-tax retained earnings by \$75 million, primarily to reflect the total changes to contract costs as of the adoption date. For the year ended December 31, 2018, these changes resulted in a decrease in expense of \$8 million.
- j. The provision for income taxes for the year ended December 31, 2018 was \$18 million lower than our provision on an ASC 605 basis. The income tax expense was calculated based on the U.S. and foreign statutory rates applicable to adjustments made. Where applicable, a U.S. statutory rate of 21% was used. There was a \$101 million net tax reduction to retained earnings upon adoption of ASC 606.

The following changes are now reflected in our consolidated statement of cash flows for the year ended December 31, 2018.

- k. As part of the changes in accounting for deferred costs, amounts capitalized relating to system implementation activities are now classified as operating cash flows. Prior to 2018, those costs capitalized under previous guidance were included in Capitalized software costs as an investing cash outflow.

Disaggregation of Revenue

The Company reports revenue by segment in Note 5 — Segment Information. The following table presents revenue by service offering and segment, as well as a reconciliation to total revenue for the year ended December 31, 2018. Along with reimbursable expenses and other, total revenue by service offering represents our revenue from customer contracts. See Note 5 — Segment Information for further information.

	Year ended December 31, 2018					
	HCB	CRB	IRR	BDA	Corporate (i)	Total
Broking	\$ 266	\$ 2,578	\$ 905	\$ 272	\$ —	\$ 4,021
Consulting	2,224	163	430	—	13	2,830
Outsourced administration	484	65	—	486	—	1,035
Other	235	9	185	—	4	433
Total revenue by service offering	3,209	2,815	1,520	758	17	8,319
Reimbursable expenses and other (i)	62	—	8	7	17	94
Total revenue from customer contracts	\$ 3,271	\$ 2,815	\$ 1,528	\$ 765	\$ 34	\$ 8,413
Interest and other income (ii)	24	37	36	—	3	100
Total revenue	\$ 3,295	\$ 2,852	\$ 1,564	\$ 765	\$ 37	\$ 8,513

- (i) Reimbursable expenses and other, as well as Corporate revenue, are excluded from segment revenue, but included in total revenue on the consolidated statements of comprehensive income.
(ii) Interest and other income is included in segment revenue and total revenue, however it has been presented separately in the above tables because it does not arise directly from contracts with customers.

Individual revenue streams aggregating to 5% of total revenue for the year ended December 31, 2018 have been included within the Other line in the table above.

The following table presents revenue by the geography where our work was performed for the year ended December 31, 2018. The reconciliation to total revenue on our consolidated statements of comprehensive income and to segment revenue is shown in the table above.

	Year ended December 31, 2018					
	HCB	CRB	IRR	BDA	Corporate	Total
North America	\$ 1,849	\$ 1,044	\$ 416	\$ 758	\$ 16	\$ 4,083
Great Britain	481	648	732	—	—	1,861
Western Europe	562	631	218	—	1	1,412
International	317	492	154	—	—	963
Total revenue by geography	<u>\$ 3,209</u>	<u>\$ 2,815</u>	<u>\$ 1,520</u>	<u>\$ 758</u>	<u>\$ 17</u>	<u>\$ 8,319</u>

Contract Balances

The Company reports accounts receivable, net on the consolidated balance sheet, which includes billed and unbilled receivables and current contract assets. In addition to accounts receivable, net, the Company had the following non-current contract assets and deferred revenue balances at December 31, 2018 and January 1, 2018:

	December 31, 2018	January 1, 2018
Billed receivables, net of allowance for doubtful accounts of \$40 million and \$45 million	\$ 1,702	\$ 1,933
Unbilled receivables	356	276
Current contract assets	321	346
Accounts receivable, net	\$ 2,379	\$ 2,555
Non-current accounts receivable, net	\$ 20	\$ 33
Non-current contract assets	\$ 3	\$ 5
Deferred revenue	\$ 448	\$ 463

The Company receives payments from customers based on billing schedules or terms as written in our contracts. Those balances denoted as contract assets relate to situations where we have completed some or all performance under the contract, however our right to consideration is conditional. Contract assets result most materially in our Medicare broking and proportional treaty broking businesses. Billed and unbilled receivables are recorded when the right to consideration becomes unconditional. Deferred revenue relates to payments received in advance of performance under the contract, and is recognized as revenue as (or when) we perform under the contract.

Accounts receivable are stated at estimated net realizable values. The following table presents the changes in our allowance for doubtful accounts for the years ended December 31, 2018, 2017 and 2016.

	December 31, 2018	December 31, 2017	December 31, 2016
Balance at beginning of year	\$ 45	\$ 40	\$ 22
Additions charged to costs and expenses	9	17	36
Charges to other accounts - acquisitions	—	—	8
Deductions/other movements	(15)	(9)	(27)
Foreign exchange	1	(3)	1
Balance at end of year	<u>\$ 40</u>	<u>\$ 45</u>	<u>\$ 40</u>

During the year ended December 31, 2018, revenue of approximately \$389 million was recognized that was reflected as deferred revenue at January 1, 2018. There were no other primary drivers for the changes in contract assets and liabilities from January 1, 2018 to December 31, 2018 besides the recognition of revenue and receipts of cash.

During the year ended December 31, 2018, the Company recognized no material revenue related to performance obligations satisfied in a prior period.

Performance Obligations

The Company has contracts for which performance obligations have not been satisfied as of December 31, 2018 or have been partially satisfied as of December 31, 2018. The following table shows the expected timing for the satisfaction of the remaining performance obligations. This table does not include contract renewals nor variable consideration, which was excluded from the transaction prices in accordance with the guidance on constraining estimates of variable consideration.

In addition, the Company has elected not to disclose the remaining performance obligations when one or both of the following circumstances apply:

- Performance obligations which are part of a contract that has an original expected duration of less than one year, and
- Performance obligations satisfied in accordance with ASC 606-10-55-18 ('right to invoice').

	2019	2020	2021 onward	Total
Revenue expected to be recognized on contracts as of December 31, 2018	\$ 441	\$ 357	\$ 466	\$ 1,264

Since most of the Company's contracts are cancellable with less than one year's notice, and have no substantive penalty for cancellation, the majority of the Company's remaining performance obligations as of December 31, 2018 has been excluded from the table above.

Costs to obtain or fulfill a contract

The Company incurs costs to obtain or fulfill contracts which it would not incur if a contract with a customer was not executed.

The following table shows the categories of costs that are capitalized and deferred over the expected life of a contract.

	Costs to fulfill
Balance at January 1, 2018	\$ 126
New capitalized costs	465
Amortization	(442)
Impairments	—
Foreign currency translation	(1)
Balance at December 31, 2018	\$ 148

Note 5 — Segment Information

Willis Towers Watson has four reportable operating segments or business areas:

- Human Capital and Benefits ('HCB')
- Corporate Risk and Broking ('CRB')
- Investment, Risk and Reinsurance ('IRR')
- Benefits Delivery and Administration ('BDA')

Willis Towers Watson's chief operating decision maker is its chief executive officer. We determined that the operational data used by the chief operating decision maker is at the segment level. Management bases strategic goals and decisions on these segments and the data presented below is used to assess the adequacy of strategic decisions and the method of achieving these strategies and related financial results. Management evaluates the performance of its segments and allocates resources to them based on net operating income on a pre-bonus, pre-tax basis.

The Company experiences seasonal fluctuations of its revenue. Revenue is typically higher during the Company's first and fourth quarters due to the timing of broking-related activities, and although the mix of quarterly income changed as a result of the adoption of ASC 606, we expect our revenue to remain highest in our first and fourth quarters.

Beginning in 2018, we made certain changes that affect our segment results that are not material. These changes include the following:

- To better align our business within our segments, we (1) moved portions of our Insurance, Consulting and Technology business from IRR to CRB; (2) moved certain resources that support our outsourced administration offerings from HCB to BDA; and (3) moved our CEEMEA-based strategy study business from our Health and Benefits business in HCB to CRB.
- As part of the continued integration of our businesses, we have applied our 2018 corporate expense allocation methodology to our 2017 and 2016 segment results in order to standardize our methodologies and allocate those expenses for period over period comparatives. Such methodology updates include (1) an increased allocation for Gras Savoye as it no longer benefits as a new acquisition; (2) adjustments relating to changes in segment and total headcount; and (3) the addition of certain allocable direct expenses, which lowers the corporate expense allocation.

In connection with our segment realignment, we reassigned a proportional amount of the carrying value of goodwill between the CRB and IRR segments. See Note 9 — Goodwill and Other Intangible Assets for further information.

Previously during the year ended December 31, 2017, the Company made changes to our segment results which standardized the allocation of corporate expenses directly attributable to business segments, reassigned Max Matthiessen to IRR and Fine Art, Jewellery & Specie to CRB to better align with their specializations, and revised the presentation of certain costs impacting fixed assets and internally-developed software which arose from the purchase accounting for the Merger.

The prior period comparatives reflected in the tables below have been retroactively adjusted to reflect our current segment presentation.

Under the segment structure and for internal and segment reporting, Willis Towers Watson segment revenue includes commissions and fees, interest and other income. U.S. GAAP revenue includes amounts that were directly incurred on behalf of our clients and reimbursed by them (reimbursable expenses), which are removed from segment revenue. Segment operating income excludes certain costs, including (i) amortization of intangibles; (ii) restructuring costs; (iii) certain transaction and integration expenses; (iv) certain litigation provisions; (v) significant pension settlement and curtailment gains or losses; and (vi) to the extent that the actual expense based upon which allocations are made differs from the forecast/budget amount, a reconciling item will be created between internally-allocated expenses and the actual expenses that we report for U.S. GAAP purposes.

During 2016, segment revenue and operating income both include revenue that was deferred by Towers Watson at the time of the Merger, and eliminated due to purchase accounting. The impact of the elimination from purchase accounting (which is the reduction to 2016 consolidated revenue and operating income) has been included in the reconciliation to our consolidated results in order to provide the actual revenue that the segments would have recognized on an unadjusted basis.

The following table presents segment revenue and segment operating income for our reportable segments for the years ended December 31, 2018, 2017 and 2016.

	Segment revenue			Segment operating income		
	Years ended December 31			Years ended December 31		
	2018	2017	2016	2018	2017	2016
HCB	\$ 3,233	\$ 3,176	\$ 3,100	\$ 789	\$ 774	\$ 722
CRB	2,852	2,709	2,608	528	483	458
IRR	1,556	1,474	1,473	384	329	346
BDA	758	734	660	144	153	120
Total	<u>\$ 8,399</u>	<u>\$ 8,093</u>	<u>\$ 7,841</u>	<u>\$ 1,845</u>	<u>\$ 1,739</u>	<u>\$ 1,646</u>

The following table presents reconciliations of the information reported by segment to the Company's consolidated amounts reported for the years ended December 31, 2018, 2017 and 2016.

	Years ended December 31,		
	2018	2017	2016
Revenue:			
Total segment revenue	\$ 8,399	\$ 8,093	\$ 7,841
Fair value adjustment to deferred revenue	—	—	(58)
Reimbursable expenses and other	114	109	104
Revenue	\$ 8,513	\$ 8,202	\$ 7,887
Operating Income:			
Total segment operating income	\$ 1,845	\$ 1,739	\$ 1,646
Fair value adjustment for deferred revenue	—	—	(58)
Amortization	(534)	(581)	(591)
Restructuring costs	—	(132)	(193)
Transaction and integration expenses (i)	(202)	(269)	(177)
Provisions for significant litigation	—	(11)	(50)
Unallocated, net (ii)	(300)	(230)	(229)
Income from operations	809	516	348
Interest expense	(208)	(188)	(184)
Other income, net	250	164	178
Income from operations before income taxes	\$ 851	\$ 492	\$ 342

(i) Includes transaction and integration expenses related to the Merger and the acquisition of Gras Savoye.

(ii) Includes certain costs, primarily related to corporate functions which are not directly related to the segments, and certain differences between budgeted expenses determined at the beginning of the year and actual expenses that we report for U.S. GAAP purposes.

The Company does not currently provide asset information by reportable segment as it does not routinely evaluate the total asset position by segment.

None of the Company's customers represented a significant amount of the Company's consolidated revenue for the years ended December 31, 2018, 2017 and 2016.

Below are our revenue and long-lived assets for Ireland, our country of domicile, countries with significant concentrations, and all other foreign countries for each of the years ended December 31, 2018, 2017 and 2016:

	Revenue			Long-Lived Assets (i)		
	2018	2017	2016	2018	2017	2016
Ireland	\$ 138	\$ 107	\$ 92	\$ 78	\$ 127	\$ 114
United States	3,970	3,821	3,395	11,068	9,988	11,400
United Kingdom	1,926	1,815	2,236	2,349	3,173	2,431
Rest of World	2,479	2,459	2,164	2,411	3,263	2,466
Total Foreign Countries	8,375	8,095	7,795	15,828	16,424	16,297
	\$ 8,513	\$ 8,202	\$ 7,887	\$ 15,906	\$ 16,551	\$ 16,411

(i) Long-lived assets do not include deferred tax assets.

Note 6 — Restructuring Costs

The Company had two major elements of the restructuring costs included in its consolidated financial statements, which were the Operational Improvement Program and the Business Restructure Program. Costs for each program were fully accrued and completed by the end of 2017 and 2016, respectively. No additional costs for either program were incurred during 2018.

Operational Improvement Program - In April 2014, Legacy Willis announced a multi-year operational improvement program designed to strengthen its client service capabilities and to deliver future cost savings. The main elements of the program included: moving more than 3,500 support roles from higher cost locations to facilities in lower cost locations; net workforce reductions in support positions; lease consolidation in real estate; and information technology systems simplification and rationalization.

The Company recognized restructuring costs of \$134 million and \$145 million for the years ended December 31, 2017 and 2016, respectively, related to the Operational Improvement Program. The Company spent a cumulative amount of \$441 million on restructuring costs for this program.

Business Restructure Program - In the second quarter of 2016, we began planning targeted staffing reductions in certain portions of the business due to a reduction in business demand or change in business focus (hereinafter referred to as the Business Restructure Program). The main element of the program included workforce reductions, and was completed in 2016, however, cash payments pertaining to the program were made primarily in 2017. During the year ended December 31, 2017, the Company recognized a \$2 million reversal of expense related to an estimate of previously incurred termination benefits. The Company recognized restructuring costs of \$48 million for the year ended December 31, 2016.

An analysis of total restructuring costs recognized in the consolidated statements of comprehensive income, with costs by segment, and costs attributable to corporate functions, for the years ended December 31, 2017 and 2016 is as follows:

	HCB	CRB	IRR	BDA	Corporate	Total
Year ended December 31, 2017						
Termination benefits	\$ —	\$ 25	\$ 4	\$ —	\$ 17	\$ 46
Professional services and other (i)	3	63	6	—	14	86
Total	\$ 3	\$ 88	\$ 10	\$ —	\$ 31	\$ 132
Year ended December 31, 2016						
Termination benefits	\$ 33	\$ 26	\$ 6	\$ 1	\$ 2	\$ 68
Professional services and other (i)	4	81	4	—	36	125
Total	\$ 37	\$ 107	\$ 10	\$ 1	\$ 38	\$ 193

(i) Other includes salary and benefits, premises, and other expenses incurred to support the ongoing management and facilitation of the programs.

An analysis of the total cumulative restructuring costs recognized for the Operational Improvement Program from its commencement to December 31, 2017 by segment is as follows:

	HCB	CRB	IRR	BDA	Corporate	Total
2014						
Termination benefits	\$ —	\$ 15	\$ 1	\$ —	\$ —	\$ 16
Professional services and other (i)	—	3	—	—	17	20
2015						
Termination benefits	\$ 2	\$ 24	\$ 7	\$ —	\$ 3	\$ 36
Professional services and other (i)	1	57	2	—	30	90
2016						
Termination benefits	\$ 1	\$ 18	\$ 3	\$ —	\$ 1	\$ 23
Professional services and other (i)	1	81	4	—	36	122
2017						
Termination benefits	\$ —	\$ 25	\$ 4	\$ —	\$ 19	\$ 48
Professional services and other (i)	3	63	6	—	14	86
Total						
Termination benefits	\$ 3	\$ 82	\$ 15	\$ —	\$ 23	\$ 123
Professional services and other (i)	5	204	12	—	97	318
Total	\$ 8	\$ 286	\$ 27	\$ —	\$ 120	\$ 441

(i) Other includes salary and benefits, premises, and other expenses incurred to support the ongoing management and facilitation of the program.

The changes in the Company's liability under the Operational Improvement Program from its commencement to December 31, 2018, are as follows:

	Termination Benefits	Professional Services and Other	Total
Balance at January 1, 2014	\$ —	\$ —	\$ —
Charges incurred	16	20	36
Cash payments	(11)	(14)	(25)
Balance at December 31, 2014	5	6	11
Charges incurred	36	90	126
Cash payments	(26)	(85)	(111)
Balance at December 31, 2015	15	11	26
Charges incurred	23	122	145
Cash payments	(31)	(115)	(146)
Balance at December 31, 2016	7	18	25
Charges incurred	48	86	134
Cash payments	(41)	(97)	(138)
Balance at December 31, 2017	14	7	21
Cash payments	(12)	(6)	(18)
Balance at December 31, 2018	\$ 2	\$ 1	\$ 3

Restructuring costs related to the Business Restructuring Program for the year ended December 31, 2016 by segment are as follows:

	HCB	CRB	IRR	BDA	Corporate	Total
	(in millions)					
2016						
Termination benefits	\$ 32	\$ 8	\$ 3	\$ 1	\$ 1	\$ 45
Professional services and other (i)	3	—	—	—	—	3
Total	<u>\$ 35</u>	<u>\$ 8</u>	<u>\$ 3</u>	<u>\$ 1</u>	<u>\$ 1</u>	<u>\$ 48</u>

(i) Other includes salary and benefits, premises, and other expenses incurred to support the ongoing management and facilitation of the program.

The changes in the Company's liability under the Business Restructure Program from its commencement to December 31, 2018, are as follows:

	Termination Benefits	Professional Services and Other	Total
Balance at January 1, 2016	\$ —	\$ —	\$ —
Charges incurred	45	3	48
Cash payments	(19)	(3)	(22)
Balance at December 31, 2016	26	—	26
Adjustment to prior charges incurred	(2)	—	(2)
Cash payments	(23)	—	(23)
Balance at December 31, 2017	1	—	1
Cash payments	(1)	—	(1)
Balance at December 31, 2018	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

Note 7 — Income Taxes

Impact of U.S. Tax Reform

On December 22, 2017, the U.S. government enacted comprehensive tax legislation, commonly referred to as 'U.S. Tax Reform'. U.S. Tax Reform makes broad and complex changes to the U.S. tax code, including, but not limited to: (1) requiring a one-time transition tax on certain unremitted earnings of foreign subsidiaries that may be payable over eight years; (2) bonus depreciation that will allow for full expensing of qualified property; (3) reduction of the federal corporate tax rate from 35% to 21%; (4) a new provision designed to tax global intangible low-taxed income ('GILTI'), which allows for the possibility of using foreign tax credits ('FTCs') and a deduction of up to 50% to offset the income tax liability (subject to some limitations); (5) a new limitation on deductible interest expense; (6) limitations on the deductibility of certain executive compensation; (7) limitations on the use of FTCs to reduce the U.S. income tax liability; (8) the creation of the base erosion anti-abuse tax ('BEAT'), a new minimum tax; and (9) a general elimination of U.S. federal income taxes on dividends from foreign subsidiaries.

Also on December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ('SAB 118'), which provided guidance on accounting for the tax effects of the U.S. Tax Reform. SAB 118 provided a measurement period that should not extend beyond one year from the U.S. Tax Reform enactment date for companies to complete the accounting under ASC 740, *Income Taxes* ('ASC 740'). In accordance with SAB 118, a company was required to reflect the income tax effects of those aspects of U.S. Tax Reform for which the accounting under ASC 740 was complete. Adjustments to incomplete and unknown amounts were required to be recorded and disclosed during the measurement period. To the extent that a company's accounting for certain income tax effects of U.S. Tax Reform was incomplete but it was able to determine a reasonable estimate, a provisional estimate in the financial statements was required to be recorded. If a company was unable to determine a provisional estimate, it was required to continue to apply ASC 740 on the basis of the provisions of the tax laws that were in effect immediately before the enactment of U.S. Tax Reform.

While the measurement period under SAB 118 is now closed, the Company may in future periods need to further refine its U.S. federal and state calculations related to U.S. Tax Reform as the taxing authorities provide additional guidance and

clarification. However, as of December 31, 2018, the Company's accounting for U.S. Tax Reform is complete based on its interpretation of the guidance issued as of the balance sheet date.

As such, the Company has revised and finalized the provisional adjustments for the following items:

Reduction of the federal corporate tax rate – Beginning January 1, 2018, the Company's U.S. income is taxed at a 21% federal corporate tax rate. Under ASC 740, deferred tax assets or liabilities must be recalculated as of the enactment date using current tax laws and rates expected to be in effect when the deferred tax items reverse in future periods, which is 21%. Consequently, the Company recorded a provisional decrease in its net deferred tax liabilities of \$208 million, with a corresponding deferred income tax benefit of \$208 million during the year ended December 31, 2017. On October 12, 2018, the Company filed its 2017 U.S. federal corporate income tax return. After refining our analysis of those items directly related to U.S. Tax Reform, the Company recorded additional deferred tax benefit of approximately \$8 million related to deferred tax items that are now subject to tax at 21%. The effect of the measurement period adjustment on the 2018 effective tax rate is approximately 1%.

One-time transition tax – The one-time transition tax is based on the Company's total post-1986 earnings and profits ('E&P') that it previously deferred from U.S. income taxes. At December 31, 2017, the Company recorded a provisional amount for the one-time transition tax liability for our foreign subsidiaries owned by U.S. corporate shareholders, resulting in an increase in U.S. Federal income tax expense of \$70 million and state income tax expense of \$2 million. This transition tax liability was recorded as a long-term liability in the 2017 financial statements. Subsequent to the December 31, 2017 reporting period, the Internal Revenue Service ('IRS') clarified the application of the 'with' and 'without' approach for calculating the transition tax liability in determining the amount payable over eight years. Based on this guidance the Company revised its provisional estimate for the U.S. federal transition tax liability in the first quarter of 2018, which was reduced by \$64 million due to the utilization of interest loss carryforwards resulting from the transition tax income inclusion. This reduction has no impact on the 2018 effective tax rate. Additionally, on the basis of revised E&P computations that were completed during the year ended December 31, 2018, we recognized an additional increase to income tax expense of \$8 million, which was recorded in current income tax payable. This has an approximate 1% impact on the Company's 2018 effective tax rate. The tax expense recorded includes the final measurement period adjustment related to the Company's November 30, 2018 foreign subsidiaries. While the measurement period under SAB 118 is now closed, we may in future periods need to further refine the U.S. federal and state transition tax calculations of the November 30, 2018 foreign subsidiaries as the taxing authorities provide additional guidance and clarification.

Indefinite reinvestment assertion – Beginning in 2018, U.S. Tax Reform provides a 100% deduction for dividends received from 10-percent owned foreign corporations by U.S. corporate shareholders, subject to a one-year holding period. Although dividend income is now exempt from U.S. federal tax for U.S. corporate shareholders, companies must still account for the tax consequences of outside basis differences and other tax impacts of their investments in non-U.S. subsidiaries. At December 31, 2017, we analyzed our global working capital and cash requirements and the potential tax liabilities attributable to a repatriation and determined we might repatriate up to \$219 million which was previously deemed indefinitely reinvested. For those investments from which we were able to make a reasonable estimate of the tax effects of such repatriation, we recorded a provisional estimate for foreign withholding and state income taxes of \$1 million. In addition, we re-measured the existing deferred tax liability accrued on certain acquired Towers Watson subsidiaries and released the associated deferred tax liability. This resulted in an income tax benefit of \$76 million as these foreign earnings were subject to the one-time transition tax. These estimates are now considered final and no further adjustments have been made in the year ended December 31, 2018 as a result of U.S. Tax Reform.

Bonus Depreciation – The Company completed its determination of all capital expenditures that qualify for immediate expensing. For the year ended December 31, 2017, the Company recorded a provisional deduction of \$40 million based on its current intent to fully expense all qualifying expenditures. This resulted in an increase of approximately \$14 million to the Company's U.S. federal current income taxes receivable and a corresponding increase in its net deferred tax liabilities of approximately \$14 million. However, as a result of further analysis on assets placed in service after September 27, 2017, the Company concluded its tax deduction to be \$8 million. The tax benefit was reflected on the Company's 2017 U.S. federal corporate income tax return filed on October 12, 2018. The effect of the measurement-period adjustment on the 2018 effective tax rate is included in the reduction of the federal corporate tax rate above.

Executive compensation – Starting with compensation paid in 2018, Section 162(m) will limit the Company from deducting compensation, including performance-based compensation, in excess of \$1 million paid to anyone who,

starting in 2018, serves as the Chief Executive Officer or Chief Financial Officer, or who is among the three most highly compensated executive officers. The only exception to this rule is for compensation that is paid pursuant to a binding contract in effect on November 2, 2017 that would have otherwise been deductible under the prior Section 162(m) rules. Accordingly, any compensation paid in the future pursuant to new compensation arrangements entered into after November 2, 2017, even if performance-based, will count towards the \$1 million deduction limit if paid to a covered executive. The Company recorded a provisional income tax expense of \$8 million relating to our compensation plans not qualifying as a binding contract exception. During the fourth quarter the Company finalized its analysis and review of the executive compensation plans and IRS guidance released throughout the year. The Company has concluded that the reviewed plans are not subject to future limitation under the binding contract exception and grandfathering rules. This resulted in the re-establishment of the deferred tax asset through the recording of an income tax benefit of \$8 million. The effect of the measurement period adjustment on the 2018 effective tax rate is approximately 1%.

GILTI – U.S. Tax Reform creates a new requirement that certain income (i.e., GILTI) earned by controlled foreign corporations (‘CFCs’) must be included currently in the gross income of the CFCs’ U.S. shareholders. GILTI is the excess of the shareholder’s ‘net CFC tested income’ over the net deemed tangible income return, which is currently defined as the excess of (1) 10 percent of the aggregate of the U.S. shareholder’s pro rata share of the qualified business asset investment of each CFC with respect to which it is a U.S. shareholder over (2) the amount of certain interest expense taken into account in the determination of net CFC-tested income. Under U.S. GAAP, the Company is allowed to make an accounting policy choice of either (1) treating taxes due on future U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the ‘period cost method’) or (2) factoring such amounts into a company’s measurement of its deferred taxes (the ‘deferred method’). The Company has concluded it is treating the taxes due on U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the ‘period cost method’). The estimated tax impact of GILTI, net of available foreign tax credits, is approximately \$15 million at December 31, 2018.

Valuation allowances – The Company has concluded there have been no changes to valuation allowances as a result of U.S. Tax Reform.

Provision for income taxes

An analysis of income from operations before income taxes by taxing jurisdiction is shown below:

	Years ended December 31,		
	2018	2017	2016
Ireland	\$ (16)	\$ (23)	\$ (27)
U.S.	(101)	(198)	(311)
U.K.	182	31	123
Other jurisdictions	786	682	557
Total	\$ 851	\$ 492	\$ 342

The components of the (provision for)/benefit from income taxes include:

	Years ended December 31,		
	2018	2017	2016
Current tax expense:			
U.S. federal taxes	\$ (98)	\$ (65)	\$ (35)
U.S. state and local taxes	(25)	(7)	(14)
U.K. corporation tax	(16)	(14)	(28)
Other jurisdictions	(112)	(99)	(71)
Total current tax expense	(251)	(185)	(148)
Deferred tax benefit:			
U.S. federal taxes	79	268	214
U.S. state and local taxes	12	(6)	5
U.K. corporation tax	(6)	9	(10)
Other jurisdictions	30	14	35
Total deferred tax benefit	115	285	244
Total (provision for)/benefit from income taxes	\$ (136)	\$ 100	\$ 96

Included in the 2018 U.S. state and local tax expense is an approximate \$25 million deferred tax benefit related to a valuation allowance release on certain state deferred tax assets offset with the write-off of certain state net operating losses that are no longer realizable.

Effective tax rate reconciliation

The reported (provision for)/benefit from income taxes differs from the amounts that would have resulted had the reported income before income taxes been taxed at the U.S. federal statutory rate. The principal reasons for the differences between the amounts provided and those that would have resulted from the application of the U.S. federal statutory tax rate are as follows:

	Years ended December 31,		
	2018	2017	2016
INCOME FROM OPERATIONS BEFORE INCOME TAXES	\$ 851	\$ 492	\$ 342
U.S. federal statutory income tax rate	21%	35%	35%
Income tax expense at U.S. federal tax rate	(179)	(172)	(120)
Adjustments to derive effective tax rate:			
Non-deductible expenses and dividends	(44)	(68)	(15)
Non-deductible acquisition costs	(2)	(11)	(1)
Disposal of non-deductible goodwill	1	(11)	(2)
Impact of change in rate on deferred tax balances	7	—	15
Effect of foreign exchange and other differences	1	(3)	(6)
Non-deductible Venezuelan foreign exchange loss	—	(2)	(4)
Changes in valuation allowances	80	(13)	74
Net tax effect of intra-group items	99	97	98
Tax differentials of non-U.S. jurisdictions	(2)	69	80
Tax differentials of U.S. state taxes and local taxes	(77)	6	(14)
Global Intangible Low-Taxed Income (GILTI)	(15)	—	—
Impact of U.S. Tax Reform	—	204	—
Other items, net	(5)	4	(9)
(Provision for)/benefit from income taxes	\$ (136)	\$ 100	\$ 96

Included in the changes in valuation allowance for 2018, the Company recorded a deferred income tax benefit for approximately \$71 million related to the valuation allowance release of certain state deferred tax assets.

In 2017, in connection with our initial analysis of U.S. Tax Reform, the Company recorded a provisional net tax benefit of \$204 million, which consisted of a net benefit of \$208 million due to the reduction of the federal corporate tax rate and re-measurement of our net U.S. deferred tax liabilities primarily related to acquisition-based intangibles, and a \$76 million benefit related to the release of a deferred tax liability we had previously recorded on the accumulated earnings of certain Towers Watson subsidiaries. These net benefit items were offset by provisional expenses of \$8 million recognized as a write-off of a deferred tax asset the Company had previously recorded on executive compensation as well as the U.S. federal and state income tax expense of \$72 million associated with the one-time transition tax on foreign earnings of our subsidiaries.

Willis Towers Watson plc is a non-trading holding company tax resident in Ireland where it is taxed at the statutory rate of 25%. In 2018, the provision for income tax on operations has been reconciled above to the U.S. federal statutory tax rate of 21% due to significant operations in the U.S. The prior year effective tax rates have not been restated to reflect a U.S. federal statutory tax rate of 21%.

Deferred income taxes

Deferred income tax assets and liabilities reflect the effect of temporary differences between the assets and liabilities recognized for financial reporting purposes and the amounts recognized for income tax purposes. We recognize deferred tax assets if it is more likely than not that a benefit will be realized.

Deferred income tax assets and liabilities included in the consolidated balance sheets at December 31, 2018 and 2017 are comprised of the following:

	December 31,	
	2018	2017
Deferred tax assets:		
Accrued expenses not currently deductible	\$ 177	\$ 131
Net operating losses	91	145
Capital loss carryforwards	30	28
Accrued retirement benefits	285	339
Deferred compensation	82	69
Stock options	22	24
Financial derivative transactions	1	18
Gross deferred tax assets	688	754
Less: valuation allowance	(81)	(162)
Net deferred tax assets	\$ 607	\$ 592
Deferred tax liabilities:		
Cost of intangible assets, net of related amortization	\$ 825	\$ 929
Cost of tangible assets, net of related depreciation	37	56
Prepaid retirement benefits	101	114
Accrued revenue not currently taxable	144	62
Deferred tax liabilities	\$ 1,107	\$ 1,161
Net deferred tax liabilities	\$ 500	\$ 569

During December 2017, the Company re-measured its U.S. deferred tax assets and liabilities as a result of U.S. Tax Reform to the newly enacted federal tax rate, which is 21%. The net deferred income tax assets are included in other non-current assets and the net deferred tax liabilities are included in deferred tax liabilities in our consolidated balance sheets.

	December 31,	
	2018	2017
Balance sheet classifications:		
Other non-current assets	\$ 59	\$ 46
Deferred tax liabilities	559	615
Net deferred tax liability	\$ 500	\$ 569

At December 31, 2018, we had U.S. federal and non-U.S. net operating loss carryforwards amounting to \$288 million of which \$239 million can be indefinitely carried forward under local statutes. The remaining \$49 million of net operating loss carryforwards will expire, if unused, in varying amounts from 2019 through 2038. In addition, we had U.S. state net operating loss carryforwards of \$515 million, which will expire in varying amounts from 2019 to 2038.

Management believes, based on the evaluation of positive and negative evidence, including the future reversal of existing taxable temporary differences, it is more likely than not that the Company will realize the benefits of net deferred tax assets of \$607 million, net of the valuation allowance. During 2018, the Company decreased its valuation allowance by \$81 million primarily related to the completion of an internal U.S. restructuring. The U.S. restructuring provided a source of positive evidence and enabled the Company to release valuation allowance on certain state deferred tax assets now considered realizable. In addition, the Company reassessed certain state net operating losses and determined these losses and related valuation allowance would never be realized. During 2017, the Company increased its valuation allowance by \$28 million primarily due to state net operating losses.

At December 31, 2018 and 2017, the Company had valuation allowances of \$81 million and \$162 million, respectively, to reduce its deferred tax assets to estimated realizable value. The valuation allowance at December 31, 2018 primarily relates to deferred tax assets for U.K. capital loss carryforwards of \$30 million, which have an unlimited carryforward period but can only be utilized against capital gains and U.S. and non-U.S. net operating losses of \$27 million and \$20 million, respectively. The valuation allowance at December 31, 2017 related to deferred tax assets for U.K. capital loss carryforwards of \$28 million, which have an unlimited carryforward period and U.S. and non-U.S. net operating losses of \$80 million and \$34 million, respectively.

An analysis of our valuation allowance is shown below.

	Years ended December 31,		
	2018	2017	2016
Balance at beginning of year	\$ 162	\$ 134	\$ 187
Additions charged to costs and expenses	18	35	—
Additions charged against other accounts	—	—	21
Deductions	(99)	(7)	(74)
Balance at end of year	\$ 81	\$ 162	\$ 134

In 2018, the net change in valuation allowance was an \$81 million decrease, of which \$80 million was a reduction to tax expense primarily related to an internal U.S. restructuring. In 2017, the amount charged to tax expense in the table above differs from the 2017 rate reconciliation of \$13 million because a portion of the valuation allowance increase is related to the U.S. federal corporate tax rate reduction impact on the U.S. state valuation allowance and is included in the impact of U.S. Tax Reform. The amount charged to tax expense in the table above for 2016 differs from the effect of \$74 million disclosed in the 2016 rate reconciliation primarily because the movement in this table includes the effects of acquisition accounting, which does not impact tax expense.

The Company recognizes deferred tax balances related to the undistributed earnings of subsidiaries when the Company expects that it will recover those undistributed earnings in a taxable manner, such as through receipt of dividends or sale of the investments. In 2016 we began accruing deferred taxes on the cumulative earnings of certain acquired Towers Watson subsidiaries. The historical cumulative earnings of our other subsidiaries have been reinvested indefinitely.

As a result of U.S. Tax Reform we analyzed our global working capital and cash requirements and the potential tax liabilities attributable to a repatriation and determined we might repatriate up to \$219 million, the majority of which was previously deemed indefinitely reinvested. For those investments from which we were able to make a reasonable estimate of the tax effects of such repatriation, we recorded a provisional estimate for foreign withholding taxes and state income taxes of \$1 million. In addition, we re-measured the existing deferred tax liability accrued on certain acquired Towers Watson subsidiaries and released the associated deferred tax liability for this item. This resulted in an income tax benefit of \$76 million as these foreign earnings were subject to the one-time transition tax. These estimates are now considered final and no further adjustments have been made in the period ended December 31, 2018 as a result of U.S. Tax Reform.

At December 31, 2018, as a result of an international restructuring, we have determined that we may repatriate an additional \$2.1 billion, which was previously deemed indefinitely reinvested. As a result we recorded an estimate for foreign withholding and state income tax expense of approximately \$11 million.

The cumulative earnings related to amounts reinvested indefinitely as of December 31, 2018 were approximately \$7.2 billion, the majority of which are non-U.S. earnings not subject to U.S. tax. As a result, it is not practicable to calculate the tax cost of repatriating these unremitted earnings. If future events, including material changes in estimates of cash, working capital, long-term investment requirements or additional guidance relating to U.S. Tax Reform necessitate that these earnings be distributed, an additional provision for income and foreign withholding taxes, net of credits, may be necessary.

Uncertain tax positions

At December 31, 2018, the amount of unrecognized tax benefits associated with uncertain tax positions, determined in accordance with ASC 740-10, excluding interest and penalties, was \$49 million. A reconciliation of the beginning and ending balances of the liability for unrecognized tax benefits is as follows:

	2018	2017	2016
Balance at beginning of year	\$ 59	\$ 56	\$ 22
Increases related to acquisitions	—	—	33
Increases related to tax positions in prior years	2	2	1
Decreases related to tax positions in prior years	(4)	(5)	(9)
Decreases related to settlements	(4)	—	(1)
Decreases related to lapse in statute of limitations	(5)	(2)	(1)
Increases related to current year tax positions	3	9	11
Cumulative translation adjustment and other adjustments	(2)	(1)	—
Balance at end of year	<u>\$ 49</u>	<u>\$ 59</u>	<u>\$ 56</u>

The liability for unrecognized tax benefits for the years ended December 31, 2018, 2017 and 2016 can be reduced by \$2 million, \$3 million and \$4 million, respectively, of offsetting deferred tax benefits associated with timing differences, foreign tax credits and the federal tax benefit of state income taxes. If these offsetting deferred tax benefits were recognized, there would have been a favorable impact on our effective tax rate. There are no material balances that would result in adjustments to other tax accounts.

Interest and penalties related to unrecognized tax benefits are included as a component of income tax expense. At December 31, 2018, we had cumulative accrued interest of \$3 million. At December 31, 2017, the cumulative accrued interest was \$5 million. Penalties accrued in 2018 were immaterial and \$2 million in 2017.

Tax expense for the years ended December 31, 2018 and 2017 included immaterial interest benefits.

The Company believes that the outcomes which are reasonably possible within the next 12 months may result in a reduction in the liability for unrecognized tax benefits in the range of \$1 million to \$3 million, excluding interest and penalties.

The Company and its subsidiaries file income tax returns in various tax jurisdictions in which it operates.

Willis North America Inc. is not currently under examination by the IRS. We have ongoing state income tax examinations in certain states for tax years ranging from calendar years ended December 31, 2013 through December 31, 2016. The statute of limitations in certain states extends back to the fiscal year ended June 30, 2014.

All U.K. tax returns have been filed timely and are in the normal process of being reviewed by HM Revenue & Customs. The Company is not currently subject to any material examinations in other jurisdictions. A summary of the tax years that remain open to tax examination in our major tax jurisdictions are as follows:

	Open Tax Years (fiscal year ending in)
U.S. — federal	2015 and forward
U.S. — various states	2013 and forward
U.K.	2010 and forward
Ireland	2014 and forward
France	2010 and forward
Germany	2010 and forward
Canada - federal	2011 and forward

Note 8 — Fixed Assets

The following table reflects changes in the net carrying amount of the components of fixed assets for the year ended December 31, 2018 and 2017:

	Furniture, equipment and software	Leasehold improvements	Land and buildings	Total
Cost: at January 1, 2017	\$ 1,009	\$ 382	\$ 90	\$ 1,481
Additions	303	91	—	394
Disposals	(61)	(21)	—	(82)
Foreign exchange	49	16	4	69
Cost: at December 31, 2017	1,300	468	94	1,862
Additions	249	70	—	319
Disposals	(278)	(35)	—	(313)
Reclassification due to ASC 606 (i)	(102)	—	—	(102)
Foreign exchange	(39)	(15)	(2)	(56)
Cost: at December 31, 2018	\$ 1,130	\$ 488	\$ 92	\$ 1,710
Depreciation: at January 1, 2017	\$ (464)	\$ (137)	\$ (41)	\$ (642)
Depreciation expense (ii)	(199)	(47)	(6)	(252)
Disposals	37	14	—	51
Foreign exchange	(26)	(6)	(2)	(34)
Depreciation: at December 31, 2017	(652)	(176)	(49)	(877)
Depreciation expense (ii)	(155)	(54)	(4)	(213)
Disposals	250	27	—	277
Reclassification due to ASC 606 (i)	19	—	—	19
Foreign exchange	19	6	1	26
Depreciation: at December 31, 2018	\$ (519)	\$ (197)	\$ (52)	\$ (768)
Net book value:				
At December 31, 2017	\$ 648	\$ 292	\$ 45	\$ 985
At December 31, 2018	\$ 611	\$ 291	\$ 40	\$ 942

- (i) Pertains to costs related to certain system implementation activities that have now been included in other non-current assets based on the guidance in ASC 606. See Note 4 — Revenue for further information.
- (ii) Depreciation expense included here does not equal the depreciation expense on the statements of comprehensive income for the years ended December 31, 2018 and 2017 due to the inclusion of \$5 million and \$49 million, respectively, which have been classified as transaction and integration expenses.

Included within land and buildings are the following assets held under capital leases:

	December 31,	
	2018	2017
Capital leases	\$ 31	\$ 31
Accumulated depreciation	(16)	(14)
	\$ 15	\$ 17

Depreciation related to capital leases was \$2 million for each of the years ended December 31, 2018, 2017 and 2016.

Note 9 — Goodwill and Other Intangible Assets

Goodwill

The components of goodwill are outlined below for the years ended December 31, 2018 and 2017:

	HCB	CRB	IRR	BDA	Total
Balance at December 31, 2016					
Goodwill, gross	\$ 4,412	\$ 2,178	\$ 1,758	\$ 2,557	\$ 10,905
Accumulated impairment losses	(130)	(362)	—	—	(492)
Goodwill, net - December 31, 2016	4,282	1,816	1,758	2,557	10,413
Goodwill reassigned in segment realignment	(113)	13	100	—	—
Goodwill acquired during the period	—	8	—	—	8
Goodwill disposed of during the period	(31)	(5)	(27)	—	(63)
Foreign exchange	74	67	20	—	161
Balance at December 31, 2017					
Goodwill, gross	4,342	2,261	1,851	2,557	11,011
Accumulated impairment losses	(130)	(362)	—	—	(492)
Goodwill, net - December 31, 2017	4,212	1,899	1,851	2,557	10,519
Goodwill reassigned in segment realignment (i)	—	72	(72)	—	—
Goodwill acquired during the period	—	9	29	—	38
Goodwill disposed of during the period	—	—	(5)	—	(5)
Foreign exchange	(42)	(34)	(11)	—	(87)
Balance at December 31, 2018					
Goodwill, gross	4,300	2,308	1,792	2,557	10,957
Accumulated impairment losses	(130)	(362)	—	—	(492)
Goodwill, net - December 31, 2018	\$ 4,170	\$ 1,946	\$ 1,792	\$ 2,557	\$ 10,465

(i) Represents the reallocation of goodwill related to certain businesses which were realigned among the segments as of January 1, 2018. See Note 5 — Segment Information for further information.

Other Intangible Assets

The following table reflects changes in the net carrying amounts of the components of finite-lived intangible assets for the year ended December 31, 2018:

	Balance at December 31, 2017	Intangible assets acquired	Intangible assets disposed	Amortization (i)	Foreign exchange	Balance at December 31, 2018
Client relationships	\$ 2,342	\$ 39	\$ (7)	\$ (341)	\$ (47)	\$ 1,986
Management contracts	56	—	—	(4)	(4)	48
Software	473	—	—	(140)	(5)	328
Trademark and trade name	966	—	—	(44)	(2)	920
Product	33	—	—	(4)	(2)	27
Favorable agreements	10	—	—	(2)	1	9
Other	2	—	—	(1)	(1)	—
Total amortizable intangible assets	\$ 3,882	\$ 39	\$ (7)	\$ (536)	\$ (60)	\$ 3,318

(i) Amortization associated with favorable lease agreements is recorded in Other operating expenses in the consolidated statements of comprehensive income.

The following table reflects changes in the net carrying amounts of the components of finite-lived intangible assets for the year ended December 31, 2017:

	Balance at December 31, 2016	Intangible assets acquired	Intangible assets disposed	Amortization (ii)	Foreign exchange	Balance at December 31, 2017
Client relationships	\$ 2,655	\$ 13	\$ (44)	\$ (379)	\$ 97	\$ 2,342
Management contracts	54	—	—	(4)	6	56
Software (i)	570	36	—	(150)	17	473
Trademark and trade name	1,006	—	(1)	(44)	5	966
Product	33	—	—	(3)	3	33
Favorable agreements	11	1	—	(2)	—	10
Other	3	—	—	(1)	—	2
Total amortizable intangible assets	<u>\$ 4,332</u>	<u>\$ 50</u>	<u>\$ (45)</u>	<u>\$ (583)</u>	<u>\$ 128</u>	<u>\$ 3,882</u>

(i) In-process research and development intangible assets acquired as part of the Merger on January 4, 2016 of \$39 million (\$36 million at the date placed into service due to changes in foreign currency exchange rates) had been placed in service during the year ended December 31, 2017 and are included as intangible assets acquired in this presentation.

(ii) Amortization associated with favorable lease agreements is recorded in Other operating expenses in the consolidated statements of comprehensive income.

We recorded amortization related to our finite-lived intangible assets, exclusive of the amortization of our favorable lease agreements, of \$534 million, \$581 million and \$591 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Our acquired unfavorable lease liabilities were \$21 million and \$26 million as of December 31, 2018 and December 31, 2017, respectively, and are recorded in other non-current liabilities in the consolidated balance sheet.

The following table reflects the carrying values of finite-lived intangible assets and liabilities at December 31, 2018 and December 31, 2017:

	December 31, 2018		December 31, 2017	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Client relationships	\$ 3,401	\$ (1,415)	\$ 3,462	\$ (1,120)
Management contracts	63	(15)	68	(12)
Software	749	(421)	764	(291)
Trademark and trade name	1,052	(132)	1,055	(89)
Product	36	(9)	39	(6)
Favorable agreements	14	(5)	14	(4)
Other	3	(3)	6	(4)
Total finite-lived assets	<u>\$ 5,318</u>	<u>\$ (2,000)</u>	<u>\$ 5,408</u>	<u>\$ (1,526)</u>
Unfavorable agreements	\$ 34	\$ (13)	\$ 34	\$ (8)
Total finite-lived intangible liabilities	<u>\$ 34</u>	<u>\$ (13)</u>	<u>\$ 34</u>	<u>\$ (8)</u>

The weighted-average remaining life of amortizable intangible assets and liabilities at December 31, 2018 was 13.9 years.

The table below reflects the future estimated amortization expense for amortizable intangible assets and the rent offset resulting from amortization of the net lease intangible assets and liabilities for the next five years and thereafter:

<u>Years ended December 31,</u>	<u>Amortization</u>	<u>Rent offset</u>
2019	\$ 472	\$ (2)
2020	420	(2)
2021	344	(2)
2022	287	(3)
2023	239	(2)
Thereafter	1,547	(1)
Total	\$ 3,309	\$ (12)

Note 10 — Derivative Financial Instruments

We are exposed to certain interest rate and foreign currency risks. Where possible, we identify exposures in our business that can be offset internally. Where no natural offset is identified, we may choose to enter into various derivative transactions. These instruments have the effect of reducing our exposure to unfavorable changes in interest and foreign currency rates. The Company's board of directors reviews and approves policies for managing each of these risks as summarized below. Additional information regarding our derivative financial instruments can be found in Note 2 — Basis of Presentation, Significant Accounting Policies and Recent Accounting Pronouncements, Note 12 — Fair Value Measurements and Note 17 — Accumulated Other Comprehensive Loss.

Interest Rate Risk - Investment Income

As a result of its operating activities, the Company holds fiduciary funds. The Company earns interest on these funds, which is included in its consolidated financial statements in revenue. These funds are regulated in terms of access as are the instruments in which they may be invested, most of which are short-term in nature.

During 2015, in order to manage interest rate risk arising from these financial assets, the Company entered into interest rate swaps to receive a fixed rate of interest and pay a variable rate of interest. These derivatives, with total notional amounts of \$300 million, were designated as hedging instruments at December 31, 2017 and had a net fair value liability of \$1 million. These derivatives matured during 2018.

Foreign Currency Risk

Certain non-U.S. subsidiaries receive revenue and incur expenses in currencies other than their functional currency, and as a result, the foreign subsidiary's functional currency revenue will fluctuate as the currency rates change. Additionally, the forecast Pounds sterling expenses of our London brokerage market operations may exceed their Pounds sterling revenue, and they may also hold significant foreign currency asset or liability positions in the consolidated balance sheet. To reduce such variability, we use foreign exchange contracts to hedge against this currency risk.

These derivatives were designated as hedging instruments and at December 31, 2018 and December 31, 2017 had total notional amounts of \$438 million and \$937 million, respectively, and had net fair value liabilities of \$15 million and \$21 million, respectively.

At December 31, 2018, the Company estimates, based on current interest and exchange rates, there will be \$12 million of net derivative losses on forward exchange rates reclassified from accumulated other comprehensive loss into earnings within the next twelve months as the forecast transactions affect earnings. At December 31, 2018, our longest outstanding maturity was 2 years.

The effects of the material derivative instruments that are designated as hedging instruments on the consolidated statements of comprehensive income for the years ended December 31, 2018, 2017 and 2016 are as follows:

	(Loss)/gain recognized in OCI (effective element)			Location of loss reclassified from Accumulated OCL into income (effective element)	Loss reclassified from Accumulated OCL into income (effective element)			Location of loss recognized in income (ineffective portion and amount excluded from effectiveness testing)	Loss recognized in income (ineffective portion and amount excluded from effectiveness testing)		
	2018	2017	2016		2018	2017	2016		2018	2017	2016
Foreign exchange contracts	\$ (22)	\$ 39	\$ (127)	Other income, net	\$ (28)	\$ (53)	\$ (42)	Interest expense	\$ (1)	\$ (1)	\$ (1)

We also enter into foreign currency transactions, primarily to hedge certain intercompany loans. These derivatives are not generally designated as hedging instruments and at December 31, 2018 and December 31, 2017, we had notional amounts of \$909 million and \$971 million, respectively, and had a net fair value asset of \$3 million at both December 31, 2018 and 2017.

The effects of derivatives that have not been designated as hedging instruments on the consolidated statements of comprehensive income for the years ended December 31, 2018, 2017 and 2016 are as follows:

Derivatives not designated as hedging instruments:	Location of gain/(loss) recognized in income	Gain/(loss) recognized in income		
		2018	2017	2016
Foreign exchange contracts	Other income, net	\$ —	\$ 11	\$ (3)

Note 11 — Debt

Short-term debt and current portion of long-term debt consists of the following:

	December 31,	
	2018	2017
7.000% senior notes due 2019	\$ 186	\$ —
Current portion of term loan due 2019	—	85
	\$ 186	\$ 85

Long-term debt consists of the following:

	December 31,	
	2018	2017
Revolving \$1.25 billion credit facility	\$ 130	\$ 884
Term loan due 2019	—	84
7.000% senior notes due 2019	—	186
5.750% senior notes due 2021	498	497
3.500% senior notes due 2021	448	447
2.125% senior notes due 2022 (i)	615	644
4.625% senior notes due 2023	248	248
3.600% senior notes due 2024	645	645
4.400% senior notes due 2026	544	544
4.500% senior notes due 2028	595	—
6.125% senior notes due 2043	271	271
5.050% senior notes due 2048	395	—
	\$ 4,389	\$ 4,450

(i) Notes issued in Euro (€540 million)

Guarantees

All direct obligations under the 5.750% senior notes are issued by Willis Towers Watson and guaranteed by Willis Netherlands B.V., Willis Investment U.K. Holdings Limited, TA I Limited, Trinity Acquisition plc, Willis Group Limited, Willis North America Inc., Willis Towers Watson Sub Holdings Unlimited Company and Willis Towers Watson U.K. Holdings Limited.

All direct obligations under the 7.000%, 3.600%, 4.500% and 5.050% senior notes are issued by Willis North America Inc. and guaranteed by Willis Towers Watson and each of the subsidiaries that guarantees the Company notes, except for Willis North America Inc. itself.

All direct obligations under the 4.625%, 6.125%, 3.500%, 4.400%, and 2.125% senior notes are issued by Trinity Acquisition plc and guaranteed by Willis Towers Watson and each of the subsidiaries that guarantees the Company notes, except for Trinity Acquisition plc itself. See Note 22 — Financial Information for Issuers and Other Guarantor Subsidiaries.

Revolving Credit Facility

\$1.25 billion revolving credit facility

On March 7, 2017, Trinity Acquisition plc (see Note 22 for further information) entered into a \$1.25 billion amended and restated revolving credit facility (the 'RCF'), that will mature on March 7, 2022. The RCF replaced the previous \$800 million revolving credit facility (see below for further information). Amounts outstanding under the RCF shall bear interest at LIBOR plus a margin of 1.00% to 1.75%, or alternatively, the base rate plus a margin of 0.00% to 0.75%, based upon the Company's guaranteed senior unsecured long-term debt rating.

Borrowings of \$409 million and €45 million against the RCF were used to repay all outstanding borrowings against the previous \$800 million revolving credit facility and the 7-year term loan due July 23, 2018.

Additionally, on March 28, 2017, \$407 million was used to repay the 6.200% senior notes due 2017, including accrued interest.

Senior Notes

4.500% senior notes due 2028 and 5.050% senior notes due 2048

On September 10, 2018, the Company, together with its wholly-owned subsidiary, Willis North America Inc. as issuer (see Note 22 for further information), completed an offering of \$600 million of 4.500% senior notes due 2028 ('2028 senior notes') and \$400 million of 5.050% senior notes due 2048 ('2048 senior notes'). The effective interest rates of the 2028 senior notes and 2048 senior notes are 4.504% and 5.073%, respectively, which include the impact of the discount upon issuance. The 2028 senior notes will mature on September 15, 2028 and the 2048 senior notes will mature on September 15, 2048. Interest has accrued on both the 2028 senior notes and 2048 senior notes from September 10, 2018 and will be paid in cash on March 15 and September 15 of each year, commencing on March 15, 2019. The net proceeds from this offering, after deducting underwriter discounts and commissions and estimated offering expenses, were \$989 million, and were used to prepay in full \$127 million outstanding under the Company's term loan due December 2019, and to repay a portion of the amount outstanding under the Company's RCF.

3.600% senior notes due 2024

On May 16, 2017, Willis North America Inc. (see Note 22 for further information) issued \$650 million of 3.600% senior notes due 2024 ('2024 senior notes'). The effective interest rate of the 2024 senior notes is 3.614%, which includes the impact of the discount upon issuance. The 2024 senior notes will mature on May 15, 2024, and interest has accrued on the 2024 senior notes from May 16, 2017 and will be paid in cash on May 15 and November 15 of each year. The net proceeds from this offering, after deducting underwriter discounts and commissions and estimated offering expenses, were \$644 million, and were used to pay down amounts outstanding under the RCF and for general corporate purposes.

2.125% senior notes due 2022

On May 26, 2016, Trinity Acquisition plc issued €540 million (\$609 million) of 2.125% senior notes due 2022 ('2022 senior notes'). The effective interest rate of these senior notes is 2.154%, which includes the impact of the discount upon issuance. The 2022 senior notes will mature on May 26, 2022. Interest has accrued on the notes from May 26, 2016 and will be paid in cash on May 26 of each year. The net proceeds from this offering, after deducting underwriter discounts and commissions and estimated offering expenses, were €535 million (\$600 million). We used the net proceeds of this offering to repay Tranche A of the previous 1-year term loan facility, which matured in 2016, and related accrued interest.

3.500% senior notes due 2021 and 4.400% senior notes due 2026

On March 22, 2016, Trinity Acquisition plc issued \$450 million of 3.500% senior notes due 2021 ('2021 senior notes') and \$550 million of 4.400% senior notes due 2026 ('2026 senior notes'). The effective interest rates of these senior notes are 3.707% and 4.572%, respectively, which include the impact of the discount upon issuance. The 2021 senior notes and the 2026 senior notes will mature on September 15, 2021 and March 15, 2026, respectively. Interest has accrued on the notes from March 22, 2016 and will be paid in cash on March 15 and September 15 of each year. The net proceeds from these offerings, after deducting underwriter discounts and commissions and estimated offering expenses, were \$988 million. We used the net proceeds of these offerings to: (i) repay \$300 million principal under the prior \$800 million revolving credit facility and related accrued interest, which was drawn to repay our previously issued 4.125% senior notes on March 15, 2016; (ii) repay \$400 million principal on Tranche B of the previous 1-year term loan facility and related accrued interest; and (iii) pay down a portion of the remaining principal amount outstanding under the previous \$800 million revolving credit facility (see below for further information) and related accrued interest.

4.625% senior notes due 2023 and 6.125% senior notes due 2043

On August 15, 2013, the Company issued \$250 million of 4.625% senior notes due 2023 and \$275 million of 6.125% senior notes due 2043. The effective interest rates of these senior notes are 4.696% and 6.154%, respectively, which include the impact of the discount upon issuance. The proceeds were used to repurchase other previously issued senior notes.

5.750% senior notes due 2021

In March 2011, the Company issued \$500 million of 5.750% senior notes due 2021. The effective interest rate of this senior note is 5.871%, which includes the impact of the discount upon issuance. The proceeds were used to repurchase and redeem other previously issued senior notes.

7.000% senior notes due 2019

In September 2009, Willis North America Inc. issued \$300 million of 7.000% senior notes due 2019. The effective interest rate of these senior notes is 7.081%, which includes the impact of the discount upon issuance. A portion of the proceeds were used to repurchase and redeem other previously-issued senior notes. In August 2013, \$113 million of the 7.000% senior notes due 2019 were repurchased.

Term Loan Facilities

Term loan due December 2019

On January 4, 2016, we acquired a \$340 million term loan in connection with the Merger. On November 20, 2015, Towers Watson Delaware Inc. entered into a 4-year amortizing term loan agreement for up to \$340 million with a consortium of banks to help fund the pre-Merger special dividend. On December 28, 2015, Towers Watson Delaware Inc. borrowed the full \$340 million. During 2018, we prepaid the remaining \$127 million outstanding under the term loan with proceeds from the issuance of the 2028 senior notes and 2048 senior notes discussed above.

Additional Information Regarding Fully Repaid Revolving Credit Facility, Term Loan Facilities and Senior Notes

\$800 million revolving credit facility

Drawings under the previous \$800 million revolving credit facility bore interest at LIBOR plus a margin of 1.25% to 2.00%, or alternatively the base rate plus a margin of 0.25% to 1.00% based upon the Company's guaranteed senior unsecured long-term debt rating; a 1.375% margin applied while the Company's debt rating remained BBB/Baa3.

7-year term loan facility

The 7-year term loan facility expiring 2018 bore interest at the same rate applicable to the previous \$800 million revolving credit facility and was repayable in quarterly installments of \$6 million with a final repayment of \$186 million due in the third quarter of 2018. During 2017, we repaid in full and terminated the 7-year term loan with proceeds from borrowings against our \$1.25 billion revolving credit facility.

1-year term loan facility

On November 20, 2015, Legacy Willis entered into a 1-year term loan facility. The 1-year term loan had two tranches: Tranche A was for €550 million, of which €544 million (\$592 million) was drawn on December 19, 2015 and used to finance the acquisition of Gras Savoye. Tranche B was for \$400 million and was drawn on January 4, 2016 and used to re-finance debt held by Legacy Towers Watson which became due on acquisition. Tranche A was repaid in its entirety on May 26, 2016 from the proceeds from the issuance of our 2022 senior notes discussed above. Tranche B was repaid in its entirety on March 22, 2016 from a portion of the proceeds from the issuance of our senior notes discussed above.

4.125% senior notes due 2016

In March 2011, the Company issued \$300 million of 4.125% senior notes due 2016. The effective interest rate of the senior notes was 4.240%, which included the impact of the discount upon issuance. The proceeds were used to repurchase and redeem other previously issued senior notes. The 4.125% senior notes were repaid in March 2016.

6.200% senior notes due 2017

On March 28, 2007, we issued \$600 million of 10-year senior notes at 6.200%. The effective interest rate of these senior notes was 6.253%. In August 2013, \$206 million of the 6.200% senior notes was repurchased. The final balance was repaid on March 28, 2017 from the RCF as discussed above.

Covenants

The terms of our current financings also include certain limitations. For example, the agreements relating to the debt arrangements and credit facilities generally contain numerous operating and financial covenants, including requirements to maintain minimum ratios of consolidated EBITDA to consolidated cash interest expense and maximum levels of consolidated funded indebtedness in relation to consolidated EBITDA, in each case subject to certain adjustments. The operating restrictions and financial covenants in our current credit facilities do, and any future financing agreements may, limit our ability to finance future operations or capital needs or to engage in other business activities. At December 31, 2018 and 2017, we were in compliance with all financial covenants.

Debt Maturity

The following table summarizes the maturity of our debt, interest on senior notes and excludes any reduction for debt issuance costs:

	2019	2020	2021	2022	2023	Thereafter	Total
Senior notes	\$ 187	\$ —	\$ 950	\$ 617	\$ 250	\$ 2,475	\$ 4,479
Interest on senior notes	191	181	153	128	119	1,019	1,791
RCF	—	—	—	130	—	—	130
Total	<u>\$ 378</u>	<u>\$ 181</u>	<u>\$ 1,103</u>	<u>\$ 875</u>	<u>\$ 369</u>	<u>\$ 3,494</u>	<u>\$ 6,400</u>

Interest Expense

The following table shows an analysis of the interest expense for the years ended December 31:

	Years ended December 31,		
	2018	2017	2016
Senior notes	\$ 166	\$ 148	\$ 139
Term loans	4	8	17
RCF	26	17	10
WSI revolving credit facility	—	1	2
Other (i)	12	14	16
Total interest expense	<u>\$ 208</u>	<u>\$ 188</u>	<u>\$ 184</u>

(i) Other primarily includes debt issuance costs, interest expense on capitalized leases and accretion on deferred and contingent consideration.

Note 12 — Fair Value Measurements

The Company has categorized its assets and liabilities that are measured at fair value on a recurring and non-recurring basis into a three-level fair value hierarchy, based on the reliability of the inputs used to determine fair value as follows:

- Level 1: refers to fair values determined based on quoted market prices in active markets for identical assets;
- Level 2: refers to fair values estimated using observable market-based inputs or unobservable inputs that are corroborated by market data; and
- Level 3: includes fair values estimated using unobservable inputs that are not corroborated by market data.

The following methods and assumptions were used by the Company in estimating its fair value disclosure for financial instruments:

- Available-for-sale securities are classified as Level 1 because we use quoted market prices in determining the fair value of these securities.
- Market values for our derivative instruments have been used to determine the fair values of interest rate swaps and forward foreign exchange contracts based on estimated amounts the Company would receive or have to pay to terminate the agreements, taking into account observable information about the current interest rate environment or current foreign currency forward rates. Such financial instruments are classified as Level 2 in the fair value hierarchy.
- Contingent consideration payable is classified as Level 3, and we estimate fair value based on the likelihood and timing of achieving the relevant milestones of each arrangement, applying a probability assessment to each of the potential outcomes, and discounting the probability-weighted payout. Typically, milestones are based on revenue or EBITDA growth for the acquired business.

The following tables present our assets and liabilities measured at fair value on a recurring basis at December 31, 2018 and December 31, 2017:

		Fair Value Measurements on a Recurring Basis at December 31, 2018			
Balance Sheet Location		Level 1	Level 2	Level 3	Total
Assets:					
<i>Available-for-sale securities:</i>					
Mutual funds / exchange traded funds	Prepaid and other current assets and other non-current assets	\$ 18	\$ —	\$ —	\$ 18
<i>Derivatives:</i>					
Derivative financial instruments (i)	Prepaid and other current assets and other non-current assets	\$ —	\$ 5	\$ —	\$ 5
Liabilities:					
<i>Contingent consideration:</i>					
Contingent consideration (ii)	Other current liabilities and other non-current liabilities	\$ —	\$ —	\$ 51	\$ 51
<i>Derivatives:</i>					
Derivative financial instruments (i)	Other current liabilities and other non-current liabilities	\$ —	\$ 17	\$ —	\$ 17
		Fair Value Measurements on a Recurring Basis at December 31, 2017			
Balance Sheet Location		Level 1	Level 2	Level 3	Total
Assets:					
<i>Available-for-sale securities:</i>					
Mutual funds / exchange traded funds	Prepaid and other current assets and other non-current assets	\$ 40	\$ —	\$ —	\$ 40
<i>Derivatives:</i>					
Derivative financial instruments (i)	Prepaid and other current assets and other non-current assets	\$ —	\$ 18	\$ —	\$ 18
Liabilities:					
<i>Contingent consideration:</i>					
Contingent consideration (ii)	Other current liabilities and other non-current liabilities	\$ —	\$ —	\$ 51	\$ 51
<i>Derivatives:</i>					
Derivative financial instruments (i)	Other current liabilities and other non-current liabilities	\$ —	\$ 37	\$ —	\$ 37

(i) See Note 10 — Derivative Financial Instruments for further information on our derivative instruments.

(ii) Probability weightings are based on our knowledge of the past and planned performance of the acquired entity to which the contingent consideration applies. The weighted-average discount rates used on our material contingent consideration calculations were 9.92% and 9.64% at December 31, 2018 and December 31, 2017, respectively. Using different probability weightings and discount rates could result in an increase or decrease of the contingent consideration payable.

The following table summarizes the change in fair value of the Level 3 liabilities:

Fair Value Measurements Using Significant Unobservable Inputs (Level 3)	December 31, 2018
Balance at December 31, 2017	\$ 51
Obligations assumed	2
Payments	(3)
Realized and unrealized gains	3
Foreign exchange	(2)
Balance at December 31, 2018	\$ 51

There were no significant transfers between Levels 1, 2 or 3 during the years ended December 31, 2018 and 2017.

Fair value information about financial instruments not measured at fair value

The following tables present our liabilities not measured at fair value on a recurring basis at December 31, 2018 and 2017:

	December 31, 2018		December 31, 2017	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Liabilities:				
Short-term debt and current portion of long-term debt	\$ 186	\$ 191	\$ 85	\$ 85
Long-term debt	\$ 4,389	\$ 4,458	\$ 4,450	\$ 4,706

The carrying values of our revolving lines of credit and term loans approximate their fair values. The fair values above are not necessarily indicative of the amounts that the Company would realize upon disposition nor do they indicate the Company's intent or ability to dispose of the financial instrument. The fair value of our respective senior notes are considered level 2 financial instruments as they are corroborated by observable market data.

Note 13 — Retirement Benefits

Defined Benefit Plans and Post-retirement Welfare Plans

Willis Towers Watson sponsors both qualified and non-qualified defined benefit pension plans and other post-retirement welfare ('PRW') plans throughout the world. The majority of our plan assets and obligations are in the United States and the United Kingdom. We have also included disclosures related to defined benefit plans in certain other countries, including Canada, France, Germany, Ireland and the Netherlands. Together, these disclosed funded and unfunded plans represent 99% of Willis Towers Watson's pension and PRW obligations and are disclosed herein.

As part of these obligations, in the United States, the United Kingdom and Canada, we have non-qualified plans that provide for the additional pension benefits that would be covered under the qualified plan in the respective country were it not for statutory maximums. The non-qualified plans are unfunded.

The significant plans within each grouping are described below:

United States

Legacy Willis – This plan was frozen in 2009. Approximately one-quarter of the Legacy Willis employees in the United States have a frozen accrued benefit under this plan.

Willis Towers Watson Plan – Substantially all U.S. employees are eligible to participate in this plan. Benefits are provided under a stable value pension plan design. The original stable value design came into effect on January 1, 2012. Existing plan participants as of July 1, 2017 earn benefits without having to make employee contributions, and all newly eligible employees after that date are required to contribute 2% of pay to participate in the plan.

United Kingdom

Legacy Willis – This plan covers approximately one-third of the Legacy Willis employees in the United Kingdom. The plan is now closed to new entrants. New employees in the United Kingdom are offered the opportunity to join a defined contribution plan.

Legacy Towers Watson – Benefit accruals earned under the Legacy Watson Wyatt defined benefit plan (predominantly pension benefits) ceased on February 28, 2015, although benefits earned prior to January 1, 2008 retain a link to salary until the employee leaves the Company. Benefit accruals earned under the legacy Towers Perrin defined benefit plan (predominantly lump sum benefits) were frozen on March 31, 2008. All participants now accrue defined contribution benefits.

Legacy Miller – The plan provides retirement benefits based on members’ salaries at the point at which they ceased to accrue benefits under the scheme.

Other

Canada (Legacy Towers Watson) – Participants accrue qualified and non-qualified benefits based on a career average benefit formula. Additionally, participants can choose to make voluntary contributions to purchase enhancements to their pension.

France (Legacy Gras Savoye) – The mandatory retirement indemnity plan is a termination benefit which provides lump sum benefits at retirement. There is no vesting before the retirement date and the benefit formula is determined through the collective bargaining agreement and the labor code. All employees with permanent employment contracts are eligible.

Germany (Legacy Willis and Legacy Towers Watson) – Both defined benefit plans are closed to new entrants and include certain legacy employee populations hired before 2011. These benefits are primarily account-based, with some long-service participants continuing to accrue benefits according to grandfathered final-average-pay formulas. Other employees, including new entrants, participate in defined contribution arrangements.

Ireland (Legacy Willis) – The defined benefit plans provide pension benefits for approximately one-third of legacy Willis employees in Ireland. The defined benefit plans are now closed to new entrants.

Ireland (Legacy Towers Watson) – Benefit accruals earned under the scheme’s defined benefit plan ceased on May 1, 2015. Benefits earned prior to this date retain a link to salary until the employee leaves the Company.

Netherlands (Legacy Towers Watson) – This plan was terminated during the year ended December 31, 2018. Benefits under the plan accrued on a final pay basis on earnings up to a maximum amount each year, however this accrual stopped at December 31, 2010. The accrued benefits received conditional indexation each year prior to the plan termination.

Post-retirement Welfare Plan

We provide certain healthcare and life insurance benefits for retired participants. The principal plans cover participants in the U.S. who have met certain eligibility requirements. Our principal post-retirement benefit plans are primarily unfunded. Retiree medical benefits provided under our U.S. post-retirement benefit plans were closed to new hires effective January 1, 2011. Life insurance benefits under the plans were frozen with respect to service, eligibility and amounts as of January 1, 2012 for active participants.

Amounts Recognized in our Consolidated Financial Statements

The following schedules provide information concerning the defined benefit pension plans and PRW plan as of and for the years ended December 31, 2018 and 2017:

	2018				2017			
	U.S.	U.K.	Other	PRW	U.S.	U.K.	Other	PRW
Change in Benefit Obligation								
Benefit obligation, beginning of year	\$ 4,476	\$ 4,165	\$ 822	\$ 123	\$ 4,169	\$ 3,899	\$ 732	\$ 113
Service cost	66	18	21	1	66	32	20	—
Interest cost	140	95	18	4	139	93	17	4
Employee contributions	14	1	—	7	6	1	—	6
Actuarial (gains)/losses	(313)	(176)	(7)	(3)	293	2	5	14
Settlements	(11)	(152)	(26)	—	(16)	(138)	(1)	—
Curtailments	—	—	(20)	—	—	—	—	—
Benefits paid	(185)	(96)	(28)	(14)	(181)	(93)	(29)	(14)
Plan amendments	—	40	—	(31)	—	—	—	—
Transfers in	—	—	1	—	—	—	1	—
Foreign currency changes	—	(229)	(53)	—	—	369	77	—
Benefit obligation, end of year	\$ 4,187	\$ 3,666	\$ 728	\$ 87	\$ 4,476	\$ 4,165	\$ 822	\$ 123
Change in Plan Assets								
Fair value of plan assets, beginning of year	\$ 3,654	\$ 4,910	\$ 562	\$ 2	\$ 3,280	\$ 4,360	\$ 467	\$ 4
Actual return on plan assets	(157)	(69)	(9)	—	464	290	42	—
Employer contributions	88	85	22	6	101	66	34	6
Employee contributions	14	1	—	7	6	1	—	6
Settlements	(11)	(152)	(26)	—	(16)	(138)	(1)	—
Benefits paid	(185)	(96)	(28)	(14)	(181)	(93)	(29)	(14)
Transfers in	—	—	1	—	—	—	1	—
Foreign currency adjustment	—	(277)	(36)	—	—	424	48	—
Fair value of plan assets, end of year	\$ 3,403	\$ 4,402	\$ 486	\$ 1	\$ 3,654	\$ 4,910	\$ 562	\$ 2
Funded status at end of year	\$ (784)	\$ 736	\$ (242)	\$ (86)	\$ (822)	\$ 745	\$ (260)	\$ (121)
Accumulated Benefit Obligation Components on the Consolidated Balance Sheet	\$ 4,187	\$ 3,666	\$ 698	\$ 87	\$ 4,476	\$ 4,165	\$ 790	\$ 123
Pension benefits assets	\$ —	\$ 745	\$ 17	\$ —	\$ —	\$ 754	\$ 17	\$ —
Current liability for pension benefits	\$ (49)	\$ (1)	\$ (6)	\$ (5)	\$ (40)	\$ —	\$ (6)	\$ (5)
Non-current liability for pension benefits	\$ (735)	\$ (8)	\$ (253)	\$ (81)	\$ (782)	\$ (9)	\$ (271)	\$ (116)
	\$ (784)	\$ 736	\$ (242)	\$ (86)	\$ (822)	\$ 745	\$ (260)	\$ (121)

Amounts recognized in accumulated other comprehensive loss as of December 31, 2018 and 2017 consist of:

	2018				2017			
	U.S.	U.K.	Other	PRW	U.S.	U.K.	Other	PRW
Net actuarial loss	\$ 769	\$ 955	\$ 98	\$ 16	\$ 663	\$ 909	\$ 79	\$ 19
Net prior service gain	—	(76)	—	(31)	—	(142)	—	—
Accumulated other comprehensive loss/(income)	\$ 769	\$ 879	\$ 98	\$ (15)	\$ 663	\$ 767	\$ 79	\$ 19

The following table presents the projected benefit obligation and fair value of plan assets for our plans that have a projected benefit obligation in excess of plan assets as of December 31, 2018 and 2017:

	2018			2017		
	U.S.	U.K.	Other	U.S.	U.K.	Other
Projected benefit obligation at end of year	\$ 4,187	\$ 9	\$ 672	\$ 4,476	\$ 10	\$ 758
Fair value of plan assets at end of year	\$ 3,403	\$ —	\$ 413	\$ 3,654	\$ —	\$ 481

The following table presents the projected benefit obligation, accumulated benefit obligation and fair value of plan assets for our plans that have an accumulated benefit obligation in excess of plan assets as of December 31, 2018 and 2017.

	2018			2017		
	U.S.	U.K.	Other	U.S.	U.K.	Other
Projected benefit obligation at end of year	\$ 4,187	\$ 9	\$ 672	\$ 4,476	\$ 10	\$ 758
Accumulated benefit obligation at end of year	\$ 4,187	\$ 9	\$ 642	\$ 4,476	\$ 10	\$ 726
Fair value of plan assets at end of year	\$ 3,403	\$ —	\$ 413	\$ 3,654	\$ —	\$ 481

The components of the net periodic benefit income and other amounts recognized in other comprehensive (income)/loss for the years ended December 31, 2018, 2017 and 2016 for the defined benefit pension and PRW plans are as follows:

	2018				2017				2016			
	U.S.	U.K.	Other	PRW	U.S.	U.K.	Other	PRW	U.S.	U.K.	Other	PRW
Components of net periodic benefit (income)/cost:												
Service cost	\$ 66	\$ 18	\$ 21	\$ 1	\$ 66	\$ 32	\$ 20	\$ —	\$ 59	\$ 24	\$ 19	\$ 1
Interest cost	140	95	18	4	139	93	17	4	137	114	18	3
Expected return on plan assets	(273)	(298)	(31)	—	(245)	(284)	(30)	—	(240)	(253)	(27)	—
Amortization of unrecognized prior service credit	—	(19)	—	—	—	(18)	—	—	—	(19)	—	—
Amortization of unrecognized actuarial loss	11	45	2	—	13	53	2	—	12	42	—	—
Settlement	1	41	2	—	1	37	1	—	—	—	5	—
Curtailment gain	—	—	(16)	—	—	—	—	—	—	—	—	—
Net periodic benefit (income)/cost	\$ (55)	\$ (118)	\$ (4)	\$ 5	\$ (26)	\$ (87)	\$ 10	\$ 4	\$ (32)	\$ (92)	\$ 15	\$ 4
Other changes in plan assets and benefit obligations recognized in other comprehensive loss/(income):												
Net actuarial loss/(gain)	\$ 117	\$ 191	\$ 13	\$ (3)	\$ 74	\$ (4)	\$ (7)	\$ 14	\$ 238	\$ 323	\$ 62	\$ 4
Amortization of unrecognized actuarial loss	(11)	(45)	(2)	—	(13)	(53)	(2)	—	(12)	(42)	—	—
Prior service cost/(credit)	—	40	—	(31)	—	—	—	—	—	—	—	—
Amortization of unrecognized prior service credit	—	19	—	—	—	18	—	—	—	19	—	—
Settlement	(1)	(41)	(2)	—	(1)	(37)	(1)	—	—	—	(8)	—
Curtailment gain	—	—	16	—	—	—	—	—	—	—	—	—
Total recognized in other comprehensive loss/(income)	105	164	25	(34)	60	(76)	(10)	14	226	300	54	4
Total recognized in net periodic benefit (income)/cost and other comprehensive loss/(income)	\$ 50	\$ 46	\$ 21	\$ (29)	\$ 34	\$ (163)	\$ —	\$ 18	\$ 194	\$ 208	\$ 69	\$ 8

As a result of adopting ASU 2017-07, within the consolidated statements of comprehensive income, service cost is included within salaries and benefits expense. The remainder of the components of net periodic benefit income of \$280 million, \$222 million and \$203 million for the years ended December 31, 2018, 2017 and 2016, respectively, are included within other income, net. These reclassifications include amounts for those plans which are immaterial for disclosure.

During the year ended December 31, 2018, the Company terminated its Netherlands-based defined benefit plan, resulting in the recognition of a non-cash curtailment gain of \$16 million.

During the years ended December 31, 2018 and 2017, as a result of past changes in UK legislation and the low interest rate environment, the amount of transfer payments from the Legacy Willis UK pension plan exceeded the plan's service and interest cost. This triggers settlement accounting which requires immediate recognition of a portion of the obligations associated with the plan transfers. Consequently, the Company recognized a non-cash expense of \$40 million and \$36 million for the years ended December 31, 2018 and 2017, respectively.

During the year ended December 31, 2016, we adopted the granular approach to calculating service and interest costs. This was treated as a change in accounting estimate, and resulted in a credit of \$51 million included in our total net periodic benefit income reflected above.

The estimated net actuarial loss and prior service credit for the defined benefit plans that will be amortized from accumulated other comprehensive loss into net periodic benefit cost over the next fiscal year are:

	For the Year Ended December 31, 2019			
	U.S.	U.K.	Other	PRW
Estimated net actuarial loss	\$ 19	\$ 21	\$ 2	\$ 1
Prior service credit	\$ —	\$ (16)	\$ —	\$ (4)

Assumptions Used in the Valuations of the Defined Benefit Pension Plans and PRW Plan

The determination of the Company's obligations and annual expense under the plans is based on a number of assumptions that, given the longevity of the plans, are long-term in focus. A change in one or a combination of these assumptions could have a material impact on our projected benefit obligation. However, certain of these changes, such as changes in the discount rate and actuarial assumptions, are not recognized immediately in net income, but are instead recorded in other comprehensive income. The accumulated gains and losses not yet recognized in net income are amortized into net income as a component of the net periodic benefit cost/(income) generally based on the average working life expectancy of each of the plan's active participants to the extent that the net gains or losses as of the beginning of the year exceed 10% of the greater of the market-related value of plan assets or the projected benefit obligation. The average remaining service period of participants for the PRW plan is approximately 10.6 years.

The Company considers several factors prior to the start of each fiscal year when determining the appropriate annual assumptions, including economic forecasts, relevant benchmarks, historical trends, portfolio composition and peer company comparisons. These assumptions, used to determine our pension liabilities and pension expense, are reviewed annually by senior management and changed when appropriate. A discount rate will be changed annually if underlying rates have moved, whereas an expected long-term return on assets will be changed less frequently as longer term trends in asset returns emerge or long-term target asset allocations are revised. To calculate the discount rate, we use the granular approach to determining service and interest costs. The expected rate of return assumptions for all plans are supported by an analysis of the weighted-average yield expected to be achieved based upon the anticipated makeup of the plans' investments. Other material assumptions include rates of participant mortality, and the expected long-term rate of compensation and pension increases.

The following assumptions were used in the valuations of Willis Towers Watson's defined benefit pension plans and PRW plan. The assumptions presented for the U.S. plans represent the weighted-average of rates for all U.S. plans. The assumptions presented for the U.K. plans represent the weighted-average of rates for the U.K. plans. The assumptions presented for the Other plans represent the weighted-average of rates for the Canada, France, Germany, Ireland, and Netherlands plans. The Netherlands plan is excluded from the 2018 disclosures due to the plan termination during the year.

The assumptions used to determine net periodic benefit cost for the fiscal years ended December 31, 2018, 2017, and 2016 were as follows:

	Years ended December 31,											
	2018				2017				2016			
	U.S.	U.K.	Other	PRW	U.S.	U.K.	Other	PRW	U.S.	U.K.	Other	PRW
Discount rate - PBO	3.6%	2.6%	2.6%	3.5%	4.0%	2.6%	2.7%	4.0%	4.2%	3.8%	3.2%	4.2%
Discount rate - service cost	3.5%	2.7%	2.9%	3.5%	3.9%	2.6%	3.0%	3.9%	3.9%	3.8%	3.4%	4.1%
Discount rate - interest cost on service cost	3.1%	2.5%	2.7%	3.2%	3.2%	2.4%	2.8%	3.5%	3.2%	3.8%	3.1%	3.5%
Discount rate - interest cost on PBO	3.2%	2.3%	2.3%	3.1%	3.4%	2.3%	2.3%	3.3%	3.4%	3.4%	2.8%	3.3%
Expected long-term rate of return on assets	7.6%	6.2%	5.7%	2.0%	7.6%	6.3%	6.1%	2.0%	7.6%	6.2%	6.1%	2.0%
Rate of increase in compensation levels	4.3%	3.0%	2.3%	N/A	4.3%	3.2%	2.3%	N/A	4.3%	3.2%	2.3%	N/A
Healthcare cost trend												
Initial rate				6.5%				7.0%				7.0%
Ultimate rate				5.0%				5.0%				5.0%
Year reaching ultimate rate				2022				2022				2022

The following tables present the assumptions used in the valuation to determine the projected benefit obligation for the fiscal years ended December 31, 2018 and 2017:

	December 31, 2018				December 31, 2017			
	U.S.	U.K.	Other	PRW	U.S.	U.K.	Other	PRW
Discount rate	4.2%	2.8%	2.8%	4.2%	3.6%	2.6%	2.6%	3.5%
Rate of increase in compensation levels	4.3%	3.0%	2.3%	N/A	4.3%	3.0%	2.3%	N/A

A one percentage point change in the assumed healthcare cost trend rates would have an immaterial effect on the post-retirement benefit cost and obligation as of December 31, 2018.

The expected return on plan assets was determined on the basis of the weighted-average of the expected future returns of the various asset classes, using the target allocations shown below. The Company's pension plan asset target allocations as of December 31, 2018 were as follows:

Asset Category	U.S.		U.K.			Canada	Germany	Ireland	
	Willis	Willis Towers Watson	Willis	Towers Watson	Miller	Towers Watson	Towers Watson	Willis	Towers Watson
Equity securities	30%	23%	23%	7%	19%	40%	34%	30%	40%
Debt securities	44%	43%	58%	25%	21%	50%	59%	29%	30%
Real estate	11%	6%	2%	1%	—%	5%	—%	3%	—%
Other	15%	28%	17%	67%	60%	5%	7%	38%	30%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

The Legacy Willis plan in Germany is invested in insurance contracts. Consequently, the asset allocations of the plans are managed by the respective insurer. The Legacy Gras Savoye plan in France is unfunded.

Our investment strategy is designed to generate returns that will reduce the interest rate risk inherent in each of the plan's benefit obligations and enable the plans to meet their future obligations. The precise amount for which these obligations will be settled depends on future events, including the life expectancy of the plan participants and salary inflation. The obligations are estimated using actuarial assumptions, based on the current economic environment.

Each pension plan seeks to achieve total returns sufficient to meet expected future obligations when considered in conjunction with expected future contributions and prudent levels of investment risk and diversification. Each plan's targeted asset allocation is generally determined through a plan-specific asset-liability modeling study. These comprehensive studies provide an evaluation of the projected status of asset and benefit obligation measures for each plan under a range of both positive and negative factors. The studies include a number of different asset mixes, spanning a range of diversification and potential equity exposures.

In evaluating the strategic asset allocation choices, an emphasis is placed on the long-term characteristics of each individual asset class, such as expected return, volatility of returns and correlations with other asset classes within the portfolios. Consideration is also given to the proper long-term level of risk for each plan, the impact of the volatility and magnitude of plan contributions and costs, and the impact that certain actuarial techniques may have on the plan's recognition of investment experience.

We monitor investment performance and portfolio characteristics on a quarterly basis to ensure that managers are meeting expectations with respect to their investment approach. There are also various restrictions and controls placed on managers, including prohibition from investing in our stock.

Fair Value of Plan Assets

The fair value hierarchy has three levels based on the reliability of the inputs used to determine fair value:

- Level 1: refers to fair values determined based on quoted market prices in active markets for identical assets;
- Level 2: refers to fair values estimated using observable market-based inputs or unobservable inputs that are corroborated by market data; and

- Level 3: includes fair values estimated using unobservable inputs that are not corroborated by market data.

The fair values of our U.S. plan assets by asset category at December 31, 2018 and 2017 are as follows:

	December 31, 2018				December 31, 2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Asset category:								
Cash	\$ 6	\$ —	\$ —	\$ 6	\$ 10	\$ —	\$ —	\$ 10
Short-term securities	—	78	—	78	—	283	—	283
Equity securities	156	—	—	156	202	—	—	202
Government bonds	2	—	—	2	10	—	—	10
Corporate bonds	—	354	—	354	—	193	—	193
Other fixed income	—	—	—	—	—	20	—	20
Pooled / commingled funds	—	—	—	1,467	—	—	—	1,922
Mutual funds	—	—	—	—	1	—	—	1
Private equity	—	—	—	357	—	—	—	287
Hedge funds	—	—	—	984	—	—	—	724
Total assets	\$ 164	\$ 432	\$ —	\$ 3,404	\$ 223	\$ 496	\$ —	\$ 3,652

The fair values of our U.K. plan assets by asset category at December 31, 2018 and 2017 are as follows:

	December 31, 2018				December 31, 2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Asset category:								
Cash	\$ 229	\$ —	\$ —	\$ 229	\$ 92	\$ —	\$ —	\$ 92
Equity securities	—	—	—	—	24	—	—	24
Government bonds	1,804	—	—	1,804	1,841	—	—	1,841
Corporate bonds	—	297	—	297	—	224	—	224
Other fixed income	—	248	—	248	—	246	—	246
Pooled / commingled funds	—	—	—	934	—	—	—	2,294
Mutual funds	—	—	—	16	—	—	—	8
Private equity	—	—	—	33	—	—	—	32
Derivatives	—	96	—	96	—	102	—	102
Real estate	—	—	—	184	—	—	—	218
Hedge funds	—	—	—	1,232	—	—	—	393
Total assets	\$ 2,033	\$ 641	\$ —	\$ 5,073	\$ 1,957	\$ 572	\$ —	\$ 5,474
Liability category:								
Repurchase agreements	—	684	—	684	—	549	—	549
Derivatives	—	—	—	—	—	16	—	16
Net assets/(liabilities)	\$ 2,033	\$ (43)	\$ —	\$ 4,389	\$ 1,957	\$ 7	\$ —	\$ 4,909

The fair values of our Other plan assets by asset category at December 31, 2018 and 2017 are as follows:

Asset category:	December 31, 2018				December 31, 2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Cash	\$ 1	\$ —	\$ —	\$ 1	\$ 5	\$ —	\$ —	\$ 5
Pooled / commingled funds	—	—	—	294	—	—	—	327
Mutual funds	—	—	—	185	—	—	—	209
Hedge funds	—	—	—	4	—	—	—	—
Insurance contracts	—	—	2	2	—	—	19	19
Total assets	<u>\$ 1</u>	<u>\$ —</u>	<u>\$ 2</u>	<u>\$ 486</u>	<u>\$ 5</u>	<u>\$ —</u>	<u>\$ 19</u>	<u>\$ 560</u>

Our PRW plan invests only in short-term investments and mutual funds and is not included within this fair value hierarchy table.

We evaluate the need to transfer between levels based upon the nature of the financial instrument and size of the transfer relative to the total net assets of the plans. There were no significant transfers between Levels 1, 2 or 3 in the fiscal years ended December 31, 2018 and 2017.

In accordance with Subtopic 820-10, *Fair Value Measurement and Disclosures*, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in these tables are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the statements of net assets.

Following is a description of the valuation methodologies used for investments at fair value:

Short-term securities: Valued at the net value of shares held by the Company at year end as reported by the sponsor of the funds.

Equity securities and mutual funds: Valued at the closing price reported on the active market on which the individual securities are traded. Exchange-traded mutual funds are included as Level 1 above.

Government bonds: Valued at the closing price reported in the active market in which the bond is traded.

Corporate bonds: Valued using pricing models maximizing the use of observable inputs for similar securities. This includes basing values on yields currently available on comparable securities of issuers with similar credit ratings.

Other fixed income: Foreign and municipal bonds are valued at the closing price reported in the active market in which the bond is traded.

Pooled / commingled funds and mutual funds: Valued at the net value of shares held by the Company at year end as reported by the manager of the funds. These funds are not exchange-traded and are not reported by level in the tables above.

Derivative investments: Valued at the closing level of the relevant index or security and interest accrual through the valuation date.

Private equity funds, real estate funds, hedge funds: The fair values for these investments are estimated based on the net asset values derived from the latest audited financial statements or most recent capital account statements provided by the private equity fund's investment manager or third-party administrator.

Insurance contracts: The fair values are determined using model-based techniques that include option-pricing models, discounted cash flow models and similar techniques.

Repurchase agreements: Valued as the repurchase obligation which includes an interest rate linked to the underlying fixed interest government bond portfolio. These agreements are short-term in nature (less than one year) and were entered into for the purpose of purchasing additional government bonds.

The following table reconciles the net plan investments to the total fair value of the plan assets:

	December 31,	
	2018	2017
Net assets held in investments	\$ 8,279	\$ 9,121
PRW plan assets	1	2
Net (payable)/receivable for investments purchased	(1)	2
Dividend and interest receivable	1	3
Other adjustments	12	—
Fair value of plan assets	<u>\$ 8,292</u>	<u>\$ 9,128</u>

Level 3 investments

As a result of the inherent limitations related to the valuations of the Level 3 investments, due to the unobservable inputs of the underlying funds, the estimated fair value may differ significantly from the values that would have been used had a market for those investments existed.

The following table sets forth a summary of changes in the fair value of the plans' Level 3 assets for the fiscal year ended December 31, 2018:

	Level 3 Roll Forward
Beginning balance at December 31, 2017	\$ 19
Plan termination	\$ (17)
Foreign exchange	—
Ending balance at December 31, 2018	<u>\$ 2</u>

Contributions and Benefit Payments

Funding is based on actuarially-determined contributions and is limited to amounts that are currently deductible for tax purposes. Since funding calculations are based on different measurements than those used for accounting purposes, pension contributions are not equal to net periodic pension costs.

The following table sets forth our projected pension contributions to our qualified plans for fiscal year 2019, as well as the pension contributions to our qualified plans in fiscal years 2018 and 2017:

	2019 (Projected)	2018 (Actual)	2017 (Actual)
U.S.	\$ 60	\$ 50	\$ 50
U.K.	\$ 75	\$ 84	\$ 65
Other	\$ 23	\$ 14	\$ 13

Expected benefit payments from our defined benefit pension plans to current plan participants, including the effects of their expected future service, as appropriate, are as follows:

Fiscal Year	Benefit Payments				
	U.S.	U.K.	Other	PRW	Total
2019	\$ 263	\$ 109	\$ 28	\$ 13	\$ 413
2020	250	107	25	10	392
2021	263	116	25	11	415
2022	272	119	26	11	428
2023	280	127	27	11	445
Years 2024 – 2028	1,435	735	160	60	2,390
	<u>\$ 2,763</u>	<u>\$ 1,313</u>	<u>\$ 291</u>	<u>\$ 116</u>	<u>\$ 4,483</u>

Defined Contribution Plan

We have defined contribution plans covering eligible employees in many countries. The most significant plans are in the U.S. and U.K. and are described here.

We have a U.S. defined contribution plan (the 'Plan') covering all eligible employees of Willis Towers Watson. The Plan allows participants to make pre-tax and Roth after-tax contributions and the Company provides a 100% match on the first 1% of employee contributions and a 50% match on the next 5% of employee contributions. Employees vest in the Company match upon 2 years of service. All investment assets of the plan are held in a trust account administered by independent trustees.

The Legacy Towers Watson U.K. pension plan has a money purchase component to which we make core contributions plus additional contributions matching those of the participants up to a maximum rate. Contribution rates depend on the age of the participant and whether or not they arise from salary sacrifice arrangements through which the participant has elected to receive a pension contribution in lieu of additional salary.

The Legacy Willis U.K. pension plan has a money purchase component to which we make core contributions plus additional contributions matching those of the participants up to a maximum rate. Contribution rates may arise from salary sacrifice arrangements through which the participant has elected to receive a pension contribution in lieu of additional salary.

We had defined contribution plan expense for the years ended December 31, 2018, 2017, and 2016 amounting to \$150 million, \$154 million and \$152 million, respectively.

Note 14 — Commitments and Contingencies

Leases

The Company leases certain land, buildings and equipment under various operating lease commitments. The total amount of the minimum rent is expensed on a straight-line basis over the term of the lease. Rental expenses and sub-lease rental income for operating leases are recorded as part of other operating expenses in the consolidated statements of comprehensive income. Rental expense, exclusive of sublease income, was \$295 million, \$302 million, and \$302 million for the years ended December 31, 2018, 2017 and 2016, respectively. We have entered into sublease agreements for some of our excess leased space. Sublease income was \$15 million, \$21 million and \$17 million for the years ended December 31, 2018, 2017 and 2016, respectively.

As of December 31, 2018, the aggregate future minimum rental commitments under all non-cancellable operating lease agreements are as follows:

	Gross rental commitments	Rentals from subleases	Net rental commitments
2019	\$ 197	\$ (11)	\$ 186
2020	180	(11)	169
2021	159	(8)	151
2022	142	(2)	140
2023	131	(2)	129
Thereafter	542	(8)	534
Total	\$ 1,351	\$ (42)	\$ 1,309

At December 31, 2018 and 2017, the Company had certain capital lease obligations totaling \$43 million and \$48 million, respectively, primarily in respect of the Company's Nashville property.

Guarantees

Guarantees issued by certain of Willis Towers Watson's subsidiaries with respect to the senior notes and revolving credit facilities are discussed in Note 11 — Debt and Note 22 — Financial Information for Issuers and Other Guarantor Subsidiaries.

Certain of Willis Towers Watson's subsidiaries have given the landlords of some leasehold properties occupied by the Company in the U.K. and the U.S. guarantees with respect to the performance of the lease obligations of the subsidiary

holding the lease. The operating lease obligations subject to such guarantees amounted to \$570 million and \$669 million at December 31, 2018 and 2017, respectively. The capital lease obligations subject to such guarantees amounted to \$7 million and \$8 million at December 31, 2018 and 2017, respectively.

Acquisition liabilities

The Company has deferred and contingent consideration due to be paid on existing acquisitions until 2021 totaling \$83 million at December 31, 2018. Most notably, our liabilities for the acquisitions of Alston Gayler and Miller Insurance Services LLP in December 2018 and May 2015, respectively, for which deferred and contingent consideration, including interest, was \$73 million at December 31, 2018. Total deferred and contingent consideration paid during the year ended December 31, 2018 was \$50 million.

Other contractual obligations

For certain subsidiaries and associates, the Company has the right to purchase shares (a call option) from co-shareholders at various dates in the future. In addition, the co-shareholders of certain subsidiaries and associates have the right to sell their shares (a put option) to the Company at various dates in the future. Generally, the exercise price of such put options and call options is formula-based (using revenue and earnings) and is designed to reflect fair value. Based on current projections of profitability and exchange rates, and assuming the put options are exercised, the potential amount payable from these options is not expected to exceed \$33 million.

Additionally, the Company has capital commitments with Trident V Parallel Fund, LP, an investment fund managed by Stone Point Capital, and Dowling Capital Partners I, LP. At December 31, 2018, the Company is obligated to make capital contributions of approximately \$2 million, collectively, to these funds.

Indemnification Agreements

Willis Towers Watson has various agreements which provide that it may be obligated to indemnify the other party to the agreement with respect to certain matters. Generally, these indemnification provisions are included in contracts arising in the normal course of business and in connection with the purchase and sale of certain businesses. Although it is not possible to predict the maximum potential amount of future payments that may become due under these indemnification agreements because of the conditional nature of the Company's obligations and the unique facts of each particular agreement, we do not believe that any potential liability that may arise from such indemnity provisions is probable or material. There are no provisions for recourse to third parties, nor are any assets held by any third parties that any guarantor can liquidate to recover amounts paid under such indemnities.

Legal Proceedings

In the ordinary course of business, the Company is subject to various actual and potential claims, lawsuits and other proceedings. Some of the claims, lawsuits and other proceedings seek damages in amounts which could, if assessed, be significant. We do not expect the impact of claims or demands not described below to be material to the Company's consolidated financial statements. The Company also receives subpoenas in the ordinary course of business and, from time to time, receives requests for information in connection with governmental investigations.

Errors and omissions claims, lawsuits, and other proceedings arising in the ordinary course of business are covered in part by professional indemnity or other appropriate insurance. See Note 15 — Supplementary Information for Certain Balance Sheet Accounts for the amounts accrued at December 31, 2018 and December 31, 2017 in the consolidated balance sheets. The terms of this insurance vary by policy year. Regarding self-insured risks, the Company has established provisions which are believed to be adequate in light of current information and legal advice, or, in certain cases, where a range of loss exists, the Company accrues the minimum amount in the range if no amount within the range is a better estimate than any other amount. The Company adjusts such provisions from time to time according to developments.

On the basis of current information, the Company does not expect that the actual claims, lawsuits and other proceedings to which the Company is subject, or potential claims, lawsuits, and other proceedings relating to matters of which it is aware, will ultimately have a material adverse effect on the Company's financial condition, results of operations or liquidity. Nonetheless, given the large or indeterminate amounts sought in certain of these actions, and the inherent unpredictability of litigation and disputes with insurance companies, it is possible that an adverse outcome or settlement in certain matters could, from time to time, have a material adverse effect on the Company's results of operations or cash flows in particular quarterly or annual periods. In addition, given the early stages of some litigation or regulatory proceedings

described below, it is not possible to predict their outcome or resolution, and it is possible that these events may have a material adverse effect on the Company.

The Company provides for contingent liabilities based on ASC 450, *Contingencies*, when it is determined that a liability, inclusive of defense costs, is probable and reasonably estimable. The contingent liabilities recorded are primarily developed actuarially. Litigation is subject to many factors which are difficult to predict so there can be no assurance that in the event of a material unfavorable result in one or more claims, we will not incur material costs.

Merger-Related Securities Litigation

On November 21, 2017, a purported former stockholder of Legacy Towers Watson filed a putative class action complaint on behalf of a putative class consisting of all Legacy Towers Watson stockholders as of October 2, 2015 against the Company, Legacy Towers Watson, Legacy Willis, ValueAct Capital Management ('ValueAct'), and certain current and former directors and officers of Legacy Towers Watson and Legacy Willis (John Haley, Dominic Casserley, and Jeffrey Ubben), in the United States District Court for the Eastern District of Virginia. The complaint asserted claims against certain defendants under Section 14(a) of the Securities Exchange Act of 1934 (the 'Exchange Act') for allegedly false and misleading statements in the proxy statement for the Merger; and against other defendants under Section 20(a) of the Exchange Act for alleged 'control person' liability with respect to such allegedly false and misleading statements. The complaint further contended that the allegedly false and misleading statements caused stockholders of Legacy Towers Watson to accept inadequate Merger consideration. The complaint sought damages in an unspecified amount. On February 20, 2018, the court appointed the Regents of the University of California ('Regents') as Lead Plaintiff and Bernstein Litowitz Berger & Grossman LLP ('Bernstein') as Lead Counsel for the putative class, consolidated all subsequently filed, removed, or transferred actions, and captioned the consolidated action 'In re Willis Towers Watson plc Proxy Litigation,' Master File No. 1:17-cv-1338-AJT-JFA. On March 9, 2018, Lead Plaintiff filed an Amended Complaint. On April 13, 2018, the defendants filed motions to dismiss the Amended Complaint, and, on July 11, 2018, following briefing and argument, the court granted the motions and dismissed the Amended Complaint in its entirety. On July 30, 2018, Lead Plaintiff filed a notice of appeal from the court's July 11, 2018 dismissal order to the United States Court of Appeals for the Fourth Circuit, and, on December 6, 2018, the parties completed briefing on the appeal.

On February 27, 2018 and March 8, 2018, two additional purported former stockholders of Legacy Towers Watson, City of Fort Myers General Employees' Pension Fund ('Fort Myers') and Alaska Laborers-Employers Retirement Trust ('Alaska'), filed putative class action complaints on behalf of a putative class of Legacy Towers Watson stockholders against the former members of the Legacy Towers Watson board of directors, Legacy Towers Watson, Legacy Willis and ValueAct, in the Delaware Court of Chancery, captioned City of Fort Myers General Employees' Pension Fund v. Towers Watson & Co., et al., C.A. No. 2018-0132, and Alaska Laborers-Employers Retirement Trust v. Victor F. Ganzi, et al., C.A. No. 2018-0155, respectively. Based on similar allegations as the Eastern District of Virginia action described above, the complaints assert claims against the former directors of Legacy Towers Watson for breach of fiduciary duty and against Legacy Willis and ValueAct for aiding and abetting breach of fiduciary duty.

On March 9, 2018, Regents filed a putative class action complaint on behalf of a putative class of Legacy Towers Watson stockholders against the Company, Legacy Willis, ValueAct, and Messrs. Haley, Casserley, and Ubben, in the Delaware Court of Chancery, captioned The Regents of the University of California v. John J. Haley, et al., C.A. No. 2018-0166. Based on similar allegations as the Eastern District of Virginia action described above, the complaint asserts claims against Mr. Haley for breach of fiduciary duty and against all other defendants for aiding and abetting breach of fiduciary duty. Also on March 9, 2018, Regents filed a motion for consolidation of all pending and subsequently filed Delaware Court of Chancery actions, and for appointment as Lead Plaintiff and for the appointment of Bernstein as Lead Counsel for the putative class. On March 29, 2018, Fort Myers and Alaska responded to Regents' motion and cross-moved for appointment as Co-Lead Plaintiffs and for the appointment of their counsel, Grant & Eisenhofer P.A. and Kessler Topaz Meltzer & Check, LLP as Co-Lead Counsel. On April 2, 2018, the court consolidated the Delaware Court of Chancery actions and all related actions subsequently filed in or transferred to the Delaware Court of Chancery. On June 5, 2018, the court denied Regents' motion for appointment of Lead Plaintiff and Lead Counsel and granted Fort Myers' and Alaska's cross-motion. On June 20, 2018, Fort Myers and Alaska designated the complaint previously filed by Alaska (the 'Alaska Complaint') as the operative complaint in the consolidated action. On September 14, 2018, the defendants filed motions to dismiss the Alaska Complaint. On October 31, 2018, Fort Myers and Alaska filed an amended complaint, which, based on similar allegations, asserts claims against the former directors of legacy Towers Watson for breach of fiduciary duty and against ValueAct and Mr. Ubben for aiding and abetting breach of fiduciary duty. On January 11, 2019, the defendants filed motions to dismiss the amended complaint.

On October 18, 2018, three additional purported former stockholders of Legacy Towers Watson, Naya Master Fund LP, Naya 174 Fund Limited and Naya Lincoln Park Master Fund Limited (collectively, 'Naya'), filed a complaint against the Company, Legacy Towers Watson, Legacy Willis and John Haley, in the Supreme Court of the State of New York, County of New York, captioned Naya Master Fund LP, et al. v. John J. Haley, et al., Index No. 654968/2018. Based on similar allegations as the Eastern District of Virginia and Delaware actions described above, the complaint asserts claims for common law fraud and negligent misrepresentation. On December 18, 2018, the defendants filed a motion to dismiss the complaint.

The defendants dispute the allegations in these actions and intend to defend the lawsuits vigorously. Given the stage of the proceedings, the Company is unable to provide an estimate of the reasonably possible loss or range of loss in respect of the complaints.

Stanford Financial Group

The Company has been named as a defendant in 15 similar lawsuits relating to the collapse of The Stanford Financial Group ('Stanford'), for which Willis of Colorado, Inc. acted as broker of record on certain lines of insurance. The complaints in these actions generally allege that the defendants actively and materially aided Stanford's alleged fraud by providing Stanford with certain letters regarding coverage that they knew would be used to help retain or attract actual or prospective Stanford client investors. The complaints further allege that these letters, which contain statements about Stanford and the insurance policies that the defendants placed for Stanford, contained untruths and omitted material facts and were drafted in this manner to help Stanford promote and sell its allegedly fraudulent certificates of deposit.

The 15 actions are as follows:

- *Troice, et al. v. Willis of Colorado, Inc., et al.*, C.A. No. 3:9-CV-1274-N, was filed on July 2, 2009 in the U.S. District Court for the Northern District of Texas against Willis Group Holdings plc, Willis of Colorado, Inc. and a Willis associate, among others. On April 1, 2011, plaintiffs filed the operative Third Amended Class Action Complaint individually and on behalf of a putative, worldwide class of Stanford investors, adding Willis Limited as a defendant and alleging claims under Texas statutory and common law and seeking damages in excess of \$1 billion, punitive damages and costs. On May 2, 2011, the defendants filed motions to dismiss the Third Amended Class Action Complaint, arguing, *inter alia*, that the plaintiffs' claims are precluded by the Securities Litigation Uniform Standards Act of 1998 ('SLUSA').

On May 10, 2011, the court presiding over the Stanford-related actions in the Northern District of Texas entered an order providing that it would consider the applicability of SLUSA to the Stanford-related actions based on the decision in a separate Stanford action not involving a Willis entity, *Roland v. Green*, Civil Action No. 3:10-CV-0224-N ('Roland'). On August 31, 2011, the court issued its decision in *Roland*, dismissing that action with prejudice under SLUSA.

On October 27, 2011, the court in *Troice* entered an order (i) dismissing with prejudice those claims asserted in the Third Amended Class Action Complaint on a class basis on the grounds set forth in the *Roland* decision discussed above and (ii) dismissing without prejudice those claims asserted in the Third Amended Class Action Complaint on an individual basis. Also on October 27, 2011, the court entered a final judgment in the action.

On October 28, 2011, the plaintiffs in *Troice* filed a notice of appeal to the U.S. Court of Appeals for the Fifth Circuit. Subsequently, *Troice*, *Roland* and a third action captioned *Troice, et al. v. Proskauer Rose LLP*, Civil Action No. 3:09-CV-01600-N, which also was dismissed on the grounds set forth in the *Roland* decision discussed above and on appeal to the U.S. Court of Appeals for the Fifth Circuit, were consolidated for purposes of briefing and oral argument. Following the completion of briefing and oral argument, on March 19, 2012, the Fifth Circuit reversed and remanded the actions. On April 2, 2012, the defendants-appellees filed petitions for rehearing *en banc*. On April 19, 2012, the petitions for rehearing *en banc* were denied. On July 18, 2012, defendants-appellees filed a petition for writ of certiorari with the United States Supreme Court regarding the Fifth Circuit's reversal in *Troice*. On January 18, 2013, the Supreme Court granted our petition. Opening briefs were filed on May 3, 2013 and the Supreme Court heard oral argument on October 7, 2013. On February 26, 2014, the Supreme Court affirmed the Fifth Circuit's decision.

On March 19, 2014, the plaintiffs in *Troice* filed a Motion to Defer Resolution of Motions to Dismiss, to Compel Rule 26(f) Conference and For Entry of Scheduling Order.

On March 25, 2014, the parties in *Troice* and the *Janvey, et al. v. Willis of Colorado, Inc., et al.* action discussed below stipulated to the consolidation of the two actions for pre-trial purposes under Rule 42(a) of the Federal Rules of Civil Procedure. On March 28, 2014, the Court ‘so ordered’ that stipulation and, thus, consolidated *Troice* and *Janvey* for pre-trial purposes under Rule 42(a).

On September 16, 2014, the court (a) denied the plaintiffs’ request to defer resolution of the defendants’ motions to dismiss, but granted the plaintiffs’ request to enter a scheduling order; (b) requested the submission of supplemental briefing by all parties on the defendants’ motions to dismiss, which the parties submitted on September 30, 2014; and (c) entered an order setting a schedule for briefing and discovery regarding plaintiffs’ motion for class certification, which schedule, among other things, provided for the submission of the plaintiffs’ motion for class certification (following the completion of briefing and discovery) on April 20, 2015.

On December 15, 2014, the court granted in part and denied in part the defendants’ motions to dismiss. On January 30, 2015, the defendants except Willis Group Holdings plc answered the Third Amended Class Action Complaint.

On April 20, 2015, the plaintiffs filed their motion for class certification, the defendants filed their opposition to plaintiffs’ motion, and the plaintiffs filed their reply in further support of the motion. Pursuant to an agreed stipulation also filed with the court on April 20, 2015, the defendants on June 4, 2015 filed sur-replies in further opposition to the motion. The Court has not yet scheduled a hearing on the motion.

On June 19, 2015, Willis Group Holdings plc filed a motion to dismiss the complaint for lack of personal jurisdiction. On November 17, 2015, Willis Group Holdings plc withdrew the motion.

On March 31, 2016, the parties in the *Troice* and *Janvey* actions entered into a settlement in principle that is described in more detail below.

- *Ranni v. Willis of Colorado, Inc., et al.*, C.A. No. 9-22085, was filed on July 17, 2009 against Willis Group Holdings plc and Willis of Colorado, Inc. in the U.S. District Court for the Southern District of Florida. The complaint was filed on behalf of a putative class of Venezuelan and other South American Stanford investors and alleges claims under Section 10(b) of the Securities Exchange Act of 1934 (and Rule 10b-5 thereunder) and Florida statutory and common law and seeks damages in an amount to be determined at trial. On October 6, 2009, *Ranni* was transferred, for consolidation or coordination with other Stanford-related actions (including *Troice*), to the Northern District of Texas by the U.S. Judicial Panel on Multidistrict Litigation (the ‘JPML’). The defendants have not yet responded to the complaint in *Ranni*. On August 26, 2014, the plaintiff filed a notice of voluntary dismissal of the action without prejudice.
- *Canabal, et al. v. Willis of Colorado, Inc., et al.*, C.A. No. 3:9-CV-1474-D, was filed on August 6, 2009 against Willis Group Holdings plc, Willis of Colorado, Inc. and the same Willis associate named as a defendant in *Troice*, among others, also in the Northern District of Texas. The complaint was filed individually and on behalf of a putative class of Venezuelan Stanford investors, alleged claims under Texas statutory and common law and sought damages in excess of \$1 billion, punitive damages, attorneys’ fees and costs. On December 18, 2009, the parties in *Troice* and *Canabal* stipulated to the consolidation of those actions (under the *Troice* civil action number), and, on December 31, 2009, the plaintiffs in *Canabal* filed a notice of dismissal, dismissing the action without prejudice.
- *Rupert, et al. v. Winter, et al.*, Case No. 2009C115137, was filed on September 14, 2009 on behalf of 97 Stanford investors against Willis Group Holdings plc, Willis of Colorado, Inc. and the same Willis associate, among others, in Texas state court (Bexar County). The complaint alleges claims under the Securities Act of 1933, Texas and Colorado statutory law and Texas common law and seeks special, consequential and treble damages of more than \$300 million, attorneys’ fees and costs. On October 20, 2009, certain defendants, including Willis of Colorado, Inc., (i) removed *Rupert* to the U.S. District Court for the Western District of Texas, (ii) notified the JPML of the pendency of this related action and (iii) moved to stay the action pending a determination by the JPML as to whether it should be transferred to the Northern District of Texas for consolidation or coordination with the other Stanford-related actions. On April 1, 2010, the JPML issued a final transfer order for the transfer of *Rupert* to the Northern District of Texas. On January 24, 2012, the court remanded *Rupert* to Texas state court (Bexar County), but stayed the action until further order of the court. On August 13, 2012, the plaintiffs filed a motion to lift the stay, which motion was denied by the court on September 16, 2014. On October 10, 2014, the plaintiffs appealed the court’s denial of their motion to lift the stay to the U.S. Court of Appeals for the Fifth Circuit. On January 5, 2015, the Fifth

Circuit consolidated the appeal with the appeal in the *Rishmaque, et ano. v. Winter, et al.* action discussed below, and the consolidated appeal, was fully briefed as of March 24, 2015. Oral argument on the consolidated appeal was held on September 2, 2015. On September 16, 2015, the Fifth Circuit affirmed. The defendants have not yet responded to the complaint in *Rupert*.

- *Casanova, et al. v. Willis of Colorado, Inc., et al.*, C.A. No. 3:10-CV-1862-O, was filed on September 16, 2010 on behalf of seven Stanford investors against Willis Group Holdings plc, Willis Limited, Willis of Colorado, Inc. and the same Willis associate, among others, also in the Northern District of Texas. The complaint alleges claims under Texas statutory and common law and seeks actual damages in excess of \$5 million, punitive damages, attorneys' fees and costs. On February 13, 2015, the parties filed an Agreed Motion for Partial Dismissal pursuant to which they agreed to the dismissal of certain claims pursuant to the motion to dismiss decisions in the *Troice* action discussed above and the *Janvey* action discussed below. Also on February 13, 2015, the defendants except Willis Group Holdings plc answered the complaint in the *Casanova* action. On June 19, 2015, Willis Group Holdings plc filed a motion to dismiss the complaint for lack of personal jurisdiction. Plaintiffs have not opposed the motion.
- *Rishmaque, et ano. v. Winter, et al.*, Case No. 2011CI2585, was filed on March 11, 2011 on behalf of two Stanford investors, individually and as representatives of certain trusts, against Willis Group Holdings plc, Willis of Colorado, Inc., Willis of Texas, Inc. and the same Willis associate, among others, in Texas state court (Bexar County). The complaint alleges claims under Texas and Colorado statutory law and Texas common law and seeks special, consequential and treble damages of more than \$37 million and attorneys' fees and costs. On April 11, 2011, certain defendants, including Willis of Colorado, Inc., (i) removed *Rishmaque* to the Western District of Texas, (ii) notified the JPML of the pendency of this related action and (iii) moved to stay the action pending a determination by the JPML as to whether it should be transferred to the Northern District of Texas for consolidation or coordination with the other Stanford-related actions. On August 8, 2011, the JPML issued a final transfer order for the transfer of *Rishmaque* to the Northern District of Texas, where it is currently pending. On August 13, 2012, the plaintiffs joined with the plaintiffs in the *Rupert* action in their motion to lift the court's stay of the *Rupert* action. On September 9, 2014, the court remanded *Rishmaque* to Texas state court (Bexar County), but stayed the action until further order of the court and denied the plaintiffs' motion to lift the stay. On October 10, 2014, the plaintiffs appealed the court's denial of their motion to lift the stay to the Fifth Circuit. On January 5, 2015, the Fifth Circuit consolidated the appeal with the appeal in the *Rupert* action, and the consolidated appeal was fully briefed as of March 24, 2015. Oral argument on the consolidated appeal was held on September 2, 2015. On September 16, 2015, the Fifth Circuit affirmed. The defendants have not yet responded to the complaint in *Rishmaque*.
- *MacArthur v. Winter, et al.*, Case No. 2013-07840, was filed on February 8, 2013 on behalf of two Stanford investors against Willis Group Holdings plc, Willis of Colorado, Inc., Willis of Texas, Inc. and the same Willis associate, among others, in Texas state court (Harris County). The complaint alleges claims under Texas and Colorado statutory law and Texas common law and seeks actual, special, consequential and treble damages of approximately \$4 million and attorneys' fees and costs. On March 29, 2013, Willis of Colorado, Inc. and Willis of Texas, Inc. (i) removed *MacArthur* to the U.S. District Court for the Southern District of Texas and (ii) notified the JPML of the pendency of this related action. On April 2, 2013, Willis of Colorado, Inc. and Willis of Texas, Inc. filed a motion in the Southern District of Texas to stay the action pending a determination by the JPML as to whether it should be transferred to the Northern District of Texas for consolidation or coordination with the other Stanford-related actions. Also on April 2, 2013, the court presiding over *MacArthur* in the Southern District of Texas transferred the action to the Northern District of Texas for consolidation or coordination with the other Stanford-related actions. On September 29, 2014, the parties stipulated to the remand (to Texas state court (Harris County)) and stay of *MacArthur* until further order of the court (in accordance with the court's September 9, 2014 decision in *Rishmaque* (discussed above)), which stipulation was 'so ordered' by the court on October 14, 2014. The defendants have not yet responded to the complaint in *MacArthur*.
- *Florida suits*: On February 14, 2013, five lawsuits were filed against Willis Group Holdings plc, Willis Limited and Willis of Colorado, Inc. in Florida state court (Miami-Dade County), alleging violations of Florida common law. The five suits are: (1) *Barbar, et al. v. Willis Group Holdings Public Limited Company, et al.*, Case No. 13-05666CA27, filed on behalf of 35 Stanford investors seeking compensatory damages in excess of \$30 million; (2) *de Gadala-Maria, et al. v. Willis Group Holdings Public Limited Company, et al.*, Case No. 13-05669CA30, filed on behalf of 64 Stanford investors seeking compensatory damages in excess of \$83.5 million; (3) *Ranni, et ano. v. Willis Group Holdings Public Limited Company, et al.*, Case No. 13-05673CA06, filed on behalf of two Stanford

investors seeking compensatory damages in excess of \$3 million; (4) *Tisminesky, et al. v. Willis Group Holdings Public Limited Company, et al.*, Case No. 13-05676CA09, filed on behalf of 11 Stanford investors seeking compensatory damages in excess of \$6.5 million; and (5) *Zacarias, et al. v. Willis Group Holdings Public Limited Company, et al.*, Case No. 13-05678CA11, filed on behalf of 10 Stanford investors seeking compensatory damages in excess of \$12.5 million. On June 3, 2013, Willis of Colorado, Inc. removed all five cases to the Southern District of Florida and, on June 4, 2013, notified the JPML of the pendency of these related actions. On June 10, 2013, the court in *Tisminesky* issued an order *sua sponte* staying and administratively closing that action pending a determination by the JPML as to whether it should be transferred to the Northern District of Texas for consolidation and coordination with the other Stanford-related actions. On June 11, 2013, Willis of Colorado, Inc. moved to stay the other four actions pending the JPML's transfer decision. On June 20, 2013, the JPML issued a conditional transfer order for the transfer of the five actions to the Northern District of Texas, the transmittal of which was stayed for seven days to allow for any opposition to be filed. On June 28, 2013, with no opposition having been filed, the JPML lifted the stay, enabling the transfer to go forward.

On September 30, 2014, the court denied the plaintiffs' motion to remand in *Zacarias*, and, on October 3, 2014, the court denied the plaintiffs' motions to remand in *Tisminesky* and *de Gadala Maria*. On December 3, 2014 and March 3, 2015, the court granted the plaintiffs' motions to remand in *Barbar* and *Ranni*, respectively, remanded both actions to Florida state court (Miami-Dade County) and stayed both actions until further order of the court. On January 2, 2015 and April 1, 2015, the plaintiffs in *Barbar* and *Ranni*, respectively, appealed the court's December 3, 2014 and March 3, 2015 decisions to the Fifth Circuit. On April 22, 2015 and July 22, 2015, respectively, the Fifth Circuit dismissed the *Barbar* and *Ranni* appeals *sua sponte* for lack of jurisdiction. The defendants have not yet responded to the complaints in *Ranni* or *Barbar*.

On April 1, 2015, the defendants except Willis Group Holdings plc filed motions to dismiss the complaints in *Zacarias*, *Tisminesky* and *de Gadala-Maria*. On June 19, 2015, Willis Group Holdings plc filed motions to dismiss the complaints in *Zacarias*, *Tisminesky* and *de Gadala-Maria* for lack of personal jurisdiction. On July 15, 2015, the court dismissed the complaint in *Zacarias* in its entirety with leave to replead within 21 days. On July 21, 2015, the court dismissed the complaints in *Tisminesky* and *de Gadala-Maria* in their entirety with leave to replead within 21 days. On August 6, 2015, the plaintiffs in *Zacarias*, *Tisminesky* and *de Gadala-Maria* filed amended complaints (in which, among other things, Willis Group Holdings plc was no longer named as a defendant). On September 11, 2015, the defendants filed motions to dismiss the amended complaints. The motions await disposition by the court.

- *Janvey, et al. v. Willis of Colorado, Inc., et al.*, Case No. 3:13-CV-03980-D, was filed on October 1, 2013 also in the Northern District of Texas against Willis Group Holdings plc, Willis Limited, Willis North America Inc., Willis of Colorado, Inc. and the same Willis associate. The complaint was filed (i) by Ralph S. Janvey, in his capacity as Court-Appointed Receiver for the Stanford Receivership Estate, and the Official Stanford Investors Committee (the 'OSIC') against all defendants and (ii) on behalf of a putative, worldwide class of Stanford investors against Willis North America Inc. Plaintiffs Janvey and the OSIC allege claims under Texas common law and the court's Amended Order Appointing Receiver, and the putative class plaintiffs allege claims under Texas statutory and common law. Plaintiffs seek actual damages in excess of \$1 billion, punitive damages and costs. As alleged by the Stanford Receiver, the total amount of collective losses allegedly sustained by all investors in Stanford certificates of deposit is approximately \$4.6 billion.

On November 15, 2013, plaintiffs in *Janvey* filed the operative First Amended Complaint, which added certain defendants unaffiliated with Willis. On February 28, 2014, the defendants filed motions to dismiss the First Amended Complaint, which motions, other than with respect to Willis Group Holding plc's motion to dismiss for lack of personal jurisdiction, were granted in part and denied in part by the court on December 5, 2014. On December 22, 2014, Willis filed a motion to amend the court's December 5 order to certify an interlocutory appeal to the Fifth Circuit, and, on December 23, 2014, Willis filed a motion to amend and, to the extent necessary, reconsider the court's December 5 order. On January 16, 2015, the defendants answered the First Amended Complaint. On January 28, 2015, the court denied Willis's motion to amend the court's December 5 order to certify an interlocutory appeal to the Fifth Circuit. On February 4, 2015, the court granted Willis's motion to amend and, to the extent necessary, reconsider the December 5 order.

As discussed above, on March 25, 2014, the parties in *Troice* and *Janvey* stipulated to the consolidation of the two actions for pre-trial purposes under Rule 42(a) of the Federal Rules of Civil Procedure. On March 28, 2014, the Court 'so ordered' that stipulation and, thus, consolidated *Troice* and *Janvey* for pre-trial purposes under Rule 42(a).

On January 26, 2015, the court entered an order setting a schedule for briefing and discovery regarding the plaintiffs' motion for class certification, which schedule, among other things, provided for the submission of the plaintiffs' motion for class certification (following the completion of briefing and discovery) on July 20, 2015. By letter dated March 4, 2015, the parties requested that the court consolidate the scheduling orders entered in *Troice* and *Janvey* to provide for a class certification submission date of April 20, 2015 in both cases. On March 6, 2015, the court entered an order consolidating the scheduling orders in *Troice* and *Janvey*, providing for a class certification submission date of April 20, 2015 in both cases, and vacating the July 20, 2015 class certification submission date in the original *Janvey* scheduling order.

On November 17, 2015, Willis Group Holdings plc withdrew its motion to dismiss for lack of personal jurisdiction.

On March 31, 2016, the parties in the *Troice* and *Janvey* actions entered into a settlement in principle that is described in more detail below.

- *Martin v. Willis of Colorado, Inc., et al.*, Case No. 201652115, was filed on August 5, 2016, on behalf of one Stanford investor against Willis Group Holdings plc, Willis Limited, Willis of Colorado, Inc. and the same Willis associate in Texas state court (Harris County). The complaint alleges claims under Texas statutory and common law and seeks actual damages of less than \$100,000, exemplary damages, attorneys' fees and costs. On September 12, 2016, the plaintiff filed an amended complaint, which added five more Stanford investors as plaintiffs and seeks damages in excess of \$1 million. The defendants have not yet responded to the amended complaint in *Martin*.
- *Abel, et al. v. Willis of Colorado, Inc., et al.*, C.A. No. 3:16-cv-2601, was filed on September 12, 2016, on behalf of more than 300 Stanford investors against Willis Group Holdings plc, Willis Limited, Willis of Colorado, Inc. and the same Willis associate, also in the Northern District of Texas. The complaint alleges claims under Texas statutory and common law and seeks actual damages in excess of \$135 million, exemplary damages, attorneys' fees and costs. On November 10, 2016, the plaintiffs filed an amended complaint, which, among other things, added several more Stanford investors as plaintiffs. The defendants have not yet responded to the complaint in *Abel*.

The plaintiffs in *Janvey* and *Troice* and the other actions above seek overlapping damages, representing either the entirety or a portion of the total alleged collective losses incurred by investors in Stanford certificates of deposit, notwithstanding the fact that Legacy Willis acted as broker of record for only a portion of time that Stanford issued certificates of deposit. In the fourth quarter of 2015, the Company recognized a \$70 million litigation provision for loss contingencies relating to the Stanford matters based on its ongoing review of a variety of factors as required by accounting standards.

On March 31, 2016, the Company entered into a settlement in principle for \$120 million relating to this litigation, and increased its provisions by \$50 million during that quarter. Further details on this settlement in principle are given below.

The settlement is contingent on a number of conditions, including court approval of the settlement and a bar order prohibiting any continued or future litigation against Willis related to Stanford, which may not be given. Therefore, the ultimate resolution of these matters may differ from the amount provided for. The Company continues to dispute the allegations and, to the extent litigation proceeds, to defend the lawsuits vigorously.

Settlement. On March 31, 2016, the Company entered into a settlement in principle, as reflected in a Settlement Term Sheet, relating to the Stanford litigation matter. The Company agreed to the Settlement Term Sheet to eliminate the distraction, burden, expense and uncertainty of further litigation. In particular, the settlement and the related bar orders described below, if upheld through any appeals, would enable the Company (a newly-combined firm) to conduct itself with the bar orders' protection from the continued overhang of matters alleged to have occurred approximately a decade ago. Further, the Settlement Term Sheet provided that the parties understood and agreed that there is no admission of liability or wrongdoing by the Company. The Company expressly denies any liability or wrongdoing with respect to the matters alleged in the Stanford litigation.

On or about August 31, 2016, the parties to the settlement signed a formal Settlement Agreement memorializing the terms of the settlement as originally set forth in the Settlement Term Sheet. The parties to the Settlement Agreement are Ralph S. Janvey (in his capacity as the Court-appointed receiver (the 'Receiver') for The Stanford Financial Group and its affiliated entities in receivership (collectively, 'Stanford')), the Official Stanford Investors Committee, Samuel Troice, Martha Diaz, Paula Gilly-Flores, Punga Punga Financial, Ltd., Manuel Canabal, Daniel Gomez Ferreiro and Promotora Villa Marina, C.A. (collectively, 'Plaintiffs'), on the one hand, and Willis Towers Watson Public Limited Company (formerly Willis Group Holdings Public Limited Company), Willis Limited, Willis North America Inc., Willis of Colorado, Inc. and the Willis

associate referenced above (collectively, 'Defendants'), on the other hand. Under the terms of the Settlement Agreement, the parties agreed to settle and dismiss the *Janvey* and *Troice* actions (collectively, the 'Actions') and all current or future claims arising from or related to Stanford in exchange for a one-time cash payment to the Receiver by the Company of \$120 million to be distributed to all Stanford investors who have claims recognized by the Receiver pursuant to the distribution plan in place at the time the payment is made.

The Settlement Agreement also provides the parties' agreement to seek the Court's entry of bar orders prohibiting any continued or future litigation against the Defendants and their related parties of claims relating to Stanford, whether asserted to date or not. The terms of the bar orders therefore would prohibit all Stanford-related litigation described above, and not just the Actions, but including any pending matters and any actions that may be brought in the future. Final Court approval of these bar orders is a condition of the settlement.

On September 7, 2016, Plaintiffs filed with the Court a motion to approve the settlement. On October 19, 2016, the Court preliminarily approved the settlement. Several of the plaintiffs in the other actions above objected to the settlement, and a hearing to consider final approval of the settlement was held on January 20, 2017, after which the Court reserved decision. On August 23, 2017, the Court approved the settlement, including the bar orders. Several of the objectors appealed the settlement approval and bar orders to the Fifth Circuit. The briefing related to the appeals is now completed and oral argument on the appeals was heard on December 3, 2018. There is no date certain for when the appeals will be decided.

The Company will not make the \$120 million settlement payment unless and until the appeals are decided in its favor and the settlement is not subject to any further appeal.

City of Houston

On August 1, 2014, the City of Houston ('plaintiff') filed suit against Legacy Towers Watson in the United States District Court for the Southern District of Texas, Houston Division. On March 8, 2016, plaintiff filed its First Amended Complaint.

In the amended complaint, plaintiff alleged various deficiencies in pension actuarial work-product and advice stated to have been provided by Legacy Towers Watson's predecessor firm, Towers Perrin, in its capacity as principal actuary to the Houston Firefighters' Relief and Retirement Fund (the 'Fund'). Towers Perrin is stated to have acted in this capacity between 'the early 1980s until 2003.'

In particular, the amended complaint alleged 'misrepresentations and miscalculations' in valuation reports allegedly issued by Towers Perrin from 2000 through 2002 upon which plaintiff claimed to have relied. Plaintiff asserted that Towers Perrin assigned a new team of actuaries to the Fund in 2002 'to correct Towers' own earlier mistakes' and that the new team 'altered' certain calculations which 'increased the actuarial accrued liability by \$163 million.' Plaintiff claimed that the reports indicated that the City's minimum contribution percentages to the Fund would remain in place through at least 2019 and that existing benefits under the Fund could be increased, and new benefits could be added, without increasing plaintiff's financial burden, and without increasing plaintiff's rate of annual contributions to the Fund. The amended complaint alleged that plaintiff relied on these reports when supporting a new benefits package for the Fund. These reports, and other advice, were alleged, among other things, to have been negligent, to have misrepresented the present and future financial condition of the Fund and the contributions required to be made by plaintiff to support those benefits. Plaintiff asserted that, but for Towers Perrin's alleged negligence and misrepresentations, plaintiff would not have supported the benefits increase, and that such increased benefits would not and could not have been approved or enacted. It is further asserted that Towers Perrin's alleged 'negligence and misrepresentations damaged the City in the amount of tens of millions of dollars in annual contributions.' The amended complaint sought the award of punitive damages, actual damages, exemplary damages, special damages, attorney's fees and expenses, costs of suit, pre- and post- judgment interest at the maximum legal rate, and other unspecified legal and equitable relief.

On October 10, 2014, Legacy Towers Watson filed a motion to dismiss plaintiff's entire complaint on the basis that the complaint fails to state a claim upon which relief can be granted. On November 21, 2014, the City filed its response in opposition to Legacy Towers Watson's motion to dismiss. On September 23, 2015, Legacy Towers Watson's motion to dismiss was denied by the United States District Court for the Southern District of Texas, Houston Division. The court entered a Scheduling Order setting trial for May 30, 2017. On June 20, 2016, the Court entered a Second Amended Scheduling Order setting trial for October 31, 2017. On March 27, 2017, the Court entered a Third Amended Scheduling Order setting trial for January 16, 2018.

On May 8, 2017, Legacy Towers Watson received the City's expert's damages report, which asserted the City had incurred actual damages of approximately \$430 million through July 1, 2017, and would incur future damages that have a present value of approximately \$400 million as of July 1, 2017 if the Fund pension benefits remained unchanged. On June 30, 2017, Legacy Towers Watson served its expert reports in rebuttal to the City's expert reports. Legacy Towers Watson's experts concluded that Legacy Towers Watson's work was reasonable and conformed with the actuarial standards of practice, and that Legacy Towers Watson did not cause any damages to the City. Legacy Towers Watson's experts also concluded that the City's damages model is flawed.

On January 9, 2018, Legacy Towers Watson and the City participated in a mediation and reached a settlement in principle. On April 4, 2018, the City of Houston City Council approved the settlement. On April 13, 2018, the court entered an order dismissing the case with prejudice, and the settlement became effective on that date. The settlement provided that in exchange for a dismissal of the claims of the City related to Legacy Towers Watson's pension actuarial advice to the Fund, and any potential claims the City may have related to Legacy Towers Watson's pension actuarial advice to the Houston Municipal Employees Pension System and the Houston Police Officers Pension System, Legacy Towers Watson agreed to pay a total of \$40 million, which was paid in full in April 2018. The Company accrued its portion of the settlement prior to 2018.

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On August 6, 2013, three individual plaintiffs filed a putative class action suit against the California Public Employees' Retirement System ('CalPERS') in Los Angeles County Superior Court. On January 10, 2014, plaintiffs filed an amended complaint, which added as defendants several members of CalPERS' Board of Administration and three Legacy Towers Watson entities, Towers Watson & Co., Towers Perrin, and Tillinghast-Towers Perrin ('Towers Perrin').

Plaintiffs' claims all relate to a self-funded, non-profit Long Term Care Program that CalPERS established in 1995 (the 'LTC Program'). Plaintiffs' claims seek unspecified damages allegedly resulting from CalPERS' 2012 decision to implement in 2015 and 2016 an 85 percent increase in the premium rates of certain of the long term care policies it issued between 1995 and 2004 (the '85% Increase').

The amended complaint alleges claims against CalPERS for breach of contract and breach of fiduciary duty. It also includes a single cause of action against Towers Perrin for professional negligence relating to actuarial services Towers Perrin provided to CalPERS relating to the LTC Program between 1995 and 2004.

Plaintiffs principally allege that CalPERS mismanaged the LTC Program and its investment assets in multiple respects and breached its contractual and fiduciary duties to plaintiffs and other class members by impermissibly imposing the 85% Increase to make up for investment losses. Plaintiffs also allege that Towers Perrin recommended inadequate initial premium rates at the outset of the LTC Program and used unspecified inappropriate assumptions in its annual valuations for CalPERS. Plaintiffs claim that Towers Perrin's allegedly negligent acts and omissions, prior to the end of its retainer in 2004, contributed to the need for the 85% Increase.

In May 2014, the court denied the motions to dismiss filed by CalPERS and Towers Perrin addressed to the sufficiency of the complaint. On January 28, 2016, the court granted plaintiffs' motion for class certification. The certified class as currently defined includes those long term care policy holders whose policies were 'subject to' the 85% Increase. The court thereafter set an October 2, 2017 trial date.

In May 2016, the case was reassigned to a different judge. The court agreed that Towers Perrin may file a motion for summary judgment which was initially scheduled to be heard on February 3, 2017. The motion was then fully briefed, and the hearing date was thereafter moved to March 8, 2017.

On March 1, 2017, Towers Perrin and Plaintiffs participated in a mediation and reached a settlement in principle. Pursuant to the settlement in principle, in exchange for a dismissal of the claims of all class members and a release of Towers Perrin by all class members, Towers Perrin would pay a total of \$9.75 million into an interest-bearing settlement fund, to be used to reimburse class counsel's costs, and for later distribution to class members as approved by the Court. This proposed settlement amount was accrued during the three months ended March 31, 2017. At the hearing on final approval held on January 26, 2018, the Court granted final approval of the settlement. Class members who properly objected to the settlement had standing to appeal by April 9, 2018. No class members filed an appeal and, therefore, the judgment is now final.

The settlement amount of \$9.75 million was paid on June 5, 2018.

Aviation Broking Competition Investigations

In April 2017, the Financial Conduct Authority ('FCA') informed Willis Limited, our U.K. broking subsidiary, that it had opened a formal investigation into possible agreements/concerted practices in the aviation broking sector.

In October 2017, the European Commission ('Commission') disclosed to us that it has initiated civil investigation proceedings in respect of a suspected infringement of E.U. competition rules involving several broking firms, including our principal U.K. broking subsidiary and one of its parent entities. In particular, the Commission has stated that the civil proceedings concern the exchange of commercially sensitive information between competitors in relation to aviation and aerospace insurance and reinsurance broking products and services in the European Economic Area, as well as possible coordination between competitors. The initiation of proceedings does not mean there has been a finding of infringement, merely that the Commission will investigate the case. We are providing information to the Commission as requested.

When the Commission initiated these proceedings, the FCA closed its related competition investigation, but still retained jurisdiction over broking regulatory matters arising from this conduct. In early 2018, the FCA advised that it will not be taking enforcement action against Willis Limited in connection with any such broking regulatory matters.

In May 2018, the Korea Fair Trade Commission ('KFTC') disclosed to us that it is investigating alleged cartels in the insurance broking industry. The KFTC has since requested information related to, among other topics, the aviation and aerospace insurance brokerage market and exchanges of information between brokers about insurance policies.

In January 2019, the Brazil Conselho Administrativo de Defesa Economica ('CADE') launched an administrative proceeding to investigate alleged sharing of competitive and commercially sensitive information in the insurance and reinsurance brokerage industry for aviation and aerospace and related ancillary services. The CADE identified 11 entities under investigation, including Willis Group Limited, one of our U.K. subsidiaries.

Given the status of these investigations, the Company is currently unable to assess the terms on which they will be resolved, or any other regulatory matter or civil claims emanating from the conduct being investigated, will be resolved, and thus is unable to provide an estimate of the reasonably possible loss or range of loss.

U.K. Investment Consulting Investigation

In September 2017, the FCA announced that it would make a referral with respect to the investment consulting industry to the U.K. Competition & Markets Authority (the 'CMA'). The CMA then commenced a market investigation, and the Company is currently cooperating with the investigation.

The CMA released its final report on December 12, 2018, finding that there is an adverse effect on competition. To address these findings, the CMA has proposed certain remedies, including mandatory tendering when trustees first purchase fiduciary management services, the reporting of investment performance to customers using a set of common standards, transparency in reporting of fees in fiduciary management and the expansion of the FCA's regulatory perimeter to include the main activities of investment consultancy and fiduciary management providers. The Company is generally supportive of these proposed remedies. The CMA will implement the remedies by way of an order on pension scheme trustees and firms providing the relevant services. Before finalizing the order, the CMA will consult with all interested parties until March 13, 2019 on the details of the order. The remedies are expected to be effective later in 2019.

London Wholesale Insurance Broker Market Study

In November 2017, the FCA published its Terms of Reference for its Market Study into insurance broking activities in the London Wholesale Market including market power, conflicts of interest and broker conduct. This was an industry-wide inquiry and not particular to the Company. The FCA used its powers under the UK Financial Services and Markets Act 2000 to collate information and originally aimed to issue an interim report in or about the first quarter of 2019. The Study had been expected to take two years to conclude. Two of the Company's subsidiaries responded to extensive data requests which had phased response times through May 2018. It was possible that outcomes of the Study could include new rules, changes to market practices, referral to the U.K. Competition & Markets Authority for a market investigation, and/or individual firm investigations on specific issues. On February 20, 2019, the FCA published its report in final form and closed its study, finding amongst other things that it had 'not found evidence of significant levels of harm to competition that require intrusive remedies'. The FCA also said it planned to continue to monitor the market as part of its normal supervision function, including in relation to broker business models and the effectiveness of competition. It also said it planned to engage with

individual firms on a number of related issues and would continue to assess specific firms' compliance with regulatory obligations, including conflict of interest, as part of its normal supervisory function.

Note 15 — Supplementary Information for Certain Balance Sheet Accounts

Additional details of specific balance sheet accounts are detailed below.

Prepaid and other current assets consist of the following:

	December 31, 2018	December 31, 2017
Prepayments and accrued income	\$ 136	\$ 132
Deferred contract costs	102	—
Derivatives and investments	25	29
Deferred compensation plan assets	18	21
Retention incentives	5	7
Corporate income and other taxes	61	170
Other current assets	57	71
Total prepaid and other current assets	<u>\$ 404</u>	<u>\$ 430</u>

Other non-current assets consist of the following:

	December 31, 2018	December 31, 2017
Prepayments and accrued income	\$ 14	\$ 18
Deferred contract costs	46	—
Deferred compensation plan assets	125	135
Deferred tax assets	59	46
Accounts receivable, net	20	33
Other investments	7	26
Other non-current assets	196	189
Total other non-current assets	<u>\$ 467</u>	<u>\$ 447</u>

Deferred revenue and accrued expenses consist of the following:

	December 31, 2018	December 31, 2017
Accounts payable, accrued liabilities and deferred income	\$ 691	\$ 772
Discretionary compensation	321	313
Accrued compensation	437	439
Accrued vacation	111	93
Other employee-related liabilities	87	94
Total deferred revenue and accrued expenses	<u>\$ 1,647</u>	<u>\$ 1,711</u>

Other current liabilities consist of the following:

	December 31, 2018	December 31, 2017
Accounts payable	\$ 163	\$ 136
Income and other taxes payable	129	90
Contingent and deferred consideration on acquisitions	61	55
Payroll-related liabilities	210	209
Derivatives	13	32
Third party commissions	169	172
Other current liabilities	119	110
Total other current liabilities	<u>\$ 864</u>	<u>\$ 804</u>

Provision for liabilities consists of the following:

	December 31, 2018	December 31, 2017
Claims, lawsuits and other proceedings	\$ 455	\$ 474
Other provisions	85	84
Total provision for liabilities	<u>\$ 540</u>	<u>\$ 558</u>

Other non-current liabilities consist of the following:

	December 31, 2018	December 31, 2017
Incentives from lessors	\$ 120	\$ 138
Deferred compensation plan liability	125	135
Contingent and deferred consideration on acquisitions	22	41
Liabilities for uncertain tax positions	46	60
Lease-related liabilities	29	28
Other non-current liabilities	87	142
Total other non-current liabilities	<u>\$ 429</u>	<u>\$ 544</u>

Note 16 — Other Income, Net

Other income, net consists of the following:

	Years ended December 31,		
	2018	2017	2016
(Loss)/gain on disposal of operations	\$ (9)	\$ 13	\$ 2
Net periodic pension and postretirement benefit credits (i)	280	222	203
Interest in earnings of associates (ii)	3	3	2
Impact of Venezuelan currency devaluation	—	(2)	—
Foreign exchange loss	(24)	(72)	(29)
Other income, net	<u>\$ 250</u>	<u>\$ 164</u>	<u>\$ 178</u>

(i) As a result of the retrospective adoption of ASU 2017-07 within the consolidated statements of comprehensive income, the service-cost component of net periodic benefit (income)/cost remained within salaries and benefits expense, while the remainder of the components are now included within other income, net. See Note 2 — Basis of Presentation, Significant Accounting Policies and Recent Accounting Pronouncements for further details.

(ii) Beginning in 2018, the Company retrospectively reclassified the pre-tax effect of its interest in earnings of associates from its own line item to other income, net within its consolidated statements of comprehensive income.

Note 17 — Accumulated Other Comprehensive Loss

The components of other comprehensive (loss)/income are as follows:

	December 31, 2018			December 31, 2017			December 31, 2016		
	Before tax amount	Tax	Net of tax amount	Before tax amount	Tax	Net of tax amount	Before tax amount	Tax	Net of tax amount
Other comprehensive (loss)/income:									
Foreign currency translation	\$ (251)	\$ —	\$ (251)	\$ 295	\$ —	\$ 295	\$ (353)	\$ —	\$ (353)
Defined pension and post-retirement benefits	(258)	59	(199)	3	11	14	(553)	114	(439)
Derivative instruments	5	(3)	2	90	(15)	75	(87)	12	(75)
Other comprehensive (loss)/income	(504)	56	(448)	388	(4)	384	(993)	126	(867)
Less: Other comprehensive (income)/loss attributable to non-controlling interests	—	—	—	(13)	—	(13)	20	—	20
Other comprehensive (loss)/income attributable to Willis Towers Watson	\$ (504)	\$ 56	\$ (448)	\$ 375	\$ (4)	\$ 371	\$ (973)	\$ 126	\$ (847)

Changes in the components of accumulated other comprehensive loss, net of tax, are included in the following table. This table excludes amounts attributable to non-controlling interests, which are not material for further disclosure.

	Foreign currency translation (i)	Cash flow hedges (i)	Defined pension and post-retirement benefit costs (ii)	Total
Balance, January 1, 2016	\$ (314)	\$ (10)	\$ (713)	\$ (1,037)
Other comprehensive loss before reclassifications	(336)	(110)	(483)	(929)
Loss reclassified from accumulated other comprehensive loss (net of income tax benefit of \$5)	—	38	44	82
Net other comprehensive loss	(336)	(72)	(439)	(847)
Balance, December 31, 2016	\$ (650)	\$ (82)	\$ (1,152)	\$ (1,884)
Other comprehensive income/(loss) before reclassifications	285	28	(26)	287
Loss reclassified from accumulated other comprehensive loss (net of income tax benefit of \$18)	—	44	40	84
Net other comprehensive income	285	72	14	371
Balance, December 31, 2017	\$ (365)	\$ (10)	\$ (1,138)	\$ (1,513)
Other comprehensive income/(loss) before reclassifications	(251)	(22)	(241)	(514)
Loss reclassified from accumulated other comprehensive loss (net of income tax benefit of \$17)	—	24	42	66
Net other comprehensive loss	(251)	2	(199)	(448)
Balance, December 31, 2018	\$ (616)	\$ (8)	\$ (1,337)	\$ (1,961)

- (i) Reclassification adjustments from accumulated other comprehensive loss related to foreign currency translation and cash flow hedges are included in Other income, net in the accompanying consolidated statements of comprehensive income. See Note 10 — Derivative Financial Instruments for additional details regarding the reclassification adjustments for the hedge settlements.
- (ii) Reclassification adjustments from accumulated other comprehensive loss are included in the computation of net periodic pension cost (see Note 13 — Retirement Benefits). These components are included in Other income, net in the accompanying consolidated statements of comprehensive income.

Note 18 — Share-based Compensation

Plan Summaries

On December 31, 2018, the Company had a number of open share-based compensation plans, which provide for the grant of time-based and performance-based options, time-based and performance-based restricted stock units, and various other share-based grants to employees. All of the Company's share-based compensation plans under which any options, restricted stock units ('RSUs') or other share-based grants are outstanding as of December 31, 2018 are described below. The compensation cost that has been recognized for these plans for the years ended December 31, 2018, 2017 and 2016 was \$50 million, \$67

million and \$123 million, respectively. The total income tax benefits recognized in the consolidated statements of comprehensive income for share-based compensation arrangements for the years ended December 31, 2018, 2017, and 2016 were \$10 million, \$22 million and \$35 million, respectively.

2012 Equity Incentive Plan

This plan, which was established on April 25, 2012, provides for the granting of incentive stock options, time-based or performance-based non-statutory stock options, share appreciation rights, restricted shares, time-based or performance-based RSUs, performance-based awards and other share-based grants or any combination thereof (collectively referred to as 'Awards') to employees, officers, non-employee directors and consultants ('Eligible Individuals') of the Company ('2012 Plan'). The board of directors also adopted a sub-plan under the 2012 plan to provide an employee sharesave scheme in the U.K.

There were approximately 7 million shares remaining available for grant under this plan as of December 31, 2018. Options are exercisable on a variety of dates, including from the second, third, fourth or fifth anniversary of the grant date. Unless terminated sooner by the board of directors, the 2012 Plan will expire 10 years after the date of its adoption. That termination will not affect the validity of any grants outstanding at that date.

Towers Watson Share Plans

In January 2016, in connection with the Merger, we assumed the Towers Watson & Co. 2009 Long-Term Incentive Plan ('LTIP') and converted the outstanding unvested restricted stock units and options into Willis Towers Watson RSUs and options using a conversion ratio stated in the Merger Agreement. We determined the fair value of the portion of the outstanding RSUs and options related to pre-acquisition employee service using the straight-line methodology from the date of grant to the acquisition date to be \$37 million, which was added to the transaction consideration. The fair value of the remaining portion of RSUs and options related to the post-acquisition employee services was \$45 million, and was recorded over the subsequent vesting periods. For the years ended December 31, 2018, 2017 and 2016, we recorded \$3 million, \$11 million and \$31 million of non-cash stock based compensation expense, respectively.

The acquired awards included performance-vested RSUs. Under the RSU agreement, participants became vested in a number of RSUs based on the achievement of specified levels of financial performance during the performance period set forth in the Merger Agreement, provided that the participant remained in continuous service with us through the end of the performance period. Dividend equivalents accrued on these RSUs and vested to the same extent as the underlying shares. The Compensation Committee of the board of directors did provide for the continuation of the vesting of RSUs upon an employee's termination under certain circumstances such as qualified retirement. The definition of qualified retirement is age 55 with 15 years of service with the Company and a minimum of one year of service in the performance period. Based on the terms of the RSU agreement, the achievement of the level of financial performance was determined at the higher of 100% or the level attained at the time of the Merger.

The Company does not intend to grant future awards under the 2009 LTIP plan.

Employee Stock Purchase Plans

The Company adopted the Willis Group Holdings 2010 North America Employee Stock Purchase Plan, which expires on May 31, 2020. These plans provide certain eligible employees in the United States and Canada with the ability to contribute payroll deductions to the purchase of Willis Towers Watson ordinary shares at the end of each offering period.

Options

Valuation Assumptions

The fair value of each option is estimated on the date of grant using the Black-Scholes option pricing model that uses the assumptions noted in the following table. Expected volatility is based on historical volatility of the Company's shares. The Company uses the simplified method set out in ASC 718 – Compensation – Stock Compensation to derive the expected term of options granted as it does not have sufficient historical exercise data to provide a reasonable basis upon which to estimate the expected term. The risk-free interest rate for periods within the expected life of the option is based on the U.S. Treasury yield curve in effect at the time of grant. The assumptions noted in the table below represent the weighted-average of each assumption for each grant during the year.

	Years ended December 31,	
	2017	2016
Expected volatility	19.8%	21.0%
Expected dividends	1.4%	1.5%
Expected life (years)	4.2	2.7
Risk-free interest rate	1.6%	0.7%

There were no options granted during the year ended December 31, 2018.

Award Activity

Classification of options as time-based or performance-based is dependent on the original terms of the award. Performance conditions on the majority of options have been met. A summary of option activity under the plans at December 31, 2018, and changes during the year then ended is presented below:

	Options (thousands)	Weighted- Average Exercise Price (i)	Weighted- Average Remaining Contractual Term	Aggregate Intrinsic Value
Time-based stock options				
Balance as of December 31, 2017	754	\$ 103.85		
Granted	—	\$ —		
Exercised	294	\$ 107.96		
Expired	11	\$ 102.19		
Balance as of December 31, 2018	449	\$ 101.21	3 years	\$ 23
Options vested or expected to vest at December 31, 2018	445	\$ 100.97	3 years	\$ 23
Options exercisable at December 31, 2018	329	\$ 99.48	3 years	\$ 17
Performance-based stock options				
Balance as of December 31, 2017	680	\$ 106.42		
Granted	—	\$ —		
Exercised	138	\$ 96.02		
Forfeited	—	\$ —		
Balance as of December 31, 2018	542	\$ 110.55	3 years	\$ 22
Options vested or expected to vest at December 31, 2018	542	\$ 110.55	3 years	\$ 22
Options exercisable at December 31, 2018	542	\$ 110.55	3 years	\$ 22

(i) Certain options are exercisable in Pounds sterling and are converted to dollars using the exchange rate at December 31, 2018.

The weighted-average grant-date fair values of time-based options granted during the years ended December 31, 2017 and 2016 were \$27.69 and \$16.88, respectively. The total intrinsic values of time-based options exercised during the years ended December 31, 2018, 2017 and 2016 were \$12 million, \$19 million and \$25 million, respectively. At December 31, 2018, there was \$1 million of total unrecognized compensation cost under the time-based stock option plans; that cost is expected to be recognized over a weighted-average period of less than one year.

The total intrinsic values of performance-based options exercised during the years ended December 31, 2018, 2017 and 2016 were \$8 million, \$10 million and \$9 million, respectively. At December 31, 2018, there is no unrecognized compensation cost related to the performance-based stock option plans.

Cash received from option exercises under all share-based payment arrangements for the years ended December 31, 2018, 2017 and 2016 was \$45 million, \$61 million and \$63 million, respectively. The actual tax benefit recognized for the tax deductions from option exercises of the share-based payment arrangements totaled \$4 million, \$7 million and \$6 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Equity-settled RSUs

Valuation Assumptions

The fair value of each time-based RSU is based on the grant date fair value, or the fair value on the acquisition date in the case of acquired awards. The fair value of each performance-based RSU is estimated on the grant date using a Monte-Carlo simulation that uses the assumptions noted in the following table. The awards also contain a market-based performance target. For the awards granted in 2018, the performance measure is entirely based on this market target. Expected volatility is based on the historical volatility of the Company's shares. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of the grant. The assumptions noted in the table below represent the weighted-average of each assumption for each grant during the year.

	Years ended December 31,		
	2018	2017	2016
Expected volatility	17.9%	20.2%	20.3%
Expected dividend yield	—%	—%	—%
Expected life (years)	2.5	2.4	2.6
Risk-free interest rate	2.6%	1.4%	0.8%

Award Activity

A summary of time-based and performance-based RSU activity under the plans at December 31, 2018, and changes during the year then ended, is presented below:

	Shares (thousands)	Weighted- Average Grant Date Fair Value
Nonvested shares (time-based RSUs)		
Balance as of December 31, 2017	143	\$ 122.27
Granted	51	\$ 153.58
Vested	165	\$ 122.61
Forfeited	10	\$ 117.09
Balance as of December 31, 2018	19	\$ 141.19
Nonvested shares (performance-based RSUs)		
Balance as of December 31, 2017	881	\$ 90.61
Granted	141	\$ 204.13
Vested	250	\$ 125.75
Forfeited	14	\$ 118.94
Balance as of December 31, 2018	758	\$ 91.02

The total number of time-based RSUs that vested during the year ended December 31, 2018 was 164,728 shares at an average share price of \$156.14. The total number of time-based RSUs that vested during the year ended December 31, 2017 was 178,574 shares at an average share price of \$150.81. The total number of time-based RSUs that vested during the year ended December 31, 2016 was 459,838 shares at an average share price of \$120.42. At December 31, 2018 there was \$2 million of total unrecognized compensation cost related to the time-based RSU plan; that cost is expected to be recognized over a weighted-average period of 1.4 years.

The total number of performance-based RSUs that vested during the year ended December 31, 2018 was 249,901 shares at an average share price of \$154.99. The total number of performance-based RSUs that vested during the year ended December 31, 2017 was 318,714 shares at an average share price of \$140.32. The total number of performance-based RSUs that vested during the year ended December 31, 2016 was 258,536 shares at an average share price of \$119.75. At December 31, 2018 there was \$12 million of total unrecognized compensation cost related to the performance-based RSU plan; that cost is expected to be recognized over a weighted-average period of 1.9 years.

The actual tax benefit recognized for the tax deductions from RSUs that vested totaled \$12 million, \$19 million and \$25 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Phantom RSUs

The Company granted 268,956 units of phantom stock with a market-performance feature in the year ended December 31, 2018. These are cash-settled awards with final payout based on the performance of Company stock. The grant date fair value of the awards was \$83.57 per share. The fair value of each phantom RSU is estimated using a Monte Carlo simulation. The Company's stock price as of the last day of the period is one of the inputs into the model. Expected volatility is based on the historical volatility of the Company's shares. The expected term of the plan is three years, based on the vesting terms of the award. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant.

Since the awards are cash-settled, they are considered a liability. Expense is recognized over the service period. The liability is remeasured at the end of each reporting period and changes in fair value are recognized as compensation cost. As of December 31, 2018, the liability recognized is \$5 million and the estimated unrecognized compensation cost is \$18 million.

Note 19 — Earnings Per Share

Basic and diluted earnings per share are calculated by dividing net income attributable to Willis Towers Watson by the average number of ordinary shares outstanding during each period. The computation of diluted earnings per share reflects the potential dilution that could occur if dilutive securities and other contracts to issue shares were exercised or converted into shares or resulted in the issuance of shares that then shared in the net income of the Company.

At December 31, 2018, 2017 and 2016, there were 0.4 million, 0.8 million and 1.2 million time-based share options; 0.5 million, 0.7 million and 0.9 million performance-based options; and 0.8 million, 0.9 million and 1.2 million performance-based RSUs outstanding, respectively. The Company's time-based RSUs were immaterial at December 31, 2018; there were 0.1 million and 0.4 million time-based RSUs outstanding at December 31, 2017 and 2016, respectively. In addition, the Company had 0.3 million performance-based phantom units outstanding at December 31, 2018; there were no phantom units outstanding at December 31, 2017 and 2016.

Basic and diluted earnings per share are as follows:

	Years ended December 31,					
	2018		2017		2016	
Net income attributable to Willis Towers Watson	\$	695	\$	568	\$	420
Basic weighted-average number of shares outstanding		131		135		137
Dilutive effect of potentially issuable shares		1		1		1
Diluted weighted-average number of shares outstanding		132		136		138
Basic earnings per share	\$	5.29	\$	4.21	\$	3.07
Dilutive effect of potentially issuable shares		(0.02)		(0.03)		(0.03)
Diluted earnings per share	\$	5.27	\$	4.18	\$	3.04

There were no anti-dilutive options for the years ended December 31, 2018 and 2017. Options to purchase 0.5 million shares for the year ended December 31, 2016 were not included in the computation of the dilutive effect of stock options because their effect was anti-dilutive. For the year ended December 31, 2018, 0.2 million RSUs were not included in the computation of the dilutive effect of potentially issuable shares because their effect was anti-dilutive. There were no anti-dilutive RSUs for the years ended December 31, 2017 and 2016.

Note 20 — Supplemental Disclosures of Cash Flow Information

Supplemental disclosures regarding cash flow information and non-cash investing and financing activities are as follows:

	Years Ended December 31,		
	2018	2017	2016
Supplemental disclosures of cash flow information:			
Cash payments for income taxes, net	\$ 178	\$ 203	\$ 158
Cash payments for interest	\$ 176	\$ 169	\$ 143
Cash acquired	\$ 13	\$ —	\$ 476
Supplemental disclosures of non-cash investing and financing activities:			
Issuance of shares and assumed awards in connection with the Merger	\$ —	\$ —	\$ 8,723
Fair value of deferred and contingent consideration related to acquisitions	\$ 36	\$ —	\$ —

Note 21 — Quarterly Financial Data (Unaudited)

Quarterly financial data for 2018 and 2017 were as follows:

	Three Months Ended			
	March 31,	June 30,	September 30,	December 31,
2018				
Revenue	\$ 2,292	\$ 1,990	\$ 1,859	\$ 2,372
Total costs of providing services	\$ 2,033	\$ 1,927	\$ 1,842	\$ 1,902
Income from operations	\$ 259	\$ 63	\$ 17	\$ 470
Net income	\$ 221	\$ 65	\$ 46	\$ 383
Net income attributable to Willis Towers Watson	\$ 215	\$ 58	\$ 44	\$ 378
Earnings per share				
— Basic	\$ 1.62	\$ 0.44	\$ 0.34	\$ 2.91
— Diluted	\$ 1.61	\$ 0.44	\$ 0.33	\$ 2.89
2017				
Revenue	\$ 2,319	\$ 1,953	\$ 1,852	\$ 2,078
Total costs of providing services	\$ 1,918	\$ 1,892	\$ 1,878	\$ 1,998
Income/(loss) from operations	\$ 401	\$ 61	\$ (26)	\$ 80
Net income/(loss)	\$ 352	\$ 41	\$ (54)	\$ 253
Net income/(loss) attributable to Willis Towers Watson	\$ 344	\$ 33	\$ (54)	\$ 245
Earnings/(loss) per share				
— Basic	\$ 2.51	\$ 0.24	\$ (0.40)	\$ 1.85
— Diluted	\$ 2.50	\$ 0.24	\$ (0.40)	\$ 1.84

Note 22 — Financial Information for Issuers and Other Guarantor Subsidiaries

As of December 31, 2018 Willis Towers Watson has issued the following debt securities ('WTW Debt Securities'):

- a) Willis Towers Watson plc (the parent company) has \$500 million senior notes outstanding, which were issued on March 15, 2016;
- b) Willis North America Inc. ('Willis North America') has \$1.8 billion senior notes outstanding, of which \$187 million were issued on September 29, 2009, \$650 million were issued on May 16, 2017, and \$1.0 billion were issued on September 10, 2018; and
- c) Trinity Acquisition plc has \$2.1 billion senior notes outstanding, of which \$525 million were issued on August 15, 2013, \$1.0 billion were issued on March 22, 2016 and €540 million (\$609 million) were issued on May 26, 2016, and \$130 million currently outstanding on a consolidated basis under the \$1.25 billion revolving credit facility issued on March 7, 2017.

The notes issued by the Company are guaranteed by the following additional wholly owned subsidiaries on a joint and several basis: Willis Netherlands B.V., Willis Investment U.K. Holdings Limited, TA I Limited, Trinity Acquisition plc,

Willis Group Limited, Willis North America, Willis Towers Watson Sub Holdings Unlimited Company and Willis Towers Watson U.K. Holdings Limited.

The notes issued by Willis North America are guaranteed on a joint and several basis by the Company and each of the subsidiaries that guarantees the Company notes, except for Willis North America itself.

The notes issued by Trinity Acquisition plc are guaranteed on a joint and several basis by the Company and each of the subsidiaries that guarantees the Company notes, except for Trinity Acquisition plc itself.

For the purposes of this footnote, the companies that guarantee the Company notes, the Willis North America notes and the Trinity Acquisition plc notes, other than Willis North America and Trinity Acquisition plc, are referred to as the 'other guarantors.'

The presentation of the financial information for issuers and other guarantor subsidiaries has been changed from prior filings in that the three previously disclosed separate notes that presented the three different issuer and related guarantor scenarios have been combined into one note. This new presentation still includes all of the financial information of the appropriate issuing and guarantor entities, with some immaterial reclassifications from what had been previously disclosed for each entity. We believe that this presentation will help to reduce the complexity of the information and offer a more meaningful analysis for the reader.

All intercompany receivables/payables have been presented in the condensed consolidating financial statements as non-current on a net presentation basis, rather than a gross basis, as this better reflects the nature of the intercompany positions and presents the funding or funded position that is due or owed. The equity method has been used for investments in subsidiaries in the condensed consolidating balance sheets of Willis Towers Watson plc, Willis North America, Trinity Acquisition plc and the other guarantors.

Presented below is condensed financial information for:

- (i) Willis Towers Watson plc, which is both an issuer and guarantor, on a parent company only basis;
- (ii) Willis North America, which is both an issuer and guarantor, on a company only basis;
- (iii) Trinity Acquisition plc, which is both an issuer and guarantor, on a company only basis;
- (iv) Other guarantors, which are all wholly owned direct or indirect subsidiaries of the parent, on a combined basis;
- (v) Non-guarantors, which are all wholly owned direct or indirect subsidiaries of the parent, on a combined basis;
- (vi) Eliminations, which are consolidating adjustments on a combined basis; and
- (vii) The consolidated Company.

Condensed Consolidating Statement of Comprehensive Income

	Year ended December 31, 2018						
	Willis Towers Watson plc	Willis North America	Trinity Acquisition plc	Other guarantors	Non- guarantors	Eliminations	Consolidated
Revenue	\$ —	\$ 34	\$ —	\$ —	\$ 8,479	\$ —	\$ 8,513
Costs of providing services							
Salaries and benefits	2	68	—	—	5,053	—	5,123
Other operating expenses	3	38	1	165	1,430	—	1,637
Depreciation	—	—	—	4	204	—	208
Amortization	—	—	—	3	534	(3)	534
Transaction and integration expenses	—	8	—	1	193	—	202
Total costs of providing services	5	114	1	173	7,414	(3)	7,704
(Loss)/income from operations	(5)	(80)	(1)	(173)	1,065	3	809
Intercompany income/(expense)	—	56	124	356	(536)	—	—
Interest expense	(30)	(58)	(104)	—	(16)	—	(208)
Other income, net	—	—	—	2	1,540	(1,292)	250
(LOSS)/INCOME FROM OPERATIONS BEFORE INCOME TAXES	(35)	(82)	19	185	2,053	(1,289)	851
(Provision for)/benefit from income taxes	—	(1)	(3)	41	(173)	—	(136)
Equity account for subsidiaries	730	124	437	498	—	(1,789)	—
NET INCOME	695	41	453	724	1,880	(3,078)	715
Income attributable to non-controlling interests	—	—	—	—	(20)	—	(20)
NET INCOME ATTRIBUTABLE TO WILLIS TOWERS WATSON	\$ 695	\$ 41	\$ 453	\$ 724	\$ 1,860	\$ (3,078)	\$ 695
Comprehensive income/(loss) before non-controlling interests	\$ 247	\$ (88)	\$ 14	\$ 286	\$ 1,470	\$ (1,662)	\$ 267
Comprehensive income attributable to non-controlling interests	—	—	—	—	(20)	—	(20)
Comprehensive income/(loss) attributable to Willis Towers Watson	\$ 247	\$ (88)	\$ 14	\$ 286	\$ 1,450	\$ (1,662)	\$ 247

Condensed Consolidating Statement of Comprehensive Income

	Year ended December 31, 2017						
	Willis Towers Watson plc	Willis North America	Trinity Acquisition plc	Other guarantors	Non- guarantors	Eliminations	Consolidated
Revenue	\$ —	\$ 19	\$ —	\$ —	\$ 8,183	\$ —	\$ 8,202
Costs of providing services							
Salaries and benefits	4	48	—	—	4,915	—	4,967
Other operating expenses	3	20	1	91	1,419	—	1,534
Depreciation	—	—	—	6	197	—	203
Amortization	—	—	—	3	581	(3)	581
Restructuring costs	—	15	—	8	109	—	132
Transaction and integration expenses	—	19	—	73	177	—	269
Total costs of providing services	7	102	1	181	7,398	(3)	7,686
(Loss)/income from operations	(7)	(83)	(1)	(181)	785	3	516
Intercompany income/(expense)	—	34	123	350	(507)	—	—
Interest expense	(30)	(35)	(103)	—	(20)	—	(188)
Other income, net	35	—	—	—	367	(238)	164
(LOSS)/INCOME FROM OPERATIONS BEFORE INCOME TAXES	(2)	(84)	19	169	625	(235)	492
(Provision for)/benefit from income taxes	—	(29)	(2)	53	78	—	100
Equity account for subsidiaries	570	171	290	370	—	(1,401)	—
NET INCOME	568	58	307	592	703	(1,636)	592
Income attributable to non-controlling interests	—	—	—	—	(24)	—	(24)
NET INCOME ATTRIBUTABLE TO WILLIS TOWERS WATSON	\$ 568	\$ 58	\$ 307	\$ 592	\$ 679	\$ (1,636)	\$ 568
Comprehensive income before non-controlling interests	\$ 939	\$ 197	\$ 663	\$ 952	\$ 1,051	\$ (2,826)	\$ 976
Comprehensive income attributable to non-controlling interests	—	—	—	—	(37)	—	(37)
Comprehensive income attributable to Willis Towers Watson	\$ 939	\$ 197	\$ 663	\$ 952	\$ 1,014	\$ (2,826)	\$ 939

Condensed Consolidating Statement of Comprehensive Income

	Year ended December 31, 2016						
	Willis Towers Watson plc	Willis North America	Trinity Acquisition plc	Other guarantors	Non- guarantors	Eliminations	Consolidated
Revenue	\$ —	\$ 19	\$ —	\$ 2	\$ 7,866	\$ —	7,887
Costs of providing services							
Salaries and benefits	2	15	—	1	4,831	—	4,849
Other operating expenses	3	88	—	112	1,348	—	1,551
Depreciation	—	14	—	5	159	—	178
Amortization	—	—	—	—	591	—	591
Restructuring costs	—	39	—	29	125	—	193
Transaction and integration expenses	1	26	—	16	134	—	177
Total costs of providing services	6	182	—	163	7,188	—	7,539
(Loss)/income from operations	(6)	(163)	-	(161)	678	—	348
Intercompany income/(expense)	—	109	106	320	(535)	—	—
Interest expense	(32)	(39)	(90)	—	(23)	—	(184)
Other income, net	—	—	—	2	176	—	178
(LOSS)/INCOME FROM OPERATIONS BEFORE INCOME TAXES	(38)	(93)	16	161	296	—	342
Benefit from/(provision for) income taxes	—	86	(3)	39	(26)	—	96
Equity account for subsidiaries	458	157	151	247	—	(1,013)	—
NET INCOME	420	150	164	447	270	(1,013)	438
Income attributable to non-controlling interests	—	—	—	—	(18)	—	(18)
NET INCOME ATTRIBUTABLE TO WILLIS TOWERS WATSON	\$ 420	\$ 150	\$ 164	\$ 447	\$ 252	\$ (1,013)	\$ 420
Comprehensive loss before non- controlling interests	\$ (427)	\$ (266)	\$ (656)	\$ (381)	\$ (549)	\$ 1,850	\$ (429)
Comprehensive loss attributable to non- controlling interests	—	—	—	—	2	—	2
Comprehensive loss attributable to Willis Towers Watson	\$ (427)	\$ (266)	\$ (656)	\$ (381)	\$ (547)	\$ 1,850	\$ (427)

Condensed Consolidating Balance Sheet

As of December 31, 2018

	Willis Towers Watson plc	Willis North America	Trinity Acquisition plc	Other guarantors	Non- guarantors	Eliminations	Consolidated
ASSETS							
Cash and cash equivalents	\$ —	\$ —	\$ —	\$ —	\$ 1,033	\$ —	\$ 1,033
Fiduciary assets	—	—	—	—	12,604	—	12,604
Accounts receivable, net	—	24	—	—	2,355	—	2,379
Prepaid and other current assets	—	311	1	33	357	(298)	404
Total current assets	—	335	1	33	16,349	(298)	16,420
Intercompany receivables, net	4,755	—	1,355	—	—	(6,110)	—
Fixed assets, net	—	—	—	16	926	—	942
Goodwill	—	—	—	—	10,465	—	10,465
Other intangible assets, net	—	—	—	58	3,318	(58)	3,318
Pension benefits assets	—	—	—	—	773	—	773
Other non-current assets	—	92	2	49	452	(128)	467
Total non-current assets	4,755	92	1,357	123	15,934	(6,296)	15,965
Investments in subsidiaries	5,691	6,649	2,677	8,108	—	(23,125)	—
TOTAL ASSETS	\$ 10,446	\$ 7,076	\$ 4,035	\$ 8,264	\$ 32,283	\$ (29,719)	\$ 32,385
LIABILITIES AND EQUITY							
Fiduciary liabilities	\$ —	\$ —	\$ —	\$ —	\$ 12,604	\$ —	\$ 12,604
Deferred revenue and accrued expenses	1	2	—	3	1,641	—	1,647
Short-term debt and current portion of long-term debt	—	186	—	—	—	—	186
Other current liabilities	95	38	33	13	935	(250)	864
Total current liabilities	96	226	33	16	15,180	(250)	15,301
Intercompany payables, net	—	902	—	4,691	517	(6,110)	—
Long-term debt	498	1,635	2,256	—	—	—	4,389
Liability for pension benefits	—	—	—	—	1,170	—	1,170
Deferred tax liabilities	—	—	—	—	688	(129)	559
Provision for liabilities	—	120	—	—	420	—	540
Other non-current liabilities	—	13	—	5	411	—	429
Total non-current liabilities	498	2,670	2,256	4,696	3,206	(6,239)	7,087
TOTAL LIABILITIES	594	2,896	2,289	4,712	18,386	(6,489)	22,388
REDEEMABLE NON-CONTROLLING INTEREST	—	—	—	—	26	—	26
EQUITY							
Total Willis Towers Watson shareholders' equity	9,852	4,180	1,746	3,552	13,752	(23,230)	9,852
Non-controlling interests	—	—	—	—	119	—	119
Total equity	9,852	4,180	1,746	3,552	13,871	(23,230)	9,971
TOTAL LIABILITIES AND EQUITY	\$ 10,446	\$ 7,076	\$ 4,035	\$ 8,264	\$ 32,283	\$ (29,719)	\$ 32,385

Condensed Consolidating Balance Sheet

As of December 31, 2017

	Willis Towers Watson plc	Willis North America	Trinity Acquisition plc	Other guarantors	Non guarantors	Eliminations	Consolidated
ASSETS							
Cash and cash equivalents	\$ 2	\$ —	\$ —	\$ 1	\$ 1,027	\$ —	\$ 1,030
Fiduciary assets	—	—	—	—	12,155	—	12,155
Accounts receivable, net	—	4	—	—	2,242	—	2,246
Prepaid and other current assets	—	267	1	44	264	(146)	430
Total current assets	2	271	1	45	15,688	(146)	15,861
Intercompany receivables, net	6,202	—	2,501	—	—	(8,703)	-
Fixed assets, net	—	—	—	25	960	—	985
Goodwill	—	—	—	—	10,519	—	10,519
Other intangible assets, net	—	—	—	60	3,882	(60)	3,882
Pension benefits assets	—	—	—	—	764	—	764
Other non-current assets	—	115	3	31	388	(90)	447
Total non-current assets	6,202	115	2,504	116	16,513	(8,853)	16,597
Investments in subsidiaries	4,506	6,125	1,918	8,425	—	(20,974)	—
TOTAL ASSETS	\$ 10,710	\$ 6,511	\$ 4,423	\$ 8,586	\$ 32,201	\$ (29,973)	\$ 32,458
LIABILITIES AND EQUITY							
Fiduciary liabilities	\$ —	\$ —	\$ —	\$ —	\$ 12,155	\$ —	\$ 12,155
Deferred revenue and accrued expenses	—	19	—	7	1,685	—	1,711
Short-term debt and current portion of long-term debt	—	—	—	—	85	—	85
Other current liabilities	87	83	33	27	724	(150)	804
Total current liabilities	87	102	33	34	14,649	(150)	14,755
Intercompany payables, net	—	787	—	3,895	4,021	(8,703)	—
Long-term debt	497	986	2,883	—	84	—	4,450
Liability for pension benefits	—	—	—	—	1,259	—	1,259
Deferred tax liabilities	—	—	—	—	704	(89)	615
Provision for liabilities	—	120	—	—	438	—	558
Other non-current liabilities	—	19	—	5	520	—	544
Total non-current liabilities	497	1,912	2,883	3,900	7,026	(8,792)	7,426
TOTAL LIABILITIES	584	2,014	2,916	3,934	21,675	(8,942)	22,181
REDEEMABLE NON-CONTROLLING INTEREST	—	—	—	—	28	—	28
EQUITY							
Total Willis Towers Watson shareholders' equity	10,126	4,497	1,507	4,652	10,375	(21,031)	10,126
Non-controlling interests	—	—	—	—	123	—	123
Total equity	10,126	4,497	1,507	4,652	10,498	(21,031)	10,249
TOTAL LIABILITIES AND EQUITY	\$ 10,710	\$ 6,511	\$ 4,423	\$ 8,586	\$ 32,201	\$ (29,973)	\$ 32,458

Condensed Consolidating Statement of Cash Flows

	Year ended December 31, 2018						Consolidated
	Willis Towers Watson plc	Willis North America	Trinity Acquisition plc	Other guarantors	Non- guarantors	Eliminations	
NET CASH (USED IN)/FROM OPERATING ACTIVITIES	\$ (537)	\$ 153	\$ 355	\$ (792)	\$ 3,196	\$ (1,087)	\$ 1,288
CASH FLOWS FROM/(USED IN) INVESTING ACTIVITIES							
Additions to fixed assets and software for internal use	—	—	—	(4)	(264)	—	(268)
Capitalized software costs	—	—	—	—	(54)	—	(54)
Acquisitions of operations, net of cash acquired	—	—	—	—	(36)	—	(36)
Net proceeds from sale of operations	—	—	—	—	4	—	4
Other, net	—	—	—	—	13	—	13
Proceeds from/(repayments of) intercompany investing activities, net	1,398	369	92	356	(2,673)	458	—
Net cash from/(used in) investing activities	\$ 1,398	\$ 369	\$ 92	\$ 352	\$ (3,010)	\$ 458	\$ (341)
CASH FLOWS (USED IN)/FROM FINANCING ACTIVITIES							
Net payments on revolving credit facility	—	(155)	(599)	—	—	—	(754)
Senior notes issued	—	998	—	—	—	—	998
Debt issuance costs	—	(8)	—	—	—	—	(8)
Repayments of debt	—	—	—	—	(170)	—	(170)
Repurchase of shares	(602)	—	—	—	—	—	(602)
Proceeds from issuance of shares	45	—	—	—	—	—	45
Payments of deferred and contingent consideration related to acquisitions	—	—	—	—	(50)	—	(50)
Cash paid for employee taxes on withholding shares	—	—	—	—	(30)	—	(30)
Dividends paid	(306)	—	(686)	(150)	(251)	1,087	(306)
Acquisitions of and dividends paid to non-controlling interests	—	—	—	—	(26)	—	(26)
(Repayments of)/proceeds from intercompany financing activities, net	—	(1,357)	838	589	388	(458)	—
Net cash (used in)/from financing activities	\$ (863)	\$ (522)	\$ (447)	\$ 439	\$ (139)	\$ 629	\$ (903)
(DECREASE)/INCREASE IN CASH AND CASH EQUIVALENTS	(2)	—	—	(1)	47	—	44
Effect of exchange rate changes on cash and cash equivalents	—	—	—	—	(41)	—	(41)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	2	—	—	1	1,027	—	1,030
CASH AND CASH EQUIVALENTS, END OF YEAR	\$ —	\$ —	\$ —	\$ —	\$ 1,033	\$ —	\$ 1,033

Condensed Consolidating Statement of Cash Flows

	Year ended December 31, 2017						
	Willis Towers Watson plc	Willis North America	Trinity Acquisition plc	Other guarantors	Non- guarantors	Eliminations	Consolidated
NET CASH FROM/(USED IN) OPERATING ACTIVITIES	\$ 743	\$ 114	\$ 29	\$ (696)	\$ 939	\$ (267)	\$ 862
CASH FLOWS FROM/(USED IN) INVESTING ACTIVITIES							
Additions to fixed assets and software for internal use	—	—	—	(8)	(292)	—	(300)
Capitalized software costs	—	—	—	—	(75)	—	(75)
Acquisitions of operations, net of cash acquired	—	—	—	—	(13)	—	(13)
Net proceeds from sale of operations	—	—	—	—	57	—	57
Other, net	—	—	—	—	(4)	—	(4)
Proceeds from/(repayments of) intercompany investing activities, net	1,042	(55)	(1,600)	277	(485)	821	—
(Increase)/decrease in investment in subsidiaries	(1,035)	(115)	(148)	833	465	—	—
Net cash from/(used in) investing activities	\$ 7	\$ (170)	\$ (1,748)	\$ 1,102	\$ (347)	\$ 821	\$ (335)
CASH FLOWS (USED IN)/FROM FINANCING ACTIVITIES							
Net borrowings on revolving credit facility	—	155	487	—	—	—	642
Senior notes issued	—	649	—	—	—	—	649
Proceeds from issuance of other debt	—	—	—	—	32	—	32
Debt issuance costs	—	(5)	(4)	—	—	—	(9)
Repayments of debt	—	(394)	(220)	—	(120)	—	(734)
Repurchase of shares	(532)	—	—	—	—	—	(532)
Proceeds from issuance of shares	61	—	—	—	—	—	61
Payments related to share cancellation	—	—	—	—	(177)	—	(177)
Payments of deferred and contingent consideration related to acquisitions	—	—	—	—	(65)	—	(65)
Cash paid for employee taxes on withholding shares	—	—	—	—	(18)	—	(18)
Dividends paid	(277)	(58)	—	(58)	(151)	267	(277)
Acquisitions of and dividends paid to non- controlling interests	—	—	—	—	(51)	—	(51)
(Repayments of)/proceeds from intercompany financing activities, net	—	(291)	1,456	(347)	3	(821)	—
Net cash (used in)/from financing activities	\$ (748)	\$ 56	\$ 1,719	\$ (405)	\$ (547)	\$ (554)	\$ (479)
INCREASE IN CASH AND CASH EQUIVALENTS	2	—	—	1	45	—	48
Effect of exchange rate changes on cash and cash equivalents	—	—	—	—	112	—	112
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	—	—	—	—	870	—	870
CASH AND CASH EQUIVALENTS, END OF YEAR	\$ 2	\$ —	\$ —	\$ 1	\$ 1,027	\$ —	\$ 1,030

Condensed Consolidating Statement of Cash Flows

	Year ended December 31, 2016						
	Willis Towers Watson plc	Willis North America	Trinity Acquisition plc	Other guarantors	Non- guarantors	Eliminations	Consolidated
NET CASH FROM/(USED IN) OPERATING ACTIVITIES	\$ (20)	\$ (83)	\$ 152	\$ 440	\$ 1,114	\$ (670)	\$ 933
CASH FLOWS FROM/(USED IN) INVESTING ACTIVITIES							
Additions to fixed assets and software for internal use	—	(12)	—	(79)	(221)	94	(218)
Capitalized software costs	—	—	—	—	(85)	—	(85)
Acquisitions of operations, net of cash acquired	—	—	—	—	476	—	476
Net proceeds from sale of operations	—	—	—	—	(4)	3	(1)
Other, net	—	33	—	—	20	(30)	23
Proceeds from/(repayments of) intercompany investing activities, net	(3,751)	—	(547)	(3,405)	(739)	8,442	—
Decrease/(increase) in investment in subsidiaries	4,600	—	—	(1,000)	(3,600)	—	—
Net cash from/(used in) investing activities	\$ 849	\$ 21	\$ (547)	\$ (4,484)	\$ (4,153)	\$ 8,509	\$ 195
CASH FLOWS (USED IN)/FROM FINANCING ACTIVITIES							
Net payments on revolving credit facility	—	—	(237)	—	—	—	(237)
Senior notes issued	—	—	1,606	—	—	—	1,606
Proceeds from issuance of other debt	—	—	400	—	4	—	404
Debt issuance costs	—	—	(14)	—	—	—	(14)
Repayments of debt	(300)	—	(1,037)	—	(564)	—	(1,901)
Repurchase of shares	(396)	—	—	—	—	—	(396)
Proceeds from issuance of shares	63	—	—	—	—	—	63
Payments of deferred and contingent consideration related to acquisitions	—	—	—	—	(67)	—	(67)
Cash paid for employee taxes on withholding shares	—	—	—	—	(13)	—	(13)
Dividends paid	(199)	(49)	(302)	(162)	(90)	603	(199)
Acquisitions of and dividends paid to non- controlling interests	—	—	—	—	(21)	—	(21)
Proceeds from/(repayments of) intercompany financing activities, net	—	111	(21)	4,204	4,148	(8,442)	—
Net cash (used in)/from financing activities	\$ (832)	\$ 62	\$ 395	\$ 4,042	\$ 3,397	\$ (7,839)	\$ (775)
(DECREASE)/INCREASE IN CASH AND CASH EQUIVALENTS	(3)	—	—	(2)	358	—	353
Effect of exchange rate changes on cash and cash equivalents	—	—	—	—	(15)	—	(15)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	3	—	—	2	527	—	532
CASH AND CASH EQUIVALENTS, END OF YEAR	\$ —	\$ —	\$ —	\$ —	\$ 870	\$ —	\$ 870

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

An evaluation was performed under the supervision and with the participation of the chief executive officer ('CEO') and chief financial officer ('CFO'), of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report. Based upon that evaluation, our management, including the CEO and CFO, concluded that our disclosure controls and procedures were effective as of December 31, 2018 in providing reasonable assurance that the information required to be disclosed in our periodic reports we file or submit under the Exchange Act is (1) recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and (2) accumulated and communicated to our management to allow for timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting in the quarter ended December 31, 2018 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Report on Internal Control over Financial Reporting

Internal control over financial reporting refers to the process designed by, or under the supervision of, our CEO and CFO, and overseen by our board of directors, management and other personnel, 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, and 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.

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting can also be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk.

Management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Management has used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ('COSO') in the report entitled *Internal Control — Integrated Framework (2013)* to evaluate the effectiveness of the Company's internal control over financial reporting. Based on this evaluation, management has concluded that the Company maintained effective internal control over financial reporting as of December 31, 2018.

The effectiveness of our internal controls over financial reporting has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is included herein.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of Willis Towers Watson Public Limited Company

We have audited the internal control over financial reporting of Willis Towers Watson Public Limited Company and subsidiaries (the “Company”) as of December 31, 2018, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2018, of the Company and our report dated February 27, 2019, expressed an unqualified opinion on those financial statements and included an explanatory paragraph regarding the Company’s adoption of a new accounting standard.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ **Deloitte & Touche LLP**
Philadelphia, PA
February 27, 2019

ITEM 9B. OTHER INFORMATION

None.

PART III.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information with respect to the executive officers of the Company is provided in Part I, Item 1 above under the heading 'Executive Officers of the Registrant'. All other information required by this Item will be provided in accordance with Instruction G(3) to Form 10-K no later than 120 days after the end of the Company's fiscal year.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item will be provided in accordance with Instruction G(3) to Form 10-K no later than 120 days after the end of the Company's fiscal year.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item will be provided in accordance with Instruction G(3) to Form 10-K no later than 120 days after the end of the Company's fiscal year.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item will be provided in accordance with Instruction G(3) to Form 10-K no later than 120 days after the end of the Company's fiscal year.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item will be provided in accordance with Instruction G(3) to Form 10-K no later than 120 days after the end of the Company's fiscal year.

PART IV.

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- a) The following documents have been included in Part II, Item 8:

Reports of Independent Registered Public Accounting Firms

Consolidated Financial Statements of Willis Towers Watson

Financial Statements:

Consolidated Statements of Comprehensive Income for each of the three years in the period ended December 31, 2018

Consolidated Balance Sheets at December 31, 2018 and 2017

Consolidated Statements of Cash Flows for each of the three years in the period ended December 31, 2018

Consolidated Statements of Changes in Equity for each of the three years in the period ended December 31, 2018

Notes to the Consolidated Financial Statements

- b) Exhibits:

In reviewing the agreements included or incorporated by reference as exhibits to this Annual Report on Form 10-K, it is important to note that they are included to provide investors with information regarding their terms, and are not intended to provide any other factual or disclosure information about Willis Towers Watson or the other parties to the agreements. The agreements contain representations and warranties made by each of the parties to the applicable agreement. These representations and warranties have been made solely for the benefit of the other parties to the applicable agreement, and: should not be treated as categorical statements of fact, but rather as a way of allocating risk between the parties; have in some cases been qualified by disclosures that were made to the other party in connection with the negotiation of the applicable agreement, which disclosures are not necessarily reflected in the agreement; may apply standards of materiality in a way that is different from what may be material to investors; and were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement and are subject to more recent developments.

Accordingly, these representations and warranties may not describe the actual state of affairs as of the date they were made or at any other time. Additional information about Willis Towers Watson may be found elsewhere in this Annual Report on Form 10-K and our other public filings, which are available without charge through the SEC's website at <http://www.sec.gov>.

- 2.1 [Agreement and Plan of Merger, dated as of June 29, 2015, by and among Willis Group Holdings plc, Citadel Merger Sub, Inc. and Towers Watson & Co \(incorporated by reference to Exhibit 2.1 to the Form 8-K filed by the Company on June 30, 2015\)](#)
- 2.2 [Amendment No. 1 to Agreement and Plan of Merger, dated November 19, 2015, by and among Willis, Merger Sub and Towers Watson \(incorporated by reference to Exhibit 2.1 to the Form 8-K filed by the Company on November 20, 2015\)](#)
- 3.1 [Amended and Restated Memorandum and Articles of Association of Willis Towers Watson Public Limited Company \(incorporated by reference to Exhibit 3.1 to the Form 8-K filed by the Company on June 15, 2017\)](#)
- 3.2 [Certificate of Incorporation of Willis Group Holdings Public Limited Company \(incorporated by reference to Exhibit 3.2 to the Form 8-K filed by the Company on January 4, 2010\)](#)
- 4.1 [Senior Indenture, dated as of July 1, 2005, and First Supplemental Indenture, dated as of July 1, 2005, by and among Willis North America Inc., as the Issuer, Willis Group Holdings Public Limited Company, TA I Limited, TA II Limited, TA III Limited, Trinity Acquisition Limited, TA IV Limited and Willis Group Limited, as the Guarantors, and The Bank of New York \(f/k/a JPMorgan Chase Bank, N.A.\), as the Trustee \(incorporated by reference to Exhibit 4.1 to the Form 8-K filed by the Company on July 1, 2005\)](#)

- 4.2 [Second Supplemental Indenture, dated as of March 28, 2007, supplemental to the Indenture dated as of July 1, 2005 \(incorporated by reference to Exhibit 4.1 to the Form 8-K filed by the Company on March 30, 2007\)](#)
- 4.3 [Third Supplemental Indenture, dated as of October 1, 2008, supplemental to the Indenture dated as of July 1, 2005 \(incorporated by reference to Exhibit 4.1 to the Form 10-Q filed by the Company on November 10, 2008\)](#)
- 4.4 [Fourth Supplemental Indenture, dated as of September 29, 2009, supplemental to the Indenture dated as of July 1, 2005 \(incorporated by reference to Exhibit 4.1 to the Form 8-K filed by the Company on September 29, 2009\)](#)
- 4.5 [Fifth Supplemental Indenture, dated as of December 31, 2009, supplemental to the Indenture dated as of July 1, 2005 \(incorporated by reference to Exhibit 4.1 to the Form 8-K filed by the Company on January 4, 2010\)](#)
- 4.6 [Sixth Supplemental Indenture, dated as of December 22, 2010, supplemental to the Indenture dated as of July 1, 2005 \(incorporated by reference to Exhibit 4.6 to the Form 10-K filed by the Company on February 28, 2011\)](#)
- 4.7 [Seventh Supplemental Indenture, dated as of March 9, 2016, supplemental to the Indenture, dated as of July 1, 2005 \(incorporated by reference to Exhibit 4.1 to the Form 8-K filed by the Company on March 10, 2016\)](#)
- 4.8 [Eighth Supplemental Indenture, dated as of August 11, 2017, supplemental to the Indenture dated as of July 1, 2005 \(incorporated by reference to Exhibit 4.1 to the Form 8-K filed by the Company on August 16, 2017\)](#)
- 4.9 [Indenture, dated as of March 17, 2011, by and among Willis Group Holdings Public Limited Company, as issuer, Willis Netherlands Holdings B.V., Willis Investment Holdings U.K. Limited, TA I Limited, Trinity Acquisition Limited, Willis Group Limited and Willis North America Inc., as Guarantors, and The Bank of New York Mellon, as Trustee \(incorporated by reference to Exhibit 4.1 to the Form 8-K filed by the Company on March 17, 2011\)](#)
- 4.10 [First Supplemental Indenture, dated as of March 17, 2011, supplemental to the Indenture dated March 17, 2011 \(incorporated by reference to Exhibit 4.2 to the Form 8-K filed by the Company on March 17, 2011\)](#)
- 4.11 [Second Supplemental Indenture, dated as of March 9, 2016, supplemental to the Indenture, dated as of March 17, 2011 \(incorporated by reference to Exhibit 4.2 to the Form 8-K filed by the Company on March 10, 2016\)](#)
- 4.12 [Third Supplemental Indenture, dated as of August 11, 2017, supplemental to the Indenture dated as of March 17, 2011 \(incorporated by reference to Exhibit 4.2 to the Form 8-K filed by the Company on August 16, 2017\)](#)
- 4.13 [Indenture, dated as of August 15, 2013, by and among Trinity Acquisition Limited, as issuer, Willis Group Holdings Public Limited Company, Willis Netherlands Holdings B.V., Willis North America Inc., Willis Investment Holdings U.K. Limited, TA I Limited and Willis Group Limited, as guarantors, and Wells Fargo Bank, National Association, as trustee \(incorporated by reference to Exhibit 4.1 to the Form 8-K filed by the Company on August 15, 2013\)](#)
- 4.14 [First Supplemental Indenture, dated as of August 15, 2013, supplemental to the Indenture dated August 15, 2013 \(incorporated by reference to Exhibit 4.2 to the Form 8-K filed by the Company on August 15, 2013\)](#)
- 4.15 [Second Supplemental Indenture, dated as of March 9, 2016, supplemental to the Indenture, dated as of August 15, 2013 \(incorporated by reference to Exhibit 4.3 to the Form 8-K filed by the Company on March 10, 2016\)](#)
- 4.16 [Third Supplemental Indenture, dated as of March 22, 2016, supplemental to the Indenture, dated as of August 15, 2013 \(incorporated by reference to Exhibit 4.1 to the Form 8-K filed by the Company on March 22, 2016\)](#)
- 4.17 [Fourth Supplemental Indenture, dated as of May 26, 2016, supplemental to the Indenture, dated as of August 15, 2013 \(incorporated by reference to Exhibit 4.1 to the Form 8-K filed by the Company on May 26, 2016\)](#)
- 4.18 [Fifth Supplemental Indenture, dated as of August 11, 2017, supplemental to the Indenture dated as of August 15, 2013 \(incorporated by reference to Exhibit 4.3 to the Form 8-K filed by the Company on August 16, 2017\)](#)
- 4.19 [Form of Indenture among Willis Towers Watson Public Limited Company, as issuer, Willis Towers Watson Sub Holdings Unlimited Company, Willis Netherlands Holdings B.V., Willis Investment UK Holdings Limited, TA I Limited, WTW Bermuda Holdings Ltd., Trinity Acquisition plc, Willis Group Limited and Willis North America Inc., as guarantors, and Wells Fargo Bank, National Association, as Trustee \(incorporated by reference to Exhibit 4.3 to the Registration Statement on Form S-3 filed by the Company on March 11, 2016\)](#)
- 4.20 [Form of Indenture among Willis North America Inc., as issuer, Willis Towers Watson Public Limited Company, Willis Towers Watson Sub Holdings Unlimited Company, Willis Netherlands Holdings B.V., Willis Investment UK Holdings Limited, TA I Limited, WTW Bermuda Holdings Ltd., Trinity Acquisition plc and Willis Group Limited, as guarantors, and Wells Fargo Bank, National Association, as Trustee \(incorporated by reference to Exhibit 4.4 to the Registration Statement on Form S-3 filed by the Company on March 11, 2016\)](#)

- 4.21 [Indenture, dated as of May 16, 2017, among Willis North America Inc., as issuer, Willis Towers Watson Public Limited Company, Willis Towers Watson Sub Holdings Unlimited Company, Willis Netherlands Holdings B.V., Willis Investment UK Holdings Limited, TA I Limited, WTW Bermuda Holdings Ltd., Trinity Acquisition plc and Willis Group Limited, as guarantors, and Wells Fargo Bank, National Association, as Trustee \(incorporated by reference to Exhibit 4.1 to the Form 8-K filed by the Company on May 16, 2017\)](#)
- 4.22 [Supplemental Indenture, dated as of May 16, 2017, among Willis North America Inc., as issuer, Willis Towers Watson Public Limited Company, Willis Towers Watson Sub Holdings Unlimited Company, Willis Netherlands Holdings B.V., Willis Investment UK Holdings Limited, TA I Limited, WTW Bermuda Holdings Ltd., Trinity Acquisition plc and Willis Group Limited, as guarantors, and Wells Fargo Bank, National Association, as trustee \(incorporated by reference to Exhibit 4.2 to the Form 8-K filed by the Company on May 16, 2017\)](#)
- 4.23 [Second Supplemental Indenture, dated as of August 11, 2017, to the Indenture dated as of May 16, 2017 \(incorporated by reference to Exhibit 4.4 to the Form 8-K filed by the Company on August 16, 2017\)](#)
- 4.24 [Third Supplemental Indenture, dated as of September 10, 2018, to the Indenture dated as of May 16, 2017 \(incorporated by reference to Exhibit 4.1 to the Form 8-K filed by the Company on September 10, 2018\)](#)
- 4.25 [Form of Willis North America Inc.'s 4.500% Senior Note due 2028 and 5.050% Senior Note due 2048 \(included in Exhibit 4.23 and incorporated by reference to Exhibit 4.2 to the Form 8-K filed by the Company on September 10, 2018\)](#)
- 10.1 [Amended and Restated Credit Agreement, dated as of March 7, 2017, among Trinity Acquisition plc, Willis Towers Watson Public Limited Company, the lenders party thereto and Barclays Bank PLC., as Administrative Agent \(incorporated by reference to Exhibit 10.1 to the Form 8-K filed by the Company on March 9, 2017\)](#)
- 10.2 [Amended and Restated Guaranty Agreement, dated as of March 7, 2017, among Trinity Acquisition plc, Willis Towers Watson Public Limited Company, the other guarantors party thereto and Barclays Bank PLC, as Administrative Agent \(incorporated by reference to Exhibit 10.2 to the Form 8-K filed by the Company on March 9, 2017\)](#)
- 10.3 [Term Loan Credit Agreement, dated as of November 20, 2015, among Towers Watson Delaware Inc., as borrower, each lender from time to time party thereto, and Bank of America, N.A., as administrative agent \(incorporated by reference to Exhibit 10.1 to the Form 8-K filed by Towers Watson on November 24, 2015\)](#)
- 10.4 [Amendment No. 1, dated as of December 23, 2015, to the Term Loan Credit Agreement \(incorporated by reference to Exhibit 10.1 to the Form 8-K filed by Towers Watson on December 29, 2015\)](#)
- 10.5 [Amendment No. 2, dated as of March 31, 2017, to the Term Loan Credit Agreement dated as of November 20, 2015, among Towers Watson Delaware Inc., as borrower, each lender from time to time party thereto, and Bank of America, N.A., as administrative agent \(incorporated by reference to Exhibit 10.3 to the Form 10-Q filed by the Company on May 9, 2017\)](#)
- 10.6 [Amendment No. 3, dated as of April 28, 2017, to the Term Loan Credit Agreement dated as of November 20, 2015, among Towers Watson Delaware Inc., as borrower, each lender from time to time party thereto, and Bank of America, N.A., as administrative agent \(incorporated by reference to Exhibit 10.4 to the Form 10-Q filed by the Company on May 9, 2017\)](#)
- 10.7 [Deed Poll of Assumption, dated as of December 31, 2009, by and between Willis Group Holdings Limited and Willis Group Holdings Public Limited Company \(incorporated by reference to Exhibit 10.4 to the Form 8-K filed by the Company on January 4, 2010\)†](#)
- 10.8 [Willis Group Senior Management Incentive Plan \(incorporated by reference to Exhibit 10.7 to the Form 8-K filed by the Company on January 4, 2010\)†](#)
- 10.9 [Willis Towers Watson Public Limited Company Amended and Restated 2010 North American Employee Stock Purchase Plan \(incorporated by reference to Exhibit B to the Definitive Proxy Statement on Schedule 14A filed by the Company on April 27, 2016\)†](#)
- 10.10 [Willis Group Holdings 2001 Share Purchase and Option Plan \(incorporated by reference to Exhibit 10.9 to the Form 8-K filed by the Company on January 4, 2010\)†](#)
- 10.11 [Form of Performance-Based Option Agreement under the Willis Group Holdings 2001 Share Purchase and Option Plan \(incorporated by reference to Exhibit 10.2 to the Form 10-Q filed by the Company on May 10, 2010\)†](#)

10.12	<u>Form of Time-Based Option Agreement under the Willis Group Holdings 2001 Share Purchase and Option Plan (incorporated by reference to Exhibit 10.16 to the Form 10-K filed by the Company on February 28, 2011)†</u>
10.13	<u>Form of Performance-Based Option Agreement for the 2011 Long Term Incentive Program under the Willis Group Holdings 2001 Share Purchase and Option Plan (incorporated by reference to Exhibit 10.1 to the Form 8-K filed by the Company on May 3, 2011)†</u>
10.14	<u>Rules of the Willis Group Holdings Sharesave Plan 2001 for the United Kingdom (incorporated by reference to Exhibit 10.13 to the Form 8-K filed by the Company on January 4, 2010)†</u>
10.15	<u>The Willis Group Holdings Irish Sharesave Plan (incorporated by reference to Exhibit 10.1 to the Form 10-Q filed by the Company on May 10, 2010)†</u>
10.16	<u>Willis Group Holdings 2008 Share Purchase and Option Plan (incorporated by reference to Exhibit 10.16 to the Form 8-K filed by the Company on January 4, 2010)†</u>
10.17	<u>Hilb Rogal & Hobbs Company 2007 Share Incentive Plan (incorporated by reference to Exhibit 10.19 to the Form 8-K filed by the Company on January 4, 2010)†</u>
10.18	<u>Form of Time-Based Restricted Share Unit Award Agreement granted under the Hilb Rogal & Hobbs Company 2007 Share Incentive Plan (incorporated by reference to Exhibit 10.1 to the Form 10-Q filed by the Company on August 6, 2010)†</u>
10.19	<u>Form of Time-Based Option Agreement granted under the Hilb Rogal & Hobbs Company 2007 Share Incentive Plan (incorporated by reference to Exhibit 10.3 to the Form 10-Q filed by the Company on August 6, 2010)†</u>
10.20	<u>Form of Performance-Based Option Agreement granted under the Hilb Rogal & Hobbs Company 2007 Share Incentive Plan (incorporated by reference to Exhibit 10.5 to the Form 10-Q filed by the Company on August 9, 2011)†</u>
10.21	<u>Willis Towers Watson Public Limited Company 2012 Equity Incentive Plan (incorporated by reference to Exhibit A to the Definitive Proxy Statement on Schedule 14A filed by the Company on April 27, 2016)†</u>
10.22	<u>Form of Time-Based Share Option Award Agreement under the Willis Group Holdings Public Limited Company 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to the Form 10-Q filed by the Company on August 9, 2012)†</u>
10.23	<u>Form of Performance-Based Share Option Award Agreement under the Willis Group Holdings Public Limited Company 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 to the Form 10-Q filed by the Company on August 9, 2012)†</u>
10.24	<u>Form of Time-Based Restricted Share Unit Award Agreement under the Willis Group Holdings Public Limited Company 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.3 to the Form 10-Q filed by the Company on August 9, 2012)†</u>
10.25	<u>Form of Performance-Based Restricted Share Unit Award Agreement under the Willis Group Holdings Public Limited Company 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.4 to the Form 10-Q filed by the Company on August 9, 2012)†</u>
10.26	<u>Form of Time-Based Restricted Share Unit Award Agreement under the Willis Group Holdings Public Limited Company 2012 Equity Incentive Plan (for Non-Employee Directors) (incorporated by reference to Exhibit 10.5 to the Form 10-Q filed by the Company on August 9, 2012)†</u>
10.27	<u>Form of Performance-Based Restricted Share Unit Award Agreement under the Willis Group Holdings Public Limited Company 2012 Equity Incentive Plan for the 2013 Long-Term Incentive Program (incorporated by reference to Exhibit 10.33 to the Form 10-K filed by the Company on February 27, 2014)†</u>
10.28	<u>Rules of the Willis Group Holdings Public Limited Company 2012 Sharesave Sub-Plan for the United Kingdom to the Willis Group Holdings Public Limited Company 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.32 to the Form 10-K filed by the Company on February 28, 2013)†</u>
10.29	<u>Form of 2012 Long Term Incentive Program Agreement of Restrictive Covenants and Other Obligations (for U.S. employees) Plan (incorporated by reference to Exhibit 10.36 to the Form 10-K filed by the Company on February 28, 2013)†</u>
10.30	<u>Form of 2012 Long Term Incentive Program Agreement of Restrictive Covenants and Other Obligations (for U.K. employees) Plan (incorporated by reference to Exhibit 10.37 to the Form 10-K filed by the Company on February 28, 2013)†</u>

- 10.31 [Amended and Restated Willis U.S. 2005 Deferred Compensation Plan \(incorporated by reference to Exhibit 10.1 to the Form 8-K filed by the Company on November 20, 2009\)†](#)
- 10.32 [First Amendment to the Amended and Restated Willis U.S. 2005 Deferred Compensation Plan, effective June 1, 2011 \(incorporated by reference to Exhibit 10.1 to the Form 10-Q filed by the Company on August 9, 2011\)†](#)
- 10.33 [Second Amendment to the Amended and Restated Willis U.S. 2005 Deferred Compensation Plan \(incorporated by reference to Exhibit 10.6 to the Form 10-Q filed by the Company on November 5, 2013\)†](#)
- 10.34 [Amendment 2017-1 to the Amended and Restated Willis U.S. 2005 Deferred Compensation Plan \(incorporated by reference to Exhibit 10.34 to the Form 10-K filed by the Company on February 28, 2018\)†](#)
- 10.35 [Form of Deed of Indemnity of Willis Towers Watson Public Limited Company \(incorporated by reference to Exhibit 10.1 to the Form 8-K filed by the Company on January 5, 2016\)†](#)
- 10.36 [Form of Indemnification Agreement of Willis North America Inc. \(incorporated by reference to Exhibit 10.2 to the Form 8-K filed by the Company on January 5, 2016\)†](#)
- 10.37 [Willis Towers Watson Public Limited Company Compensation Policy and Share Ownership Guidelines for Non-Employee Directors \(as amended May 2018\) \(incorporated by reference to Exhibit 10.3 to the Form 10-Q filed by the Company on August 6, 2018\)](#)
- 10.38 [Employment Agreement, dated as of March 1, 2016, by and between Willis Towers Watson Public Limited Company and John J. Haley \(incorporated by reference to Exhibit 10.1 to the Form 8-K filed by the Company on March 1, 2016\)†](#)
- 10.39 [Amendment to Employment Agreement, dated as of July 18, 2018, by and between Willis Towers Watson Public Limited Company and John J. Haley \(incorporated by reference to Exhibit 99.2 to the Form 8-K filed by the Company on July 18, 2018\)†](#)
- 10.40 [Restricted Share Unit Award Agreement, dated as of February 26, 2016, by and between Willis Towers Watson Public Limited Company and John J. Haley \(incorporated by reference to Exhibit 10.2 to the Form 8-K filed by the Company on March 1, 2016\)†](#)
- 10.41 [Supplemental Restricted Share Unit Award Agreement, by and between Willis Towers Watson Public Limited Company and John J. Haley, dated as of June 14, 2016 \(incorporated by reference to Exhibit 10.1 to the Form 8-K filed by the Company on June 16, 2016\)†](#)
- 10.42 [Offer Letter, dated August 17, 2017, from John J. Haley to Michael J. Burwell \(incorporated by reference to Exhibit 10.1 to the Form 8-K filed by the Company on August 21, 2017\)†](#)
- 10.43 [Letter Agreement, dated September 18, 2017, by and between the Company and Roger F. Millay \(incorporated by reference to Exhibit 10.2 to the Form 10-Q filed by the Company on November 6, 2017\)†](#)
- 10.44 [Offer Letter, dated July 23, 2013, and Contract of Employment, dated as of September 3, 2013, by and between Willis Limited, a subsidiary of Willis Towers Watson Public Limited Company, and David Shalders \(incorporated by reference to Exhibit 10.3 to the Form 10-Q filed by the Company on May 10, 2016\)†](#)
- 10.45 [Amendment, dated April 30, 2014, to the Contract of Employment, dated as of September 3, 2013, by and between Willis Limited, a subsidiary of Willis Towers Watson Public Limited Company, and David Shalders \(incorporated by reference to Exhibit 10.4 to the Form 10-Q filed by the Company on May 10, 2016\)†](#)
- 10.46 [Amendment, dated as of June 29, 2015, to Contract of Employment, dated as of September 3, 2013, by and between Willis Limited, a subsidiary of Willis Towers Watson Public Limited Company, and David Shalders \(incorporated by reference to Exhibit 10.5 to the Form 10-Q filed by the Company on May 10, 2016\)†](#)
- 10.47 [Offer Letter, dated November 9, 2014, and Contract of Employment, dated as of November 9, 2014, by and between Willis Limited, a subsidiary of Willis Towers Watson Public Limited Company, and Nicolas Aubert \(incorporated by reference to Exhibit 10.6 to the Form 10-Q filed by the Company on May 10, 2016\)†](#)
- 10.48 [Amendment, dated as of June 29, 2015, to Contract of Employment, dated as of November 9, 2014, by and between Willis Limited, a subsidiary of Willis Towers Watson Public Limited Company, and Nicolas Aubert \(incorporated by reference to Exhibit 10.7 to the Form 10-Q filed by the Company on May 10, 2016\)†](#)
- 10.49 [Letter Agreement, dated June 7, 2017, by and between the Company and Nicolas Aubert \(incorporated by reference to Exhibit 10.4 to the Form 10-Q filed by the Company on August 7, 2017\)†](#)

10.50	<u>Employment Agreement, dated as of September 15, 2003, by and between Willis Americas Administration, Inc. and Todd J. Jones (incorporated by reference to Exhibit 10.63 to the Form 10-K filed by the Company on February 27, 2014)†</u>
10.51	<u>Letter Agreement, dated August 1, 2013, by and between Willis North America Inc. and Todd J. Jones (incorporated by reference to Exhibit 10.64 to the Form 10-K filed by the Company on February 27, 2014)†</u>
10.52	<u>Amendment, dated April 30, 2014, to the Employment Agreement, dated August 1, 2013, by and between Willis North America Inc. and Todd J. Jones (incorporated by reference to Exhibit 10.6 to the Form 10-Q filed by the Company on May 9, 2014)†</u>
10.53	<u>Amendment to Employment Agreement, dated as of June 29, 2015, by and between Willis North America Inc. and Todd Jones (incorporated by reference to Exhibit 10.4 to the Form 8-K filed by the Company on June 30, 2015)†</u>
10.54	<u>Amendment to Employment Agreement, dated as of May 22, 2018, by and between Willis North America Inc. and Todd Jones. (incorporated by reference to Exhibit 10.1 to the Form 10-Q filed by the Company on August 6, 2018)†</u>
10.55	<u>Form of Time-Based Restricted Share Unit Award Agreement under the Willis Group Holdings Public Limited Company 2012 Equity Incentive Plan, dated as of November 9, 2015, by and between Todd Jones / Nicolas Aubert / David Shalders and Willis Group Holdings Public Limited Company (incorporated by reference to Exhibit 10.74 to the Form 10-K filed by the Company on February 29, 2016)†</u>
10.56	<u>Form of Performance-Based Restricted Share Unit Award Agreement under the Willis Group Holdings Public Limited Company 2012 Equity Incentive Plan, dated as of November 9, 2015, by and between Todd Jones / Nicolas Aubert / David Shalders and Willis Group Holdings Public Limited Company (incorporated by reference to Exhibit 10.75 to the Form 10-K filed by the Company on February 29, 2016)†</u>
10.57	<u>Form of Time-Based Share Option Agreement under the Willis Group Holdings Public Limited Company 2012 Equity Incentive Plan, dated as of November 9, 2015, by and between Todd Jones / Nicolas Aubert / David Shalders and Willis Group Holdings Public Limited Company (incorporated by reference to Exhibit 10.76 to the Form 10-K filed by the Company on February 29, 2016)†</u>
10.58	<u>Form of Performance-Based Restricted Share Unit Award Agreement for Operating Committee Members under the Willis Towers Watson Public Limited Company Amended and Restated 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 to the Form 10-Q filed by the Company on November 7, 2016)†</u>
10.59	<u>Form of Performance-Based Restricted Share Unit Agreement for Operating Committee Members under the Willis Towers Watson Public Limited Company Amended and Restated 2012 Equity Incentive Plan (incorporated by reference to Exhibit 10.6 to the Form 10-Q filed by the Company on August 6, 2018)†</u>
10.60	<u>Towers Watson Amended and Restated 2009 Long Term Incentive Plan (incorporated by reference to Exhibit 99.1 to the Registration Statement on Form S-8 filed by the Company on January 5, 2016)†</u>
10.61	<u>Trust Deed and Rules of the Towers Watson Limited Share Incentive Plan 2005 (U.K.) (incorporated by reference to Exhibit 10.21 to the Form 10-K filed by Watson Wyatt Worldwide Inc. on September 1, 2006)†</u>
10.62	<u>Towers Watson Limited Share Incentive Plan 2005 Deed of Amendment (U.K.) (incorporated by reference to Exhibit 10.22 to the Form 10-K filed by Watson Wyatt Worldwide Inc. on September 1, 2006)†</u>
10.63	<u>Towers Watson Limited Share Incentive Plan 2005 Deed to Change the Trust Deed and Rules (U.K.) (incorporated by reference to Exhibit 10.10 to the Form 10-K filed by Towers Watson on August 29, 2012)†</u>
10.64	<u>Share Purchase Plan 2005 (Spain) (incorporated by reference to Exhibit 10.24 to the Form 10-K filed by Watson Wyatt Worldwide Inc. on September 1, 2006)†</u>
10.65	<u>Trust Deed and Rules of the Watson Wyatt Ireland Share Participation Scheme (incorporated by reference to Exhibit 10.23 to the Form 10-K filed by Watson Wyatt Worldwide Inc. on September 1, 2006)†</u>
10.66	<u>Form of Non-Qualified Stock Option Award Agreement for use under the Towers Watson & Co. 2009 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to the Form 8-K filed by Towers Watson on March 8, 2010)†</u>
10.67	<u>Extend Health Amended and Restated 2007 Equity Incentive Plan (incorporated by reference to Exhibit 99.3 to the Registration Statement on Form S-8 filed by the Company on January 5, 2016)†</u>

10.68	Liazon Amended and Restated 2011 Equity Incentive Plan (incorporated by reference to Exhibit 99.4 to the Registration Statement on Form S-8 filed by the Company on January 5, 2016)†
10.69	Willis Towers Watson Non-Qualified Deferred Savings Plan for U.S. Employees (as amended and restated effective January 1, 2017) (incorporated by reference to Exhibit 10.1 to the Form 10-Q filed by the Company on November 7, 2016)†
10.70	Amendment 2018-1 to the Willis Towers Watson Non-Qualified Deferred Savings Plan for U.S. Employees (incorporated by reference to Exhibit 99.3 to the Form 8-K filed by the Company on July 18, 2018)†
10.71	Willis Towers Watson Non-Qualified Stable Value Excess Plan for U.S. Employees (incorporated by reference to Exhibit 10.3 to the Form 10-Q filed by the Company on August 7, 2017)†
10.72	Amendment 2017-1 to the Willis Towers Watson Non-Qualified Stable Value Excess Plan for U.S. Employees (incorporated by reference to Exhibit 10.2 to the Form 10-Q filed by the Company on August 6, 2018)†
10.73	Willis Towers Watson Public Limited Company Compensation Recoupment Policy (incorporated by reference to Exhibit 10.68 to the Form 10-K filed by the Company on February 28, 2018)†
21.1	List of subsidiaries*
23.1	Consent of Deloitte & Touche LLP*
23.2	Consent of Deloitte LLP*
31.1	Certification Pursuant to Rule 13a-14(a)*
31.2	Certification Pursuant to Rule 13a-14(a)*
32.1	Certification Pursuant to 18 USC. Section 1350*
32.2	Certification Pursuant to 18 USC. Section 1350*
101.INS	XBRL Instance Document*
101.SCH	XBRL Taxonomy Extension Schema Document*
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document*
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document*
101.LAB	XBRL Taxonomy Extension Label Linkbase Document*
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document*

* Filed herewith.

† Management contract or compensatory plan or arrangement.

All exhibits that are incorporated by reference herein to a filing with the SEC made more than five years ago are filed under: SEC File No. 001-16503, for any filings that were made by Willis Group Holdings or the Company; SEC File No. 001-34594, for any filings that were made by Towers Watson; and SEC File No. 001-16159, for any filings that were made by Watson Wyatt Worldwide.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

The following were the subsidiaries of the Company as of December 31, 2018:

Company Name	Country of Incorporation / Organization
Gras Savoye Algeria Services	Algeria
Asifina S.A.	Argentina
WFD Consultores S.A.	Argentina
Willis Towers Watson Argentina S.A.	Argentina
Willis Towers Watson Consultores S.A.	Argentina
Willis Towers Watson Corredores de Reaseguros S.A.	Argentina
CKA Risk Solutions Pty Limited	Australia
Richard Oliver Underwriting Managers Pty Limited	Australia
Towers Watson Australia Pty Ltd	Australia
Towers Watson Superannuation Pty Ltd	Australia
Trinity Processing Services (Australia) Pty Limited	Australia
Willis Australia Group Services Pty Ltd	Australia
Willis Australia Limited	Australia
Willis Employee Benefits Pty Ltd	Australia
Willis Reinsurance Australia Limited	Australia
Willis Towers Watson Australia Holdings Limited	Australia
Wycomp Pty Ltd	Australia
Willis Towers Watson Austria GmbH	Austria
Venture Reinsurance Company Limited	Barbados
Willis Towers Watson Management (Barbados) Limited	Barbados
Gras Savoye Consulting (Belgium)	Belgium
Gras Savoye Euro Finance	Belgium
Miller Europe SPRL	Belgium
Willis Towers Watson Consulting SPRL/BVBA	Belgium
Willis Towers Watson SA/NV	Belgium
Gras Savoye Benin SA	Benin
International Tankers Indemnity Association Limited	Bermuda
Meridian Insurance Company Limited	Bermuda
Miller Bermuda Limited	Bermuda
PPH Limited	Bermuda
RePlace Holding LLC	Bermuda
Resilliance Re Ltd.	Bermuda
Towers Watson (Bermuda) Ltd.	Bermuda
Willis (Bermuda) 2 Limited	Bermuda
Willis (Bermuda) Limited	Bermuda
Willis Investment Holding (Bermuda) Limited	Bermuda
Willis Investment Holdings (Bermuda) Ltd.	Bermuda
Willis Re Bermuda Limited	Bermuda
Willis Towers Watson Management (Bermuda) Limited	Bermuda
WTW Bermuda Holdings Ltd.	Bermuda
Sertec Servicos Tecnicos de Inspecao, Levantamentos e Avaliacoes Ltda	Brazil
Towers Watson Consultoria Ltda.	Brazil
Towers Watson Corretora e Consultoria de Seguros Ltda.	Brazil
WFB Corretora de Seguros Ltda.	Brazil
Willis Affinity Corretores de Seguros Limitada	Brazil
Willis Corretora de Resseguros Limitada	Brazil
Willis Corretores de Seguros Limitada	Brazil
York Vale Corretora e Administradora de Seguros Limitada	Brazil
Gras Savoye Burkina	Burkina Faso
Gras Savoye (Cambodia) Insurance Broker Plc	Cambodia
Willis Towers Watson Cameroun SA	Cameroon

RePlace Services ULC	Canada
Towers Watson Canada Inc.	Canada
Willis Canada Inc.	Canada
Willis Holding Company of Canada Inc.	Canada
Willis Re Canada Inc.	Canada
Willis Towers Watson Management (Cayman) Limited	Cayman Islands
Gras Savoye Centrafrique SA	Central African Republic
Gras Savoye Tchad SA	Chad
Willis Chile Limitada	Chile
Willis Towers Watson Corredores de Reaseguros Limitada	Chile
Willis Towers Watson Consultores S.A.	Chile
Willis Towers Watson S.A. Corredores de Seguros	Chile
Towers Watson Consulting (Shanghai) Limited	China
Towers Watson Management Consulting (Shenzhen) Co., Ltd.	China
Willis (Shanghai) Business Consulting Co., Ltd.	China
Willis Insurance Brokers Co. Ltd.	China
Towers Watson Colombia Agencia de Seguros Ltda.	Colombia
Towers Watson Consultores Colombia S.A.	Colombia
Willis Towers Watson Colombia Consulting S.A.S	Colombia
Willis Towers Watson Colombia Corredores de Reaseguros	Colombia
Willis Towers Watson Corredores de Seguros S.A.	Colombia
Willis Towers Watson Congo SA	Congo
Gras Savoye R.D.C SA	Congo, The Democratic Republic of the
Willis Towers Watson Cote d'Ivoire SA	Cote d'Ivoire
Willis Towers Watson d.d	Croatia
JRC Metropolitan Trust Holdings Limited	Cyprus
Willis s.r.o.	Czech Republic
Willis Towers Watson s.r.o.	Czech Republic
Willis Insurance Agency I/S	Denmark
Willis Re Nordic Reinsurance Broking (Denmark) A/S	Denmark
Willis Towers Watson A/S	Denmark
Willis Towers Watson Consultancy Services I/S	Denmark
Willis Towers Watson Forsikringservice I/S	Denmark
Willis Towers Watson I/S	Denmark
Willis Towers Watson Egypt SAE	Egypt
Willis Towers Watson Re Egypt SAE	Egypt
Willis Towers Watson Risk Solutions Egypt SAE	Egypt
Willis Føroyar I/S	Faroe Islands
Willis Tryggingartaenasta Foroyar I/S	Faroe Islands
Willis Towers Watson Oy Ab	Finland
Avenir 2	France
Courtage D'assurances Gestion Risque Maladie - C.G.R.M.	France
Dero Courtage	France
Gras Savoye NSA	France
Gras Savoye SAS	France
Gras Savoye Yachting	France
GS & Cie Groupe SAS	France
Informatique et Associes 3	France
Sageris	France
Temeris	France
Willis/GS France	France
Willis Re SA	France
Willis Towers Watson SARL	France
WTW Underwriting Solutions France	France
Gras Savoye Tahiti Nui Insurance	French Polynesia
Gras Savoye Gabon SA	Gabon

Willis Re GmbH	Germany
Willis Towers Watson (Dusseldorf) GmbH	Germany
Willis Towers Watson Assekuranzdienste GmbH	Germany
Willis Towers Watson GmbH	Germany
Willis Towers Watson Holding GmbH	Germany
Willis Towers Watson Investments GmbH	Germany
Willis Towers Watson Pensionsfonds AG	Germany
Willis Towers Watson Versicherungsmakler GmbH	Germany
Willis Towers Watson Versicherungsservice GmbH	Germany
Willis Towers Watson Vorsorge Trust GmbH	Germany
WV Versicherungsmakler GmbH	Germany
Zeitinvest-Service GmbH	Germany
Willis Towers Watson Ghana Limited	Ghana
Willis Towers Watson Management (Gibraltar) Limited	Gibraltar
Willis Towers Watson Greece Insurance Brokers S.A.	Greece
Willis Towers Watson Kendriki Greece Insurance Works S.A.	Greece
Willis Towers Watson Net Trust Greece Insurance Brokers S.A.	Greece
Friars Street Insurance Limited	Guernsey
MICAL Limited	Guernsey
Willis Towers Watson Guernsey ICC Limited	Guernsey
Willis Towers Watson Holdings (Guernsey) Limited	Guernsey
Willis Towers Watson Management (Guernsey) Limited	Guernsey
Gras Savoye Guinee SA	Guinea
Towers Watson Hong Kong Limited	Hong Kong
Towers Watson Investment Services Hong Kong Limited	Hong Kong
Willis Hong Kong Limited	Hong Kong
Willis Management (HK) Pty Limited	Hong Kong
Willis Towers Watson Securities (Hong Kong) Limited	Hong Kong
Willis Towers Watson Magyarorszag Biztositasi Alkusz es Tanacsado Kft	Hungary
Acclaris Business Solutions Private Limited	India
Ternary Risk Consultancy and Management Private Limited	India
Willis Consulting Services Private Limited	India
Willis Towers Watson India Private Limited	India
WTW Global Delivery and Solutions India Private Limited	India
PT Towers Watson Indonesia	Indonesia
PT Towers Watson Insurance Brokers Indonesia	Indonesia
PT Towers Watson Purbajaga	Indonesia
PT Willis Indonesia	Indonesia
PT Willis Reinsurance Brokers Indonesia	Indonesia
Al-Shorouq for Reinsurance Broker Co. Ltd	Iraq
Innovisk Capital Partners (Ireland) Limited	Ireland
Planlife Trustee Services Limited	Ireland
The Asset Management Exchange (Ireland) Limited	Ireland
The Asset Management Exchange Holdings Limited	Ireland
Towers Watson (Ireland) Limited	Ireland
Towers Watson Investment Management (Ireland) Limited	Ireland
Trustee Principles Limited	Ireland
Willis GS Ireland Limited	Ireland
Willis Human Capital & Benefits Ireland Limited	Ireland
Willis Private Clients Limited	Ireland
Willis Risk Services (Ireland) Limited	Ireland
Willis Risk Services Holdings (Ireland) Limited	Ireland
Willis Towers Watson Management (Dublin) Limited	Ireland
Willis Towers Watson Sub Holdings Unlimited Company	Ireland
Willis Towers Watson Trade Credit and Surety Limited	Ireland
Willis Towers Watson Administration (Isle of Man) Limited	Isle of Man

Willis Towers Watson Management (Isle of Man) Limited	Isle of Man
Towers Watson Italia Srl	Italy
Williconsulting Srl	Italy
Willis General Agency Srl	Italy
Willis Italia S.p.A	Italy
Willis Re Southern Europe S.p.A	Italy
Towers Watson Investment Services K.K.	Japan
Towers Watson KK	Japan
Willis Consulting K.K.	Japan
Willis Japan Holdings K.K.	Japan
Willis Japan Services K.K.	Japan
Willis Re Japan K.K.	Japan
Willis ESOP Management Limited	Jersey
Willis Towers Watson (Kazakhstan) Insurance Broker LLP	Kazakhstan
Gras Savoye East Africa Risk Solutions Limited	Kenya
Willis Towers Watson Consulting Korea Limited	Korea, Republic of
Willis Towers Watson Insurance Korea Limited	Korea, Republic of
Willis Towers Watson Investments Korea Limited	Korea, Republic of
Gras Savoye Liberia Ltd	Liberia
GS Re - Societe de reassurance du groupe Gras Savoye	Luxembourg
Towers Perrin Luxembourg Holdings S.a.r.l	Luxembourg
Watson Wyatt Luxembourg SARL	Luxembourg
Willis Corroon Management (Luxembourg) S.A.	Luxembourg
Willis Towers Watson Luxembourg S.A.	Luxembourg
Willis Towers Watson Management (Luxembourg)	Luxembourg
BSA Madagascar SA	Madagascar
Towers Watson (Malaysia) Sdn Bhd	Malaysia
Willis Re Labuan Limited	Malaysia
Willis Risk Management (Malaysia) Sdn. Bhd.	Malaysia
Willis Towers Watson Management (Labuan) Limited	Malaysia
Gras Savoye Mali	Mali
Willis Towers Watson Management (Malta) Limited	Malta
Willis Towers Watson Services (Malta) Limited	Malta
Willis Towers Watson (Mauritius) Ltd	Mauritius
Carsa Consultores, Agente de Seguros y de Fianzas, S.A. de C.V.	Mexico
Towers Watson Consultores Mexico S.A. de C.V.	Mexico
Towers Watson Mexico, Agente de Seguros, S.A. de C.V.	Mexico
Willis Agente de Seguros y de Fianzas, S.A. de C.V.	Mexico
Willis Mexico, Intermediario de Reaseguro, S.A. de C.V.	Mexico
Willis Europe B.V.	Netherlands
Scheuer Verzekeringen B.V.	Netherlands
Towers Watson Netherlands BV	Netherlands
Towers Watson Pension Services B.V.	Netherlands
Watson Wyatt European Region BV	Netherlands
Willis B.V.	Netherlands
Willis Global Markets B.V.	Netherlands
Willis Nederland B.V.	Netherlands
Willis Netherlands Holdings B.V.	Netherlands
WTW Global Treasury Company B.V.	Netherlands
Gras Savoye Nouvelle Caldonie	New Caledonia
Willis New Zealand Limited	New Zealand
Gras Savoye Niger SA	Niger
Willis Towers Watson Nigeria Limited	Nigeria
Willis Forsikringspartner AS	Norway
Willis Re Nordic Reinsurance Broking (Norway) AS	Norway
Willis Towers Watson AS	Norway

Willis Corredores de Reaseguros S.A.	Peru
Willis Corredores de Seguros SA	Peru
Willis Towers Watson Consulting Peru S.A.C.	Peru
Willis Towers Watson Global Business Services, Inc.	Philippines
Willis Towers Watson Insurance Brokers Philippines, Inc.	Philippines
Willis Towers Watson Philippines, Inc.	Philippines
Biuro Doradztwa I Posrednictwa Ubezpieczeniowego E.C.A. Sp. z.o.o	Poland
Brokerskie Centrum Ubezpieczeniowe AMA SP. Z O.O.	Poland
Willis Services sp. z o.o.	Poland
WTW Services Spolka Z Ograniczona Odpowiedzialnoscia	Poland
Willis Towers Watson Polska Spolka Z Ograniczona Odpowiedzialnoscia	Poland
Gras Savoye NSA - Garantia E Assistencia Automovel, S.A.	Portugal
Towers Watson (Portugal) Unipessoal Limitada	Portugal
Willis Corretores de Seguros SA	Portugal
Towers Watson Puerto Rico Insurance Brokerage Inc.	Puerto Rico
Willis Towers Watson Romania-Broker De Asigurare Reasigurare Srl	Romania
Towers Watson, Limited Liability Company	Russian Federation
Willis CIS Insurance Broker LLC	Russian Federation
Towers Watson Saudi Arabia LLC	Saudi Arabia
Willis Towers Watson Consulting Senegal SA	Senegal
Willis Towers Watson Senegal SA	Senegal
Drustvo za posredovanje u osiguranju WILLIS TOWERS WATSON DOO BEOGRAD	Serbia
Willis Towers Watson (SL) Limited	Sierra Leone
Miller Insurance Services (Singapore) Pte. Ltd.	Singapore
Towers Watson Singapore Holdings Pte. Ltd.	Singapore
Willis Towers Watson Brokers (Singapore) Pte. Ltd.	Singapore
Willis Towers Watson Consulting (Singapore) Pte. Ltd.	Singapore
Willis Towers Watson Health & Benefits (SG) Pte. Ltd.	Singapore
Willis Towers Watson Management (Singapore) Pte. Limited	Singapore
Actuary Online (Pty) Ltd	South Africa
Group Risk Management Services Proprietary Limited	South Africa
Motheo Reinsurance Consultants (Pty) Limited	South Africa
Retirement Online (Pty) Limited	South Africa
Towers Watson (Pty) Ltd	South Africa
Towers Watson SA (Proprietary) Limited	South Africa
Towers Watson South Africa Holdings (Pty) Limited	South Africa
Willis Re (Pty) Limited	South Africa
Willis South Africa (Pty) Limited	South Africa
Bolgey Holding S.A.	Spain
Towers Watson de Espana SA	Spain
Willis Affinity S.L.	Spain
Willis Consulting S.L.	Spain
Willis Iberia Correduria de Seguros y Reaseguros SAU	Spain
Willis Towers Watson Agencia de Suscripcion, S.L.U.	Spain
Willis Towers Watson Services, S.L.	Spain
Be My Compensation Management AB	Sweden
InsClear AB	Sweden
Insclear PC AB	Sweden
Max Matthiessen AB	Sweden
Max Matthiessen Vardepapper AB	Sweden
MM Holding AB	Sweden
Navigera AB	Sweden
Willis AB	Sweden
Willis Holding AB	Sweden
Willis Towers Watson Consulting AB	Sweden

Willis Towers Watson Management (Stockholm) AB	Sweden
Asmarin Verwaltungs AG	Switzerland
Towers Watson AG	Switzerland
Willis AG	Switzerland
Willis Faber AG	Switzerland
Willis (Taiwan) Limited	Taiwan
Towers Watson (Thailand) Limited	Thailand
Gras Savoye Togo SA	Togo
Willis Towers Watson Danismanlik Limited Sirketi	Turkey
Willis Towers Watson Sigorta Ve Reasurans Brokerlik Anonim Sirketi	Turkey
Willis Towers Watson Uganda Insurance Brokers Limited	Uganda
Gras Savoye Ukraine, Limited Liability Company	Ukraine
Willis Insurance Brokers LLC	Ukraine
Towers Watson Middle East FZ-LLC	United Arab Emirates
Acappella Capital Limited	United Kingdom
Acappella Delegated Authority North America Limited	United Kingdom
Acappella Syndicate Management Limited	United Kingdom
Acappella Transactional Real Estate Limited	United Kingdom
AG Broking Limited	United Kingdom
AG Broking Services Limited	United Kingdom
ALBUS MANAGEMENT LLP	United Kingdom
Alston Gayler & Co Limited	United Kingdom
Aqueous Management Limited	United Kingdom
ATRE Limited	United Kingdom
Corporate Medical Management Limited	United Kingdom
Dawson Investments (UK) Limited	United Kingdom
EMB Management Holdings Limited	United Kingdom
EXAA LIMITED	United Kingdom
Faber Global Limited	United Kingdom
Friars Street Trustees Limited	United Kingdom
G360 UND LIMITED	United Kingdom
Innovisk (UK) Limited	United Kingdom
INNOVISK CAPITAL PARTNERS LLP	United Kingdom
INNOVISK SERVICES LIMITED	United Kingdom
Miller 2015 Limited	United Kingdom
Miller Insurance Holdings Limited	United Kingdom
Miller Insurance Services LLP	United Kingdom
Miller Marine Limited	United Kingdom
Nelson Holdings Limited	United Kingdom
PFLA LIMITED	United Kingdom
PMI HEALTH GROUP LIMITED	United Kingdom
PMIHG HOLDINGS LIMITED	United Kingdom
Private Medicine Intermediaries Limited	United Kingdom
Saville Assessment Limited	United Kingdom
Saville Consulting Limited	United Kingdom
Six Clerks Insurance Services Limited	United Kingdom
Special Contingency Risks Limited	United Kingdom
TA I Limited	United Kingdom
THE ASSET MANAGEMENT EXCHANGE (IP CO.) LIMITED	United Kingdom
THE ASSET MANAGEMENT EXCHANGE (UK) LIMITED	United Kingdom
The Wyatt Company (UK) Limited	United Kingdom
The Wyatt Company Holdings Limited	United Kingdom
Themis Capital LLP	United Kingdom
Towers Perrin (UK) Trustee Company Limited	United Kingdom
Towers Perrin Europe Limited	United Kingdom
Towers Perrin UK Holdings Limited	United Kingdom

Towers Watson Global 2 Limited	United Kingdom
Towers Watson Global 3 Limited	United Kingdom
Towers Watson Global Holdings Limited	United Kingdom
Towers Watson Global Limited	United Kingdom
Towers Watson Investment Management Limited	United Kingdom
Towers Watson Limited	United Kingdom
Towers Watson Pension Scheme Trustees Limited	United Kingdom
Towers Watson Software Limited	United Kingdom
Towers Watson UK Limited	United Kingdom
Trinity Acquisition Plc	United Kingdom
Trinity Processing Services Limited	United Kingdom
TXW Limited	United Kingdom
Watson Wyatt (UK) Acquisitions 1 Limited	United Kingdom
Watson Wyatt (UK) Acquisitions 2 Limited	United Kingdom
Watson Wyatt European Investment Holdings Limited	United Kingdom
Watson Wyatt European Region Ltd	United Kingdom
Watson Wyatt Holdings (Europe) Limited	United Kingdom
Willis Corporate Director Services Limited	United Kingdom
Willis Corroon (FR) Limited	United Kingdom
Willis Corroon Financial Planning Limited	United Kingdom
Willis Corroon Licensing Limited	United Kingdom
Willis Corroon Nominees Limited	United Kingdom
Willis Employee Benefits Limited	United Kingdom
Willis Faber Limited	United Kingdom
Willis Faber Underwriting Agencies Limited	United Kingdom
Willis Faber Underwriting Services Limited	United Kingdom
Willis Group Limited	United Kingdom
Willis Group Medical Trust Limited	United Kingdom
Willis Group Services Limited	United Kingdom
Willis GS UK Holdings Limited	United Kingdom
Willis GS UK LIMITED	United Kingdom
Willis International Limited	United Kingdom
Willis Investment UK Holdings Limited	United Kingdom
Willis Japan Limited	United Kingdom
Willis Limited	United Kingdom
Willis Overseas Investments Limited	United Kingdom
Willis Pension Trustees Limited	United Kingdom
Willis PMI Group Limited	United Kingdom
Willis Structured Financial Solutions Limited	United Kingdom
WILLIS TOWERS WATSON FRANCE HOLDINGS LIMITED	United Kingdom
WILLIS TOWERS WATSON SECURITIES EUROPE LIMITED	United Kingdom
WILLIS TOWERS WATSON UK HOLDINGS LIMITED	United Kingdom
WILLIS TOWERS WATSON UK HOLOCENE LIMITED	United Kingdom
Acclaris Holdings, Inc.	United States - Delaware
Acclaris, Inc.	United States - Delaware
Carroll Technical Risks Agency LLC	United States - Delaware
Celerity Professional Liability Insurance Services LLC	United States - Delaware
Encore 1551 IC, Inc.	United States - Vermont
Encore Insurance PCC, Limited	United States - Vermont
Encore One IC, Inc.	United States - Vermont
Extend Health, Inc.	United States - Delaware
Extend Insurance Services LLC	United States - Utah
Freberg Environmental, Inc.	United States - Colorado
Innovisk Capital Partners, Inc.	United States - Delaware
Innovisk Services, Inc.	United States - Delaware
Liazon Benefits, Inc.	United States - Delaware

Liazon Corporation	United States - Delaware
Premium Funding Associates, Inc.	United States - Connecticut
Professional Consultants Insurance Company, Inc.	United States - Vermont
RSDIG Risk Purchasing Group, LLC	United States - Tennessee
Special Contingency Risks Inc.	United States - Delaware
Stone Mountain Insurance Company	United States - Vermont
The Willis Towers Watson Foundation	United States - Tennessee
Towers Perrin Capital Corp.	United States - Delaware
Towers Watson Delaware Holdings LLC	United States - Delaware
Towers Watson Investment Services, Inc.	United States - Delaware
Towers Watson Latin America Holdings LLC	United States - Delaware
Towers Watson Middle East Holdings LLC	United States - Delaware
Towers Watson Retiree Insurance Services, Inc.	United States - Delaware
TPF&C International, Inc.	United States - Pennsylvania
Vertus Insurance Agency, LLC	United States - Florida
Vertus Insurance Partners, LLC	United States - Florida
Vindati LLC	United States - Delaware
Watson Wyatt European Investment Holdings 1, LLC	United States - Delaware
Watson Wyatt European Investment Holdings, Inc.	United States - Delaware
Watson Wyatt International, Inc.	United States - Nevada
Westport Financial Services, LLC	United States - Delaware
Westport HRH, LLC	United States - Delaware
Willis Administrative Services Corporation	United States - Tennessee
Willis Americas Administration, Inc.	United States - Tennessee
Willis HRH, Inc.	United States - Virginia
Willis Insurance Services of California, Inc.	United States - California
Willis Insurance Services of Georgia, Inc.	United States - Georgia
Willis NA Inc.	United States - Delaware
Willis North America Inc.	United States - Delaware
Willis North American Holding Company	United States - Delaware
Willis of Alabama, Inc.	United States - Alabama
Willis of Arizona, Inc.	United States - Arizona
Willis of Colorado, Inc.	United States - Colorado
Willis of Connecticut, LLC	United States - Connecticut
Willis of Florida, Inc.	United States - Florida
Willis of Greater Kansas, Inc.	United States - Kansas
Willis of Illinois, Inc.	United States - Illinois
Willis of Louisiana, Inc.	United States - Louisiana
Willis of Maryland, Inc.	United States - Maryland
Willis of Massachusetts, Inc.	United States - Massachusetts
Willis of Michigan, Inc.	United States - Michigan
Willis of Minnesota, Inc.	United States - Minnesota
Willis of Mississippi, Inc.	United States - Mississippi
Willis of New Hampshire, Inc.	United States - New Hampshire
Willis of New Jersey, Inc.	United States - New Jersey
Willis of New York, Inc.	United States - New York
Willis of North Carolina, Inc.	United States - North Carolina
Willis of Ohio	United States - Ohio
Willis of Oklahoma, Inc.	United States - Oklahoma
Willis of Oregon, Inc.	United States - Oregon
Willis of Pennsylvania, Inc.	United States - Pennsylvania
Willis of Seattle, Inc.	United States - Washington
Willis of Tennessee, Inc.	United States - Tennessee
Willis of Texas, Inc.	United States - Texas
Willis of Vermont, Inc.	United States - Vermont
Willis of Virginia, Inc.	United States - Virginia

Willis of Wisconsin, Inc.	United States - Delaware
Willis of Wyoming, Inc.	United States - Wyoming
Willis Personal Lines, LLC	United States - Delaware
Willis Processing Services, Inc.	United States - New York
Willis Programs of Connecticut, Inc.	United States - Connecticut
Willis Re Inc.	United States - New York
Willis Securities, Inc.	United States - Delaware
Willis Services LLC	United States - Delaware
Willis Towers Watson Analytical Insurance Services Inc.	United States - Delaware
Willis Towers Watson CAC, Inc.	United States - Florida
Willis Towers Watson Management (Vermont), Ltd.	United States - Vermont
Willis Towers Watson Risk Purchasing Group, Inc.	United States - Delaware
Willis Towers Watson US LLC	United States - Delaware
Willis US Holding Company, LLC	United States - Delaware
WTW Delaware Holdings LLC	United States - Delaware
Willis Towers Watson Uruguay S.A.	Uruguay
C.A. Prima Asesoría Técnica	Venezuela, Bolivarian Republic of
Rontarca Willis, C.A. Sociedad de corretaje de seguros	Venezuela, Bolivarian Republic of
Plan Administrado Rontarca Salud, C.A.	Venezuela, Bolivarian Republic of
Willis Corretaje de Reaseguros S.A.	Venezuela, Bolivarian Republic of
Willis Towers Watson Consultores C.A.	Venezuela, Bolivarian Republic of
Gras Savoye Willis Vietnam Insurance Broking Company Limited	Vietnam
South Asia Services Limited Liability Company	Vietnam
Towers Watson Vietnam Company Limited	Vietnam

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-210094 on Form S-3 and in Registration Statement Nos. 333-211967, 333-208876, 333-197706, 333-62780, 333-63186, 333-130605, 333-153202, 333-153770, 333-169961 and 333-181150 on Forms S-8 of our reports dated February 27, 2019, relating to (1) the 2018 and 2017 consolidated financial statements and the retrospective adjustments to the 2016 consolidated financial statements of Willis Towers Watson Public Limited Company and subsidiaries (which report expresses an unqualified opinion and includes an explanatory paragraph relating to a change in accounting principle), and (2) the effectiveness of Willis Towers Watson Public Limited Company's internal control over financial reporting as of December 31, 2018, appearing in this Annual Report on Form 10-K of Willis Towers Watson Public Limited Company for the year ended December 31, 2018.

/s/ Deloitte & Touche LLP
Philadelphia, PA
February 27, 2019

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-210094 on Form S-3 and in Registration Statements Nos. 333-211967, 333-208876, 333-197706, 333-62780, 333-63186, 333-130605, 333-153202, 333-153770, 333-169961 and 333-181150 on Form S-8 of our report dated March 1 2017, relating to the 2016 consolidated financial statements (before retrospective adjustments to the consolidated financial statements and financial statement disclosures) of Willis Towers Watson Public Limited Company and subsidiaries (not presented herein) (which report expresses an unqualified opinion and includes an explanatory paragraph outlining that Deloitte LLP were not engaged to audit, review, or apply any procedures to the adjustments to retrospectively apply the changes in accounting discussed in Note 2, the adjustment to the disclosures for changes in the composition of reportable segments discussed in Note 5 and the change in presentation of the financial information for issuers and other guarantor subsidiaries discussed in Note 22 to the consolidated financial statements and, accordingly, did not express an opinion or any other form of assurance about whether such retrospective adjustments are appropriate and have been properly applied), appearing in this Annual Report on Form 10-K of Willis Towers Watson Public Limited Company for the year ended December 31, 2018.

/s/ Deloitte LLP
London, United Kingdom
February 27, 2019

CERTIFICATION PURSUANT TO RULE 13a-14(a)

I, John J. Haley, certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2018 of Willis Towers Watson plc;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2019

By: _____
/s/ John J. Haley
John J. Haley
Chief Executive Officer

CERTIFICATION PURSUANT TO RULE 13a-14(a)

I, Michael J. Burwell, certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2018 of Willis Towers Watson plc;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2019

By: _____
/s/ Michael J. Burwell
Michael J. Burwell
Chief Financial Officer

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350

In connection with the annual report on Form 10-K for the year ended December 31, 2018, of Willis Towers Watson plc (the "Company"), as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John J. Haley, Chief Executive Officer of the Company, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, certify 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 27, 2019

By: _____ /s/ John J. Haley
John J. Haley
Chief Executive Officer

A signed original of this written statement required by Section 906 has been provided to Willis Towers Watson plc and will be retained by Willis Towers Watson plc and furnished to the Securities and Exchange Commission or its staff upon request.

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350

In connection with the annual report on Form 10-K for the year ended December 31, 2018, of Willis Towers Watson plc (the "Company"), as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael J. Burwell, Chief Financial Officer of the Company, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, certify 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 27, 2019

By: _____ /s/ Michael J. Burwell
Michael J. Burwell
Chief Financial Officer

A signed original of this written statement required by Section 906 has been provided to Willis Towers Watson plc and will be retained by Willis Towers Watson plc and furnished to the Securities and Exchange Commission or its staff upon request.