Irish Statutory Accounts

WILLIS TOWERS WATSON PLC

(Registered Number 475616)

DIRECTORS' REPORT AND CONSOLIDATED FINANCIAL STATEMENTS

FINANCIAL YEAR ENDED DECEMBER 31, 2018

IMPORTANT NOTICE TO SHAREHOLDERS

Following our redomicile to Ireland in 2009, we are required to produce Irish statutory accounts prepared under applicable Irish company law, to be filed with the Irish Companies Registration Office. We are also required to send this document to the shareholders in advance of the Annual General Meeting.

These are in addition to our financial statements prepared under applicable US securities laws, filed with the Securities and Exchange Commission on our Annual Form 10-K and sent to shareholders.

FIVE FINANCIAL YEARS ENDED DECEMBER 31
(IN MILLIONS, EXCEPT PER SHARE DATA AND PERCENTAGES)

	2018	2017	2016	2015	2014
Revenue	$ 8,513	$ 8,202	$ 7,887	$ 3,829	$ 3,802
Total operating expenses (2) (3)	$ 7,704	$ 7,686	$ 7,489	$ 3,566	$ 3,216
Operating income	$ 809	$ 516	$ 398	$ 263	$ 586
Operating margin	9.5%	6.3%	5.0%	6.9%	15.4%
Net income attributable to Willis Towers Watson (2)	$ 695	$ 568	$ 450	$ 343	$ 362
Net income per diluted share (1) (2)	$ 5.27	$ 4.18	$ 3.26	$ 4.97	$ 5.32
Total debt	$ 4,575	$ 4,535	$ 3,865	$ 3,266	$ 2,297
Total Willis Towers Watson shareholders' equity (2)	$ 9,852	$ 10,126	$ 10,065	$ 2,199	$ 1,985
Capitalization ratio (2)	32%	31%	28%	60%	54%

(1) As set out in Note 3 to the Consolidated Financial Statements, on January 4, 2016, pursuant to the Agreement and Plan of Merger, dated June 29, 2015, as amended on November 19, 2015, between Willis Group Holdings Public Limited Company, Towers Watson & Co., 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 a wholly-owned subsidiary of Willis. As a result, net income (loss) per diluted shares has been retroactively adjusted to reflect the 1 to 2.6490 reverse stock split effected by the Company as of January 4, 2016 upon completion of the Merger.

(2) Total operating expenses for 2015 were increased by $50 million to reflect a settlement in principle the Company entered into on March 31, 2016 amounting to $120 million relating to Stanford Financial Group litigation. As a consequence, net income attributable to Willis Towers Watson for 2015 was decreased by the post-tax effect of $30 million, net income per diluted share and stockholders' equity for 2015 was decreased and the capitalization ratio for 2015 was increased. This increase in the litigation provision was recognized in Annual Form 10-K for the following year, 2016. Further details on this settlement in principle are given in Note 15 to the Consolidated Financial Statements.

(3) 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 net periodic pension and postretirement benefit credits from Salaries and benefits to Other income, net within its consolidated profit and loss account. This reclassification resulted in a change to the Company's Income from operations for 2017 and prior. See Note 2 to the Consolidated Financial Statements for further details.

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
'Parent Company'	Willis Towers Watson Public Limited Company (only)
'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

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Officers and corporate information

DIRECTORS

Executive Director

John J. Haley

Non-Executive Directors

Anna C. Catalano
Victor F. Ganzi (Non-Executive Chairman, effective January 1, 2019)
Wendy E. Lane
James F. McCann (Non-Executive Chairman through December 31, 2018)
Brendan R. O'Neill
Jaymin B. Patel
Linda D. Rabbitt
Paul D. Thomas
Wilhelm Zeller

SECRETARY

Nicole Napolitano

REGISTERED OFFICE

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Dublin 4, Ireland

AUDITOR

Deloitte LLP
Hill House
1 Little New Street
London, EC4A 3TR
United Kingdom

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 'Principal Risks and Uncertainties' in the Directors' Report. 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 report, 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.

DIRECTORS' REPORT FOR THE FINANCIAL YEAR ENDED DECEMBER 31, 2018

Summary and Basis of Presentation

The Directors present their report, together with the audited consolidated financial statements of Willis Towers Watson plc, a company incorporated in Ireland, and its subsidiaries, for the year ended December 31, 2018.

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.

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.

The Directors have elected to prepare the consolidated financial statements of Willis Towers Watson plc in accordance with Section 279 of the Companies Act 2014 which provides that a true and fair view of the assets and liabilities, financial position and profit or loss may be given by preparing the financial statements in accordance with accounting principles generally accepted in the United States of America ('US GAAP'), as defined in Section 279 of the Companies Act 2014, to the extent that the use of those principles in the preparation of the financial statements does not contravene any provision of Part 6 of the Companies Act 2014.

The Parent Company financial statements have been prepared in accordance with International Financial Reporting Standards ('IFRSs') as adopted by the European Union.

Principal Activities

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.

Management Structure

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 to the Consolidated Financial Statements for a further discussion of these changes.

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 financial 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), Connextions (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 'Principal Risks and Uncertainties' below in this Directors' Report 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 'Principal Risks and Uncertainties' below in this Directors' Report 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.

Corporate Governance

Willis Towers Watson is subject to SEC reporting requirements, the mandates of the Sarbanes-Oxley Act and applicable corporate governance rules of the Nasdaq Global Select Market. Willis Towers Watson continues to report its consolidated financial results in US dollars and in accordance with US GAAP, complying also with any additional reporting requirements of Irish Law.

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.

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.

Review of Developments and Business Performance

General

This discussion includes forward-looking statements. See 'Disclaimer Regarding Forward-looking Statements' for certain cautionary information regarding forward-looking statements and 'Principal Risks and Uncertainties' below 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 ‘Principal Risks and Uncertainties’ below.

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 'Principal Risks and Uncertainties' below for discussions of risks that may affect our ability to compete.

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.

Financial Statement Overview

The tables below set forth our summarized consolidated profit and loss account 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 to the Consolidated Financial Statements), 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 Profit and Loss Account
($ in millions, except per share data)

	Years ended December 31,							
	2018				2017		2016	
	As reported		Without adoption of ASC 606		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%	1,501	19%
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		7,489	
Income from operations	809	10%	907	11%	516	6%	398	5%
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%	76	1%
Income attributable to non-controlling interests	(20)	—%	(20)	—%	(24)	—%	(18)	—%
NET INCOME ATTRIBUTABLE TO WILLIS TOWERS WATSON	$ 695	8%	$ 775	9%	$ 568	7%	$ 450	6%
Diluted earnings per share	$ 5.27		$ 5.87		$ 4.18		$ 3.26	

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 financial 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,			Components of Revenue Change [(i)]				
	2018	2017	As Reported Change	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,			Components of Change [(i)]			
	2017	2016	As Reported Change	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' below.

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 to the Consolidated Financial Statements 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,			Components of Revenue Change [i]				
	2018	2017	As Reported Change	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,			Components of Revenue Change [i]			
	2017	2016	As Reported Change	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 $197 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 $1.5 billion for the year ended December 31, 2016, an increase of $33 million. The increase was due primarily to 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 to the Consolidated Financial Statements 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 Note 14 to the Consolidated Financial Statements for the prior year, 2017, 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 $398 million for the year ended December 31, 2016, an increase of $118 million, or 30%. 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 $76 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 (19.4)%, respectively. These effective tax rates are calculated using extended values from our consolidated profit and loss account, 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 $450 million for the year ended December 31, 2016. The increase was primarily driven by an improvement of $118 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 to the Consolidated Financial Statements, 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 report 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 (in millions)	Effect of Change
HCB			
Revenue	$ 3,233	$ 3,292	$ (59) *a*
Operating income	789	849	(60) *a, e*
CRB			
Revenue	2,852	2,855	(3) *b*
Operating income	528	529	(1) *b, f*
IRR			
Revenue	1,556	1,552	4 *c*
Operating income	384	377	7 *c, f*
BDA			
Revenue	758	799	(41) *d*
Operating income	144	190	(46) *d, e*

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 financial 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 considers it an effective mechanism for the return of excess cash to shareholders. The Company will consider whether to do so from time to time based on market conditions and other desired uses of cash.

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

An analysis of movements on shares held by the Company is as follows:

	Year Ended December 31, 2018					
	Ordinary shares, $0.000304635 nominal value			Ordinary shares, €1 nominal value		
	Number of shares	Percentage of the called-up share capital	Nominal value (thousands)	Number of shares	Percentage of the share class	Nominal value (thousands)
Balance at January 1, 2018	17,519	Under 0.01%	$—	40,000	100%	$—
Shares repurchased	3,918,689		1	—		—
Shares canceled	(3,918,689)		(1)	—		—
Balance at December 31, 2018	17,519	Under 0.01%	$—	40,000	100%	$—

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 interim cash dividends of $306 million were paid during the year ended December 31, 2018. In February 2019, the board of directors approved an interim 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.

Consolidated Balance Sheet

Total assets of $32.4 billion as of December 31, 2018 reduced by $0.1 billion in the year ended December 31 2018, with a $0.6 billion combined decrease in goodwill and other intangible assets, net, largely due to amortization and movements in foreign exchange, partly offset by a $0.4bn increase in fiduciary assets and a $0.1 billion increase in accounts receivable, net.

Total liabilities of $22.4 billion as of December 31, 2018 increased by $0.2 billion in the year ended December 31, 2018, with a $0.4 billion increase in fiduciary liabilities, partly offset by a $0.1 billion decrease in deferred revenue and a $0.1 billion decrease in retirement benefit obligations.

Total equity decreased by $278 million in the year ended December 31, 2018, as the impact of share repurchases, dividends paid and other comprehensive losses were only partly offset by net income of $713 million.

Off-Balance Sheet Arrangements and Contractual Obligations

Off-Balance Sheet Transactions

Apart from commitments, guarantees and contingencies, as disclosed herein and Note 15 to the Consolidated Financial Statements 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 financial 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 Note 15 to the Consolidated Financial Statements.

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 Note 15 to the Consolidated Financial Statements.

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 Note 15 to the Consolidated Financial Statements.

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 report 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 above. These measures are also reported by segment in the 'Segment Revenue' section above.

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,			Components of Revenue Change (i)				
	2018	2017	As Reported Change	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,			Components of Change [i]			
	2017	2016	As Reported Change	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	$ 398
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	—
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 $118 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	$ 468
Provision for/(benefit from) income taxes	136	154	(100)	(76)
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	—
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	$ 2,036	$ 2,161	$ 1,901	$ 1,771

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	$ 695	$ 775	$ 568	$ 450
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	—
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)	(300)
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	$ 3.26
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	—
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)	(2.17)
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
	($ in millions)			
INCOME FROM OPERATIONS BEFORE INCOME TAXES	$ 851	$ 949	$ 492	$ 392
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	—
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 income before taxes	$ 1,620	$ 1,718	$ 1,510	$ 1,409
Provision for/(benefit from) income taxes	$ 136	$ 154	$ (100)	$ (76)
Tax effect on certain items listed above [(i)]	184	184	275	300
Tax effects of internal reorganizations	(4)	(4)	(48)	—
Tax effect of U.S. Tax Reform	—	—	204	—
Deferred tax valuation allowance	—	—	—	69
Adjusted income taxes	$ 316	$ 334	$ 331	$ 293
U.S. GAAP tax rate	16.0%	16.2%	(20.5)%	(19.4)%
Adjusted income tax rate	19.5%	19.4%	21.9%	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 (19.4)% 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.

Principal Risks and Uncertainties

In addition to the factors discussed elsewhere in this report, 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 above under 'Review of Development and Business Performance - 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 15 to the Consolidated Financial Statements 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 15 to the Consolidated Financial Statements. 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. exists 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 financial 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 2014, 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.

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 Notes 2 and 10 to the Consolidated Financial Statements.

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 though 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.

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, 2019	2020	2021	2022	2023	Thereafter	Total	Fair Value (i)
	($ 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.

Subsidiary Companies

Information regarding principal subsidiary undertakings and undertakings of substantial interest is provided in Note 25 to the Consolidated Financial Statements.

Branches

As of December 31, 2018, Willis Towers Watson had the following branches of European Economic Area ('E.E.A.') entities in other E.E.A. member states: Willis s.r.o. branch in Slovakia; Willis Limited branches in Belgium, France, the Netherlands and Spain; Willis Risk Services (Ireland) Limited branch in the U.K.; Miller Insurance Services LLP branches in Belgium and France; Willis Towers Watson Trade Credit and Surety Limited (formerly Trade Credit Brokers Limited) branch in the U.K.; Towers Watson Limited branch in Germany; and Willis Europe B.V. branch in the U.K. The Gras Savoye NSA S.A.S. branch in Portugal was deregistered in March 2018. In February 2019, a branch of Willis Towers Watson S.A./N.V. was registered in the U.K.

Political Donations

Neither the Parent Company nor its subsidiaries made any political donations which are required to be disclosed under Irish law for the year ended December 31, 2018 (2017: none).

Non-Financial Report

Environmental Matters

Our clients, colleagues and other stakeholders expect us to conduct our business with integrity and in an environmentally and socially responsible manner. We take these expectations seriously and have embraced principles that are aligned with our business priorities, are consistent with our commitment to ethical and sustainable practices and demonstrate our respect for those communities in which we operate across the globe. Our Code of Conduct requires us to conduct our business with integrity and in accordance with the applicable laws and regulations of the countries where we do business, including compliance with local environmental-related legislation.

We recognize the importance of our environmental responsibilities and our impact on the environment on a location-by-location basis, and are in the process of designing and implementing processes to reduce damage that might be caused by Willis Towers Watson's activities. This includes baselining our environmental data and developing a new carbon reduction reporting system. This will allow us to track our emissions and carbon footprint across our global operations.

In addition to the development work happening at the global level, the below illustrates some notable activities that are further helping reduce our environmental impact:

- Reduced paper use and increased recycling have been a focus for several years throughout the Company. This has included a focus on reducing print volumes, and therefore paper and equipment usage, by implementing print on-demand technology and scanning capabilities and by offering fewer printers in office space. We have also increased the availability (and use) of online meeting and records management tools that reduce their overall reliance on paper-

based materials. This has resulted in our ability to reduce paper consumption while also recycling several million pounds of paper each year.

- We encourage our colleagues to participate in office-based recycling programs and paperless recordkeeping, our offices to replace personal printers with networked multi-function devices and procure recycled supplies, and our IT programs to ensure proper disposal and recycling of obsolete computer equipment.

- We raise awareness for and provide information about environmental sustainability and corporate social responsibility to our colleagues through internal news stories, communications and a forum.

We support our suppliers', subcontractors' and service providers' commitment to environmental sustainability. We encourage this commitment through increasing our demand for and use of goods that are developed in a sustainable way and contribute to a reduced carbon footprint. Since our direct impact on the environment largely comes from office-based operations, our priority is procuring sustainable choices by negotiating a wide variety of office product options that focus on reducing our carbon footprint. Recycled office supplies, paper, toner, kitchen and pantry products, and cleaning products can be found in the product listings of our main corporate agreements with suppliers who provide such commodities.

Social and Employee Matters and Respect for Human Rights

We are committed to demonstrating to our shareholders and communities that we are a responsible and ethical business partner and good corporate citizen by conducting our business based on our global Code of Conduct, Respect at Work and Anti-Harassment Policy, and our Company values, which emphasize managing our relationships, inside the Company and out, with fairness, decency and good citizenship. Our policy is that adherence is compulsory and enforced, with reported violations investigated promptly, and demonstration of values formally assessed during annual performance reviews and incorporated into a colleague's overall performance rating. Colleagues may raise concerns anonymously or confidentially through our Code of Conduct Hotline, online or by phone. As discussed further below, mandatory training on our Code of Conduct is delivered to all colleagues annually and completion rates are monitored.

We partner with our clients and communities to help address their social and economic challenges. For example, we participate in the Insurance Development Forum, a public/private partnership led by the insurance industry and international organizations (such as the United Nations and the World Bank) that aims to optimize and extend the use of insurance and its related risk management capabilities to build greater resilience and protection for people, communities, business and public institutions that are vulnerable to disasters and their associated economic shocks.

Additionally, we endeavor to enable our colleagues to reach their full potential by fostering a culture of mutual respect, an inclusive and diverse work environment, professional development opportunities, safe working conditions and fair hiring and labor standards. Each year, our leaders cascade diversity and inclusion-focused objectives throughout the organization, and we continue to look for ways to provide for an objective and fair process that mitigates human biases in our talent programs and processes. Highlights of our inclusion and diversity activities include the following:

- *Globally*: Our business-led Inclusion and Diversity Council, Multicultural Inclusion Network and Talent Acquisition teams partner with the International Association of Black Actuaries and other organizations to source diverse talent. We have also implemented Unconscious Bias and Inclusive Leadership workshops in the U.S., the U.K. and across the globe to leadership teams and colleagues. For the fourth year running, Willis Towers Watson was a gold sponsor of the Dive In festival for inclusion and diversity in insurance, holding events across the company globally.

- *In North America and the U.K.*: We launched a comprehensive set of actions to address and ameliorate gender imbalance in leadership levels, with an integrated, business-sponsored approach targeted at hiring, developing, retaining and promoting senior women.

- *In the U.S.*: Talent Management magazine acknowledged our Developing Inclusive Behaviors learning framework for being "exceptional" and a "best practice" and we have been recognized by the Human Rights Campaign Foundation as a "Best Place to Work" for LGBT+ equality.

- *In the U.K.*: Willis Towers Watson is a member of Stonewall's Diversity Champions program, an employers' forum for sexual orientation and gender identity equality.

We help strengthen our communities through charitable giving and volunteering by offering:

- Matching Gifts Program that matches our colleague's contributions to charitable organizations focused on healthcare, inclusion and diversity, post-secondary education, and disaster relief;

- Volunteer Day Program that provides our colleagues with paid opportunities to volunteer their time and talents to improve our communities;

- a global charitable giving policy that benefits the Company by providing consistent new company-wide governance and expenditure recording for all business and office charitable expenditure in this area; and
- an opportunity to U.S. offices and colleagues to partner with The Willis Foundation (a registered 501(c)(3) charity) to raise funds for and issue grants to U.S.-based charitable organizations.

While we believe the nature of our business as a professional services provider predominantly to corporate clients means that we are not directly exposed to a high risk of modern slavery and human trafficking, we are nonetheless aware that the possibility does exist within our global supply chains. We do not have a formal global human rights policy; however our approach to modern slavery reflects our overall approach to human rights. Seven of our U.K. subsidiaries (including Willis Limited and Towers Watson Limited) have produced Modern Slavery Act Transparency Statements, most recently for the financial year ending 31 December 2017. These U.K. entities work with other Willis Towers Watson entities to combat modern slavery and human trafficking in the business structure and have a cross-function modern slavery working group that continues to coordinate a Company-wide approach to the matter. As part of Willis Towers Watson, these U.K. entities are committed to maintaining and improving practices to combat the human rights violations of slavery and human trafficking. The U.K. Modern Slavery Working Group has continued investigations into our supply chain to further a standardized approach to assessing the risk of modern slavery and human trafficking.

To ensure a high level understanding of the risks of modern slavery and human trafficking amongst those of our colleagues engaged in our large enterprise-wide supplier arrangements, we have started to introduce training across key departments so that relevant employees are aware of the risks and what warning signs they should look for. We continue to standardize Company-wide modern slavery and human trafficking requirements for our large enterprise-wide supplier arrangements to provide for a coordinated approach moving forward.

Anti-Bribery and Anti-Corruption

The Company is subject to global anti-bribery and anti-corruption policies and procedures, which apply to all employees in entities owned and/or controlled by Willis Towers Watson, suppliers to Willis Towers Watson and third parties performing services on behalf of Willis Towers Watson (unless the suppliers or third parties have comparable anti-bribery and anti-corruption policies of their own).

The Anti-Bribery & Corruption Policy states that Willis Towers Watson is committed to conducting business with honesty, integrity and fairness and without the use of bribery and corrupt practices, and prohibits the offering, promising, giving, requesting, agreeing to receive or accepting of any bribe or other illegal or corrupt payment or inducement to or from any person at any time anywhere in the world.

Bribery and corruption risks include those through third parties and gifts, entertainment and hospitality. The company mitigates these risks by global procedures which apply to all employees in entities owned and/or controlled by Willis Towers Watson. The Company's Anti-Bribery & Corruption - Gifts, Entertainment & Hospitality Procedures require approval of gifts, entertainment and hospitality (whether given or received by Willis Towers Watson) that meet bribery risk criteria explained in the procedures. In general, the Anti-Bribery & Corruption - Third Party Approval Procedures require due diligence be conducted on, and approval be obtained for, all third parties performing specified services on behalf of Willis Towers Watson. For all but the very lowest risk third parties, the approval procedures must be refreshed and repeated annually. Very low risk third parties require re-approval under the procedures every two years.

The policies, procedures and supporting forms and information are available on the Company intranet site and are translated into 26 languages to support their global application and understanding.

Online training was provided in 2018 in these languages on a risk-based approach to Willis Towers Watson employees regarding Anti-Bribery & Corruption; Gifts Entertainment & Hospitality; and Third Party Bribery Risk, including a comprehension test on the module content.

All employees of Willis Towers Watson are also required to comply with the Code of Conduct, which sets out the Company's expectations regarding anti-bribery and anti-corruption matters. In 2018, all employees were required to complete Code of Conduct training (provided in multiple languages) and to complete a comprehension test on the module content and certify their understanding and compliance with the Code of Conduct.

Risk Factors

The principal risks related to the Company's business are described in the 'Principal Risks and Uncertainties' section above.

Business Model

The Company's business model is described in the 'Executive Overview - Business Overview' and 'Business Strategy' sections above.

Accounting Records

To ensure that adequate accounting records are kept in accordance with Sections 281 to 285 of the Companies Act 2014 the Directors have employed appropriately qualified accounting personnel and have maintained appropriate computerized accounting systems. The accounting records are held at the Company's registered office at Elm Park, Merrion Road, Dublin 4, Ireland.

Directors and Secretary

As shown in 'Officers and corporate information' on page 6, which forms part of this report, the Directors of the Company are John J. Haley, Anna C. Catalano, Victor F. Ganzi, Wendy E. Lane, James F. McCann, Brendan R. O'Neill, Jaymin B. Patel, Linda D. Rabbitt, Paul D. Thomas and Wilhelm Zeller and the Secretary of the Company is Nicole Napolitano. There were no changes in Directors during the year or after year-end.

Directors' and Secretary's Interests

None of the Directors, nor the Company Secretary, in office at December 31, 2018 was interested in 1 percent or over of the share capital of the ultimate parent company at December 31, 2018 or January 1, 2018.

There have been no contracts or arrangements entered into during the financial period in which a Director of the Company was materially interested and which were significant in relation to Willis Towers Watson's business.

Directors' Responsibilities Statement in relation to the Financial Statements

The Directors are responsible for preparing the directors' report and the financial statements in accordance with the Companies Act 2014.

Irish company law requires the Directors to prepare financial statements for each financial year. Under Irish company law, the Directors have elected to prepare the Company financial statements in accordance with accounting principles generally accepted in the United States of America ('US GAAP'), as defined in Section 279 of the Companies Act 2014, to the extent that the use of those principles in the preparation of the Company financial statements does not contravene any provision of Part 6 of the Companies Act 2014, and to prepare the Parent Company financial statements in accordance with International Financial Reporting Standards ('IFRSs') as adopted by the European Union ('relevant financial reporting framework').

Under Irish company law, the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the assets, liabilities and financial position of the Company and the Parent Company as at the financial year end date and of the profit or loss of the Company for the financial year and otherwise comply with the Companies Act 2014. In preparing the financial statements, the Directors are required to:

- select suitable accounting policies for the Company and Parent Company financial statements and then apply them consistently;
- make judgments and estimates that are reasonable and prudent;
- state whether the financial statements have been prepared in accordance with applicable accounting standards, identify those standards, and note the effect and reasons for any material departure from those standards; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Parent Company and the Company will continue in business.

The Directors are responsible for ensuring that the Company keeps, or causes to be kept, adequate accounting records which correctly explain and record the transactions of the Company, enable at any time the assets, liabilities, financial position and profit or loss of the Company to be determined with reasonable accuracy and enable them to ensure that the financial statements and Directors' Report comply with the Companies Act 2014 and enable the financial statements to be audited. They are also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Company's website. Legislation in Ireland governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Directors' Compliance Statement

As required by section 225(2) of the Companies Act 2014, the directors acknowledge that they are responsible for securing the Company's compliance with its relevant obligations (as defined in section 225(1)). The directors further confirm that a "compliance policy statement" (as defined in section 225(3)(a)) has been drawn up, that appropriate arrangements and structures that are, in the directors' opinion, designed to secure material compliance with the relevant obligations have been put in place and that a review of those arrangements and structures has been conducted in the financial year to which this report relates.

Relevant Audit Information

Each of the persons who is a Director at the date of approval of this report confirms that:

- so far as the Director is aware, there is no relevant audit information of which the Company's statutory auditor is unaware; and
- the Director has taken all the steps that they ought to have taken as a Director in order to make themselves aware of any relevant audit information and to establish that the Company's statutory auditor is aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of Section 330 of the Companies Act 2014.

Audit Committee

The Company has established an Audit Committee which is in conformity with the provisions of Section 167 of the Companies Act 2014, with responsibilities including:

- the monitoring of the financial reporting process;
- the monitoring of the effectiveness of the Company's systems of internal control, internal audit and risk management;
- the monitoring of the statutory audit of the Company's statutory financial statements; and
- the review and monitoring of the independence of the statutory auditor and the provision of additional services to the Company.

Auditor

A resolution relating to the reappointment of Deloitte LLP, Statutory Audit Firm, United Kingdom, as auditor will be proposed at the forthcoming Annual General Meeting of Shareholders. In the event that regulations preclude Deloitte LLP from acting as auditor, under Irish law the Board of Directors has the authority to appoint another accounting firm, which the Board currently expects would be the Irish member firm of the Deloitte Touche Tohmatsu Limited network, as auditor.

On behalf of the Directors

/s/ Victor F. Ganzi Director	/s/ Brendan R. O'Neill Director
Date: March 27, 2019	Date: March 27, 2019

Elm Park
Merrion Road
Dublin 4, Ireland

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INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF WILLIS TOWERS WATSON PUBLIC LIMITED COMPANY

Report on the audit of the consolidated financial statements

Opinion on the consolidated financial statements of Willis Towers Watson Public Limited Company

In our opinion, the Group financial statements:

- give a true and fair view of the assets, liabilities and financial position of the Group as at December 31, 2018 and of its profit for the financial year then ended; and
- have been properly prepared in accordance with the relevant financial reporting framework and, in particular, with the requirements of the Companies Act 2014.

The Group financial statements we have audited comprise:

- the Consolidated Profit and Loss Account;
- the Consolidated Statement of Total Comprehensive Income;
- the Consolidated Balance Sheet;
- the Consolidated Statement of Cash Flows;
- the Consolidated Statement of Changes in Equity; and
- the related notes 1 to 25, including a summary of significant accounting policies as set out in Note 2.

The relevant financial reporting framework that has been applied in the preparation of the consolidated financial statements comprises the Companies Act 2014 and the US accounting standards as defined in Section 279 of the Companies Act 2014 ('US GAAP') to the extent that the use of those principles in preparation of the consolidated financial statements does not contravene any provision of Part 6 of the Companies Act 2014 ('relevant financial reporting framework').

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (Ireland) (ISAs (Ireland)) and applicable law. Our responsibilities under those standards are further described in the 'Auditor's responsibilities for the audit of the financial statements' section of our report.

We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in Ireland, including the Ethical Standard issued by The Irish Auditing and Accounting Supervisory Authority (IAASA), as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which ISAs (Ireland) require us to report to you where:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate: or
- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Group's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorized for issue.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current financial year and include the most significant assessed risks of material misstatement (whether or not due to fraud) we identified, including those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Valuation and allocation of Errors and Omissions Provisions	
Key audit matter description	The Group has established provisions against various actual and potential claims, lawsuits and other proceedings relating principally to alleged errors & omissions ('E&O') which arise in connection with the placement of insurance and reinsurance and provision of 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 ('IBNR'). These provisions are established based on actuarial estimates together with individual case reviews. Significant management judgment is required to estimate the amounts of such claims. Auditing management's judgments relating to its E&O provision involved especially subjective judgment for the following two areas in particular: • the Legacy Towers Watson provision related to the IBNR; and • the Legacy Willis provision related to large claims reported but not paid, such as the Stanford Financial Group Litigation ($120 million as at December 31, 2018 and as at December 31, 2017) that was accrued in 2015. Refer to Note 14 and Note 15 to the financial statements.
How the scope of our audit responded to the key audit matter	We tested the design and operating effectiveness of controls over the Company's estimation of the E&O provision including controls over the underlying historical claims data, the actuarial methodology used, and the assumptions selected by management that are used to calculate the Legacy Towers Watson IBNR provision. We also tested the design and operating effectiveness of controls over the establishment and quarterly evaluation of provisions for reported claims. For the Legacy Towers Watson IBNR provision, we evaluated the appropriateness of the IBNR model. We inquired or management regarding any changes in the estimation process or model, evaluated whether any changes were warranted given changes in the business, and evaluated the consistency of the model with prior years in order to challenge the methodology used to estimate and calculate the provision. We used our internal actuarial experts to assist us in assessing the methodology and models used, including key inputs and assumptions used in, and arithmetical accuracy of, the models used. We evaluated the individual litigation matters and the appropriateness of their projected settlement values through inquiries of, and confirmations from, external lawyers handling those matters for the Company.
Key observations	We performed the planned procedures without noting any material issues.

Adoption of Revenue Recognition Standard ASC 606	
Key audit matter description	The Company adopted ASC 606, *Revenue from Contracts with Customers* ('the Standard') as of January 1, 2018, using the modified retrospective method, which had a material impact on the consolidated financial statements and the accompanying notes. The Standard 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 Standard 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. Management analyzed its various revenue streams to determine the full impact of the Standard on the Company's revenue recognition, cost deferral, systems and processes, and the Company determined the following: • Certain revenue streams have accelerated revenue recognition timing; • Revenue recognition for certain other revenue streams has changed from recognizing revenue at a point in time to recognizing revenue over time; and • The Company's accounting for deferred costs changed: o For those portions of the business that previously deferred costs (related to system implementation activities), the length of time over which the Company amortizes those costs extended to a longer estimated contract term. o The costs associated with other types of arrangements meet the criteria for cost deferral under ASC 606. In reaching such conclusions management has exercised significant judgement regarding the identification and disaggregation of the Company's various revenue streams, and related contractual arrangements which required separate and unique accounting evaluation under the Standard, and the appropriate application of the Standard to those revenue streams. Auditing management's judgement related to the identification of revenue streams, interpretations of the contractual obligations and the application of the new Standard required especially complex and subjective judgment. Refer to Note 2 and Note 4 to the financial statements.
How the scope of our audit responded to the key audit matter	We tested the design and operating effectiveness of controls over management's identification and disaggregation of the Company's revenue streams, and controls over the evaluation of the technical accounting for significant revenue streams. We tested the completeness of management's identification and disaggregation of the Company's revenue streams. We evaluated contract attributes on a sample basis and validated management's categorization of such contracts within the various revenue streams. With the assistance of our technical accounting specialists, we evaluated management's analysis, judgements and application of the Standard as it related to each of the Company's significant revenue streams including the (i) identification of the contract with the customer, (ii) identification of the performance obligations, (iii) determination of transaction price, (iv) allocation of transaction price to the performance obligations and (v) recognition of revenue when (or as) the entity satisfies a performance obligation. We read and assessed the Company's disclosures with respect to the impact of adoption for accuracy, completeness and reasonableness.
Key observations	We performed the planned procedures without noting any material issues.

In the previous year, we identified a key audit matter in relation to possibility of management not properly considering the multi-year and multiple deliverable nature of certain insurance brokering revenue arrangements. However, we have not identified this as key audit matter in the current year primarily because the management's processes and our audit procedures for such arrangements are well established and the degree of audit judgement and subjectivity in the current year's audit work in this area was not significant.

In the previous year, we also identified a key audit matter in relation to the impact of US tax reform on the tax charge for the year and the estimation of tax liabilities. As the Company completed its accounting under SAB 118, there were no material adjustments throughout the year. We have not identified this as a key audit matter in the current year primarily because the US Treasury Department has released further regulations in 2018 clarifying the initial guidance that was enacted late in 2017. Therefore, there is less uncertainty in the process for estimating the impact on the tax charge and deferred tax liabilities.
Our audit procedures relating to the above key audit matters were designed in the context of our audit of the financial statements as a whole, and not to express an opinion on individual accounts or disclosures. Our opinion on the financial statements is not modified with respect to any of the key audit matters described above, and we do not express an opinion on these individual matters.

Our application of materiality

We define materiality as the magnitude of misstatement that makes it probable that the economic decisions of a reasonably knowledgeable person, relying on the financial statements, would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work. Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

Group materiality	$85 million (2017:$73 million)
Basis for determining materiality	We determined the materiality using a multiple benchmark approach considering adjusted profit before tax ('PBT'), adjusted earnings before interest, taxes, depreciation and amortization ('EBITDA') and revenue to be the relevant benchmarks, with normalised GAAP PBT and EBITDA as supporting benchmarks. Based on the results of our analysis, we determined and selected the materiality level of $85 million for the consolidated financial statements.
Rationale for the benchmark applied	The attention of the users of the Group's financial statements is primarily focused on adjusted earnings per share (and therefore Adjusted PBT), Adjusted EBITDA and revenue.

We agreed with the Audit Committee that we would report to them any audit differences in excess of $4.2 million (2017: $3.6 million, as well as differences below that threshold which, in our view, warranted reporting on qualitative grounds. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

An overview of the scope of our audit

The scope of our audit was determined by obtaining an understanding of the Group and its environment, including group-wide controls and assessing the risk of material misstatement.

Our Group audit scope focused primarily in two locations (US and UK) with three components subject to full scope audits. In addition, our component teams performed audits of specified account balances and classes of transactions for ten components to support our opinion on the consolidated financial statements.

In scope components as described above account for approximately 82% of Group's total assets and approximately 81% of Group's total revenue as of December 31, 2018.

The components were selected to provide an appropriate basis of undertaking audit work to address the risks of material misstatements including those identified above. Our audits of each of the components was performed using materiality lower than the Group materiality based on their size relative to the Group and ranged from $25.5 million to $63.8 million.

The Group engagement team activities comprised audit work in areas such as the consolidation, review of the overall financial statements and disclosures, taxes, overall IT controls work and other areas such as discretionary compensation awards. The component teams carried out work in relation to the transactions and balances of the underlying businesses. The Group engagement team had oversight of the work performed by the component teams, reviewed their work and discussed any issues throughout the year.

Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in respect of these matters.

Responsibilities of directors

As explained more fully in the directors' responsibilities statement set out on page 62, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view and otherwise comply with the Companies Act 2014, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (Ireland) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the IAASA's website at: http://www.iaasa.ie/getmedia/b2389013-1cf6-458b-9b8f-a98202dc9c3a/Descriptionofauditorsresponsiblitiesforaudit.pdf. This description forms part of our auditor's report.

Report on other legal and regulatory requirements

Opinions on other matters prescribed by the Companies Act 2014

Based solely on the work undertaken in the course of the audit, we report that:

- We have obtained all the information and explanations which we consider necessary for the purposes of our audit.
- In our opinion, the accounting records of the Group were sufficient to permit the financial statements to be readily and properly audited and the Group statement of its financial position in agreement with the accounting records.
- In our opinion, the information given in those parts of the directors' report as specified for our review is consistent with the financial statements and has been prepared in accordance with the Companies Act 2014.

Matters on which we are required to report by exception

Based on the knowledge and understanding of the Group and its environment obtained in the course of the audit, we have not identified material misstatements in those parts of the directors' report that have been specified for our review.

The Companies Act 2014 also requires us to report to you if, in our opinion, the Group has not provided the information required by Regulation 5(2) to 5(7) of the European Union (Disclosure of Non-Financial and Diversity Information by certain large undertakings and groups) Regulations 2017 (as amended) for the financial year ended December 31, 2018. We have nothing to report in this regard.
We have nothing to report in respect of the provisions in the Companies Act 2014 which require us to report to you if, in our opinion, the disclosures of directors' remuneration and transactions required by Sections 305 to 312 of the Companies Act 2014 are not made.

Other matter

We have reported separately on the Parent Company financial statements of Willis Towers Watson Public Limited Company for the financial year ended December 31, 2018.

Use of our report

Our report is made solely to the Company's members, as a body, in accordance with Section 391 of the Companies Act 2014. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members, as a body, for our audit work, for this report, or for the opinions we have formed.

Andrew Downes
For and on behalf of Deloitte LLP
Statutory Audit Firm
London, United Kingdom

27 March 2019

CONSOLIDATED PROFIT AND LOSS ACCOUNT

	Note	Years ended December 31, 2018	2017	2016
		(millions, except per share data)		
REVENUE	4	$ 8,513	$ 8,202	$ 7,887
EXPENSES				
Salaries and benefits	17	5,123	4,967	4,849
Other operating expenses [(i)]		1,637	1,534	1,501
Depreciation	9	208	203	178
Amortization	8	534	581	591
Restructuring costs	6	—	132	193
Transaction and integration expenses		202	269	177
Total expenses		7,704	7,686	7,489
OPERATING INCOME		809	516	398
Other income, net	19	250	164	178
Interest expense	11	(208)	(188)	(184)
INCOME FROM OPERATIONS BEFORE INCOME TAXES		851	492	392
(Provision for)/benefit from income taxes [(i)]	7	(136)	100	76
NET INCOME		715	592	468
Less: net income attributable to non-controlling interests		(20)	(24)	(18)
NET INCOME ATTRIBUTABLE TO WILLIS TOWERS WATSON		$ 695	$ 568	$ 450
EARNINGS PER SHARE	22			
Basic earnings per share [(i)]		$ 5.29	$ 4.21	$ 3.28
Diluted earnings per share [(i)]		$ 5.27	$ 4.18	$ 3.26

(i) Other operating expenses, benefit from income taxes, basic earnings per share and diluted earnings per share for 2016 differ from Annual Form 10-K due to an additional $50 million provision relating to the Stanford Financial Group litigation reflecting a settlement in principle the Company entered into on March 31, 2016 being recognized in these Consolidated Financial Statements for 2015 but in Annual Form 10-K for the following year, 2016. Further details on this settlement in principle are given in Note 15 to these Consolidated Financial Statements.

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF TOTAL COMPREHENSIVE INCOME

	Note	Years ended December 31, 2018	2017	2016
			(millions)	
NET INCOME		$ 715	$ 592	$ 468
Other comprehensive (loss)/income, net of tax:				
Foreign currency translation	20	$ (251)	$ 295	(353)
Defined pension and post-retirement benefits	20	(199)	14	(439)
Derivative instruments	20	2	75	(75)
Other comprehensive (loss)/income, net of tax, before non-controlling interests		(448)	384	(867)
Comprehensive income/(loss) before non-controlling interests		267	976	(399)
Less: Comprehensive (income)/loss attributable to non-controlling interests		(20)	(37)	2
Comprehensive income/(loss) attributable to Willis Towers Watson		$ 247	$ 939	$ (397)

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED BALANCE SHEET

	Note	December 31, 2018	December 31, 2017
		(millions, except share data)	
ASSETS			
FIXED ASSETS			
Intangible assets			
Goodwill	8	$ 10,465	$ 10,519
Other intangible assets, net	8	3,318	3,882
Tangible assets			
Fixed assets, net	9	942	985
Financial assets			
Investments in associates		23	31
Pension benefits assets	13	773	764
Deferred tax assets	7	59	46
Other non-current assets	16	385	370
Total fixed assets		15,965	16,597
CURRENT ASSETS			
Accounts receivable, net	4	2,379	2,246
Fiduciary assets		12,604	12,155
Other current assets	16	404	430
Cash and cash equivalents		1,033	1,030
Total current assets		16,420	15,861
TOTAL ASSETS		$ 32,385	$ 32,458
LIABILITIES, CAPITAL AND RESERVES			
CREDITORS: AMOUNTS FALLING DUE WITHIN ONE YEAR			
Short-term debt and current portion of long-term debt	11	$ 186	$ 85
Fiduciary liabilities		12,604	12,155
Deferred revenue	16	448	537
Accrued expenses	16	1,199	1,174
Income taxes payable	7	81	43
Other current liabilities	16	783	761
Total creditors: amounts falling due within one year		15,301	14,755
CREDITORS: AMOUNTS FALLING DUE AFTER MORE THAN ONE YEAR			
Long-term debt	11	4,389	4,450
Retirement benefit obligations	13	1,170	1,259
Deferred tax liabilities	7	559	615
Other non-current liabilities	16	429	544
Total creditors: amounts falling due after more than one year		6,547	6,868
PROVISIONS FOR LIABILITIES	14	540	558
Total liabilities		22,388	22,181

(Continued on next page)

CONSOLIDATED BALANCE SHEET (Continued)

	Note	December 31, 2018	December 31, 2017
		(millions, except share data)	
COMMITMENTS AND CONTINGENCIES	15	—	—
REDEEMABLE NON-CONTROLLING INTEREST (i)		26	28
CAPITAL AND RESERVES			
Ordinary shares, \$0.000304635 nominal value; Authorized: 1,510,003,775; Issued: 128,921,530 shares in 2018 and 132,139,581 shares in 2017		—	—
Ordinary shares, €1 nominal value; Authorized: 40,000; Issued: 40,000 shares in 2018 and 2017		—	—
Preference shares, \$0.000115 nominal value; Authorized: 1,000,000,000; Issued: none in 2018 and 2017		—	—
Share premium		9,420	9,375
Profit and loss account		1,021	924
Other reserves		1,372	1,340
Accumulated other comprehensive loss, net of tax	20	(1,961)	(1,513)
Total Willis Towers Watson shareholders' equity		9,852	10,126
Non-controlling interests		119	123
Total equity		9,971	10,249
TOTAL LIABILITIES, CAPITAL AND RESERVES		\$ 32,385	\$ 32,458

(i) The redeemable non-controlling interest has been presented in accordance with US GAAP.

The accompanying notes are an integral part of these Consolidated Financial Statements.

Approved by the Board of Directors on March 27, 2019 and signed on behalf of the Directors:

/s/ Victor F. Ganzi
Director

/s/ Brendan R. O'Neill
Director

CONSOLIDATED STATEMENT OF CASH FLOWS

	Note	Years ended December 31, 2018	2017	2016
			(millions)	
CASH FLOWS FROM OPERATING ACTIVITIES				
NET INCOME (i)		$ 715	$ 592	$ 468
Adjustments to reconcile net income to total net cash from operating activities:				
Depreciation	9	213	252	178
Amortization	8	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 (i)	7	(115)	(285)	(224)
Share-based compensation	21	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 (i)		(23)	(35)	15
Net cash from operating activities		1,288	862	933
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		(341)	(335)	195

(Continued on next page)

CONSOLIDATED STATEMENT OF CASH FLOWS (Continued)

	Note	Years ended December 31, 2018	2017	2016
			(millions)	
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		(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

(i) Net income, benefit from deferred income taxes and the movement on provisions for 2016 differ from Annual Form 10-K due to an additional $50 million provision relating to the Stanford Financial Group litigation reflecting a settlement in principle the Company entered into on March 31, 2016 being recognized in these Consolidated Financial Statements for 2015 but in Annual Form 10-K for the following year, 2016.

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Shares outstanding [i]	Share premium	Profit and loss account	Other reserves	AOCL [ii]	Total WTW shareholders' equity	Non-controlling interests	Total equity	Redeemable non-controlling interest [iii]	Total
	(thousands)					(millions)				
Balance at December 31, 2015	68,625	$ 564	$ 1,564	$ 1,108	$ (1,037)	$ 2,199	$ 131	$ 2,330	$ 53	
Shares repurchased	(3,170)	—	(396)	—	—	(396)	—	(396)	—	
Net income [iv]	—	—	450	—	—	450	11	461	7	$ 468
Dividends	—	—	(265)	—	—	(265)	(9)	(274)	(5)	
Other comprehensive loss	—	—	—	—	(847)	(847)	(16)	(863)	(4)	$ (867)
Issue of shares under employee stock compensation plans	1,342	63	—	—	—	63	—	63	—	
Tax benefits on issue of shares under employee share compensation plans	—	—	—	3	—	3	—	3	—	
Issue 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 at December 31, 2016	136,297	$ 9,313	$ 1,353	$ 1,283	$ (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 [v]	(1,415)	—	(177)	—	—	(177)	—	(177)	—	
Net income	—	—	568	—	—	568	16	584	8	$ 592
Dividends	—	—	(285)	—	—	(285)	(15)	(300)	(3)	
Other comprehensive income	—	—	—	—	371	371	7	378	6	$ 384
Issue 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 at December 31, 2017	132,140	$ 9,375	$ 924	$ 1,340	$ (1,513)	$ 10,126	$ 123	$ 10,249	$ 28	
Adoption of ASC 606 (See Note 2 to these Consolidated Financial Statements)	—	—	317	—	—	317	—	317	—	
Shares repurchased	(3,919)	—	(602)	—	—	(602)	—	(602)	—	
Net income	—	—	695	—	—	695	18	713	2	$ 715
Dividends	—	—	(313)	—	—	(313)	(24)	(337)	(2)	
Other comprehensive loss	—	—	—	—	(448)	(448)	2	(446)	(2)	$ (448)
Issue of shares under employee stock compensation plans	701	45	—	—	—	45	—	45	—	
Share-based compensation	—	—	—	27	—	27	—	27	—	
Foreign currency translation	—	—	—	5	—	5	—	5	—	
Balance at December 31, 2018	128,922	$ 9,420	$ 1,021	$ 1,372	$ (1,961)	$ 9,852	$ 119	$ 9,971	$ 26	

(i) The nominal value of the ordinary shares and the number of ordinary shares issued in the year ended December 31, 2015 have been retroactively adjusted to reflect the reverse stock split on January 4, 2016. See Note 3 to these Consolidated Financial Statements for further details.

(ii) Additional other comprehensive loss, net of tax ('AOCL').

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

(iv) Net income for 2016 differs from Annual Form 10-K due to an additional provision relating to the Stanford Financial Group litigation reflecting a settlement in principle the Company entered into on March 31, 2016 being recognized in these Consolidated Financial Statements for 2015 but in Annual Form 10-K for the following year, 2016.

(v) 1,415,199 shares were surrendered by shareholders in 2017 following Merger-related appraisal demands.

The accompanying notes are an integral part of these Consolidated Financial Statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(Tabular amounts are in millions of U.S. dollars, except per share data and employee numbers)

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.

2. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS

Basis of Presentation

The Company is required to file consolidated financial statements with the Irish Companies Registration Office. These consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America under (‘US GAAP’) but incorporate additional Companies Act 2014 requirements.

The Directors have elected to prepare the consolidated financial statements of Willis Towers Watson in accordance with Section 279 of the Companies Act 2014 of the Republic of Ireland, which provides that a true and fair view of the assets and liabilities, financial position and profit or loss may be given by preparing the consolidated financial statements in accordance with US GAAP, to the extent that the use of those principles in the preparation of the financial statements does not contravene any provision of Part 6 of the Companies Act 2014.

The preparation of these financial statements under US GAAP includes primary statement formats, captions and terminology throughout that both complies with US GAAP and is familiar to users of such accounts filed by the Company in the United States.

Such disclosure formats, captions and terminology may not always comply specifically with the requirements of Irish Company Law. The Company has departed from the format requirements in Irish Company Law as explained below, to continue its disclosure under US formats. There are various instances of this occurring, including, but not limited to, the Company’s consolidated profit and loss account not strictly conforming to the formats prescribed under Irish Company Law. However, the Company believes that the consolidated profit and loss account as reported better reflects the business and activities of the Company.

All intercompany accounts and transactions have been eliminated in consolidation. We have reclassified certain prior year amounts to conform to the current year presentation.

2. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS (continued)

True and fair view override

In special disclosure circumstances, where compliance with any of the provisions of the Companies Act 2014 as to the matters to be included in a company's financial statements (or notes thereto) is inconsistent with the requirement to give a true and fair view of the state of affairs and profit or loss, the directors shall depart from that provision to the extent necessary to give a true and fair view. The Company is adopting a true and fair view override in relation to goodwill - see the accounting policy on goodwill below.

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 to these Consolidated Financial Statements 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.

2. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS (continued)

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 profit and loss account.

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 to these Consolidated Financial Statements 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 to these Consolidated Financial Statements 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 profit and loss account 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.

2. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS (continued)

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 to these Consolidated Financial Statements 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 profit and loss account. 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 statement of total 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 to these Consolidated Financial Statements 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 Notes 15 and 14 to these Consolidated Financial Statements 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.

2. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS (continued)

The Company expenses equity-based compensation, which is included in Salaries and benefits in the consolidated profit and loss account, 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 profit and loss account. The significant assumptions underlying our expense calculations include the estimated achievement of any performance targets and estimated forfeiture rates.

See Note 21 to these Consolidated Financial Statements 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 9 to these Consolidated Financial Statements 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 profit and loss account over the lease terms. See Note 15 to these Consolidated Financial Statements 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. Irish Law requires the amortization of goodwill. However, the Company believes the amortization of goodwill would not give a true and fair view because:

- not all goodwill declines in value; and
- goodwill that does decline in value rarely does so on a straight-line basis.

Consequently, straight-line amortization of goodwill over an arbitrary period does not reflect economic reality and thus does not provide useful information to financial statement users. Furthermore, under both US and International generally accepted accounting principles, goodwill is considered an indefinite lived asset and not amortized. The Company is therefore invoking the 'true and fair view override' described above.

The Company is not able to reliably estimate the impact on the financial statements of the true and fair override on the basis that the useful life of goodwill cannot be predicted with a satisfactory level of reliability, nor can the pattern in which goodwill diminishes be known.

2. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS (continued)

Consequently, the Company does not amortize goodwill but tests it for impairment annually as of October 1, and whenever indicators of impairment exist. 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 8 to these Consolidated Financial Statements for additional information about our goodwill and other intangible assets.

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

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 to these Consolidated Financial Statements for additional information about our pensions.

Revenue Recognition (effective from January 1, 2018) — The following policies were effective for the 2018 financial 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 to these Consolidated Financial Statements. These Other revenue streams represent approximately 5% of customer contract revenue for the year ended December 31, 2018.

2. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS (continued)

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.

2. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS (continued)

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.

2. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS (continued)

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.

2. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS (continued)

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.

2. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS (continued)

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.

2. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS (continued)

- 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 disclosures and will be effective for the Company for its 2020 annual reporting. 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.

2. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND RECENT ACCOUNTING PRONOUNCEMENTS (continued)

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 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 to these Consolidated Financial Statements.

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 these Consolidated Financial Statements. 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 profit and loss account.

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.

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 registered office of the Towers Watson holding undertaking, WTW Delaware Holdings LLC (formerly Towers Watson & Co.), was 160, Greentree Drive, Suite 101, Dover, Kent, DE 19904 (now 251 Little Falls Drive, Wilmington, New Castle County, DE 19808).

Willis Towers Watson plc (the 'Parent Company') is a public company limited by shares incorporated and registered in the Republic of Ireland. Its registered address is Willis Towers Watson House, Elm Park, Merrion Road, Dublin 4, Ireland and its registered number is 475616.

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

	January 4, 2016
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	$ 8,723

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 acquisition was accounted for using the acquisition method of accounting. 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.

The registered office of Alston Gayler & Co Limited is 100 Leadenhall Street, London, EC3A 3BP.

3. MERGER, ACQUISITIONS AND DIVESTITURES (continued)

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 16 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 profit and loss account. 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.

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 these Consolidated Financial Statements 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:

Consolidated Balance Sheet	Balance at December 31, 2017	Adjustments due to ASC 606		Balance at January 1, 2018
ASSETS				
Accounts receivable, net	$ 2,246	$ 309	*a*	$ 2,555
Other current assets	430	89	*b*	519
Fixed assets, net	985	(83)	*c*	902
Deferred tax assets and Other non-current assets	416	39	*c*	455
LIABILITIES				
Deferred revenue and Accrued expenses	1,711	(74)	*d*	1,637
Deferred tax liabilities	615	99	*e*	714
Provisions for liabilities	558	12	*f*	570
EQUITY				
Profit and loss account	924	317	*g*	1,241

4. REVENUE (continued)

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

	Year Ended December 31, 2018			
Consolidated Profit and Loss Account	**As Reported**	**Balances Without Adoption of ASC 606**	**Effect of Change**	
Revenue	$ 8,513	$ 8,613	$ (100)	*h*
Expenses				
Salaries and benefits	5,123	5,098	25	*i*
Depreciation	208	235	(27)	*i*
Operating income	809	907	(98)	
INCOME FROM OPERATIONS BEFORE INCOME TAXES	851	949	(98)	
Provision for income taxes	(136)	(154)	18	*j*
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)	

	As of December 31, 2018			
Consolidated Balance Sheet	**As Reported**	**Balances Without Adoption of ASC 606**	**Effect of Change**	
ASSETS				
Accounts receivable, net	$ 2,379	$ 2,198	$ 181	*a*
Other current assets	404	302	102	*b*
Fixed assets, net	942	1,051	(109)	*c*
Deferred tax assets and Other non-current assets	444	396	48	*c*
LIABILITIES				
Deferred revenue and Accrued expenses	1,647	1,754	(107)	*d*
Income taxes payable and Other current liabilities	864	863	1	*e*
Deferred tax liabilities	559	479	80	*e*
Provisions for liabilities	540	529	11	*f*
EQUITY				
Profit and loss account	1,021	784	237	*g*

	Year Ended December 31, 2018			
Consolidated Statement of Cash Flows	**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*

4. REVENUE (continued)

Explanation of Changes

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

a. 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.

b. 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.

c. 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.

d. 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.

e. Income taxes payable, Other current liabilities 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.

f. Provision for liabilities has been adjusted for additional reserves for long-term post-placement obligations in our broking business.

g. 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 profit and loss account 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 (Consolidated Profit and Loss Account) 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)

4. REVENUE (continued)

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.

4. REVENUE (continued)

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 to these Consolidated Financial Statements. 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 to these Consolidated Financial Statements 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 profit and loss account.

(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 profit and loss account 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	$ 3,209	$ 2,815	$ 1,520	$ 758	$ 17	$ 8,319

4. REVENUE (continued)

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	$ 40	$ 45	$ 40

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

4. REVENUE (continued)

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

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 8 to these Consolidated Financial Statements for further information.

5. SEGMENT INFORMATION (continued)

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	$ 8,399	$ 8,093	$ 7,841	$ 1,845	$ 1,739	$ 1,646

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
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)	—
Unallocated, net (ii)	(300)	(230)	(229)
Operating income	809	516	398
Interest expense	(208)	(188)	(184)
Other income, net	250	164	178
Income from operations before income taxes	$ 851	$ 492	$ 392

(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.

5. SEGMENT INFORMATION (continued)

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.

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.

6. RESTRUCTURING COSTS (continued)

An analysis of total restructuring costs recognized in the consolidated profit and loss account, 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.

6. RESTRUCTURING COSTS (continued)

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	$ 35	$ 8	$ 3	$ 1	$ 1	$ 48

(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	$ —	$ —	$ —

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.

7. INCOME TAXES (continued)

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.

7. INCOME TAXES (continued)

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)	(261)
U.K.	182	31	123
Other jurisdictions	786	682	557
Total	$ 851	$ 492	$ 392

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 (i)	79	268	197
U.S. state and local taxes (i)	12	(6)	2
U.K. corporation tax	(6)	9	(10)
Other jurisdictions	30	14	35
Total deferred tax benefit	115	285	224
Total (provision for)/benefit from income taxes	$ (136)	$ 100	$ 76

(i) U.S. federal and U.S. state and local deferred tax benefits for 2016 differ from Annual Form 10-K due to an additional provision relating to the Stanford Financial Group litigation reflecting a settlement in principle the Company entered into on March 31, 2016 being recognized in these Consolidated Financial Statements for 2015 but in Annual Form 10-K for the following year, 2016. Further details on this settlement in principle are given in Note 15 to these Consolidated Financial Statements.

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.

7. INCOME TAXES (continued)

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[(i)]
INCOME FROM OPERATIONS BEFORE INCOME TAXES [(i)]	$ 851	$ 492	$ 392
U.S. federal statutory income tax rate	21%	35%	35%
Income tax expense at U.S. federal tax rate	(179)	(172)	(137)
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 [(i)]	(77)	6	(17)
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	$ 76

(i) Income from operations before income taxes, and tax differentials of U.S. state taxes and local taxes, for 2016 differ from Annual Form 10-K due to an additional provision relating to the Stanford Financial Group litigation reflecting a settlement in principle the Company entered into on March 31, 2016 being recognized in these Consolidated Financial Statements for 2015 but in Annual Form 10-K for the following year, 2016. Further details on this settlement in principle are given in Note 15 to these Consolidated Financial Statements.

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.

7. INCOME TAXES (continued)

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	December 31, 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	December 31, 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.

7. INCOME TAXES (continued)

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	$ 49	$ 59	$ 56

7. INCOME TAXES (continued)

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

8. 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 to these Consolidated Financial Statements 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 profit and loss account.

8. GOODWILL AND OTHER INTANGIBLE ASSETS (continued)

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	$ 4,332	$ 50	$ (45)	$ (583)	$ 128	$ 3,882

(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 profit and loss account.

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	$ 5,318	$ (2,000)	$ 5,408	$ (1,526)
Unfavorable agreements	$ 34	$ (13)	$ 34	$ (8)
Total finite-lived intangible liabilities	$ 34	$ (13)	$ 34	$ (8)

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:

Years ended December 31,	Amortization	Rent offset
2019	$ 472	$ (2)
2020	420	(2)
2021	344	(2)
2022	287	(3)
2023	239	(2)
Thereafter	1,547	(1)
Total	$ 3,309	$ (12)

9. FIXED ASSETS, NET

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 to these Consolidated Financial Statements for further information.

(ii) Depreciation expense included here does not equal the depreciation expense on the consolidated profit and loss account 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.

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 Notes 2, 12 and 20 to these Consolidated Financial Statements.

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 profit and loss account 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 profit and loss account 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)

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.

Revolving Credit Facility

$1.25 billion revolving credit facility

On March 7, 2017, Trinity Acquisition plc 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.

11. DEBT (continued)

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, 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. 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.

11. DEBT (continued)

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.

11. DEBT (continued)

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	$ 378	$ 181	$ 1,103	$ 875	$ 369	$ 3,494	$ 6,400

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	$ 208	$ 188	$ 184

(i) Other primarily includes debt issuance costs, interest expense on capitalized leases and accretion on deferred and contingent consideration.

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.

12. FAIR VALUE MEASUREMENTS (continued)

The following tables present our assets and liabilities measured at fair value on a recurring basis at December 31, 2018 and December 31, 2017:

	Balance Sheet Location	Fair Value Measurements on a Recurring Basis at December 31, 2018			
		Level 1	Level 2	Level 3	Total
Assets:					
Available-for-sale securities:					
Mutual funds / exchange traded funds	Prepaid and other current assets and other non-current assets	$ 18	$ —	$ —	$ 18
Derivatives:					
Derivative financial instruments (i)	Prepaid and other current assets and other non-current assets	$ —	$ 5	$ —	$ 5
Liabilities:					
Contingent consideration:					
Contingent consideration (ii)	Other current liabilities and other non-current liabilities	$ —	$ —	$ 51	$ 51
Derivatives:					
Derivative financial instruments (i)	Other current liabilities and other non-current liabilities	$ —	$ 17	$ —	$ 17

	Balance Sheet Location	Fair Value Measurements on a Recurring Basis at December 31, 2017			
		Level 1	Level 2	Level 3	Total
Assets:					
Available-for-sale securities:					
Mutual funds / exchange traded funds	Prepaid and other current assets and other non-current assets	$ 40	$ —	$ —	$ 40
Derivatives:					
Derivative financial instruments (i)	Prepaid and other current assets and other non-current assets	$ —	$ 18	$ —	$ 18
Liabilities:					
Contingent consideration:					
Contingent consideration (ii)	Other current liabilities and other non-current liabilities	$ —	$ —	$ 51	$ 51
Derivatives:					
Derivative financial instruments (i)	Other current liabilities and other non-current liabilities	$ —	$ 37	$ —	$ 37

(i) See Note 10 to these Consolidated Financial Statements 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.

12. FAIR VALUE MEASUREMENTS (continued)

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.

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.

13. RETIREMENT BENEFITS (continued)

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.

Retirement benefit costs and liabilities in respect of defined benefit pension plans are assessed in accordance with the advice of professionally qualified actuaries. At December 31, 2018 the most recent actuarial valuations of the four principal defined benefit pension plans (which are not available for public inspection) were January 1, 2018 for the Legacy Willis United States scheme, January 1, 2018 for the Legacy Towers Watson United States scheme, December 31, 2018 for the Legacy Willis United Kingdom scheme and March 31, 2017 for the Legacy Watson Wyatt United Kingdom scheme.

13. RETIREMENT BENEFITS (continued)

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	$ 4,187	$ 3,666	$ 698	$ 87	$ 4,476	$ 4,165	$ 790	$ 123
Components on the Consolidated Balance Sheet								
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

13. RETIREMENT BENEFITS (continued)

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 profit and loss account, 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.

13. RETIREMENT BENEFITS (continued)

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 financial 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 financial 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 financial 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 financial 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

13. RETIREMENT BENEFITS (continued)

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:

	U.S.		U.K.			Canada	Germany	Ireland	
Asset Category	**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.

13. RETIREMENT BENEFITS (continued)

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:

	December 31, 2018				December 31, 2017			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Asset category:								
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	$ 1	$ —	$ 2	$ 486	$ 5	$ —	$ 19	$ 560

Our PRW plan invests only in short-term investments and mutual funds and is not included within this fair value hierarchy table.

13. RETIREMENT BENEFITS (continued)

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 financial 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	$ 8,292	$ 9,128

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.

13. RETIREMENT BENEFITS (continued)

The following table sets forth a summary of changes in the fair value of the plans' Level 3 assets for the financial 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	$ 2

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 financial year 2019, as well as the pension contributions to our qualified plans in financial 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:

	Benefit Payments				
Financial Year	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
	$ 2,763	$ 1,313	$ 291	$ 116	$ 4,483

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.

14. PROVISIONS FOR LIABILITIES

An analysis of movements on provisions for liabilities is as follows:

	Claims, lawsuits and other proceedings(i)	Other provisions(ii)	Total
Balance at January 1, 2017	$ 508	$ 67	$ 575
Net provisions made during the year	51	12	63
Utilized in the year	(94)	(3)	(97)
Foreign currency translation adjustment	9	8	17
Balance at December 31, 2017	$ 474	$ 84	$ 558
Net provisions made during the year	45	9	54
Utilized in the year	(59)	(3)	(62)
Foreign currency translation adjustment	(5)	(5)	(10)
Balance at December 31, 2018	$ 455	$ 85	$ 540

(i) The claims, lawsuits and other proceedings provision includes E&O cases which represents management's assessment of liabilities that may arise from asserted and unasserted claims for alleged errors and omissions that arise in the ordinary course of the Company's business. Where some of the potential liability is recoverable under the Company's external insurance arrangements, the full assessment of the liability is included in the provision with the associated insurance recovery shown separately as an asset.

(ii) The 'Other' category includes amounts that principally relate to post placement service provisions, property and employee-related provisions.

15. 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 profit and loss account. 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 to these Consolidated Financial Statements and Note 15 to the Parent Company Financial Statements.

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.

15. COMMITMENTS AND CONTINGENCIES (continued)

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 14 to these Consolidated Financial Statements 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.

15. COMMITMENTS AND CONTINGENCIES (continued)

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.

15. COMMITMENTS AND CONTINGENCIES (continued)

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.

15. COMMITMENTS AND CONTINGENCIES (continued)

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 *Rishmague, 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.

15. COMMITMENTS AND CONTINGENCIES (continued)

- *Rishmague, 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 *Rishmague* 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 *Rishmague* 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 *Rishmague* 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 *Rishmague*.

- *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 *Rishmague* (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.

15. COMMITMENTS AND CONTINGENCIES (continued)

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.

15. COMMITMENTS AND CONTINGENCIES (continued)

- *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 for this adjusting subsequent event in the Consolidated Financial Statements for 2015. This increase in the litigation provision was recognized in Annual Form 10-K for the following year, 2016. 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.

15. COMMITMENTS AND CONTINGENCIES (continued)

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.

15. COMMITMENTS AND CONTINGENCIES (continued)

Elma Sanchez, et. al

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.

15. COMMITMENTS AND CONTINGENCIES (continued)

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.

16. SUPPLEMENTARY INFORMATION FOR CERTAIN BALANCE SHEET ACCOUNTS

Additional details of specific balance sheet accounts are detailed below.

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 other current assets	$ 404	$ 430

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
Accounts receivable, net	20	33
Other investments	7	26
Other non-current assets	173	158
Total other non-current assets	$ 385	$ 370

Deferred revenue and accrued expenses consist of the following:

	December 31, 2018	December 31, 2017
Accounts payable, accrued liabilities and deferred revenue	$ 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	$ 1,647	$ 1,711

Other current liabilities consist of the following:

	December 31, 2018	December 31, 2017
Accounts payable	$ 163	$ 136
Other taxes payable	48	47
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	$ 783	$ 761

16. SUPPLEMENTARY INFORMATION FOR CERTAIN BALANCE SHEET ACCOUNTS (continued)

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	$ 429	$ 544

17. EMPLOYEES

The average number of persons, including Executive Directors, employed by the Company are approximated below:

	Years ended December 31,		
	2018	2017	2016
	(average number)	(average number)	(average number)
Human Capital and Benefits	14,200	12,800	12,300
Corporate Risk and Broking	13,800	14,600	12,700
Investment, Risk and Reinsurance	3,800	4,900	4,600
Benefits Delivery and Administration	4,000	3,200	4,700
Total operating segments	35,800	35,500	34,300
Corporate and Other	8,000	7,900	7,200
Total average number of employees for the year	43,800	43,400	41,500

Staff costs were as follows:

	Years ended December 31,		
	2018	2017	2016
Salaries and other compensation (i)	$ 4,421	$ 4,240	$ 4,110
Share-based compensation	50	67	123
Severance costs (ii)	13	15	8
Social security costs	372	360	346
Retirement benefits — defined benefit plan expense (iii)	117	131	110
Retirement benefits — defined contribution plan expense (iv)	150	154	152
Total salaries and benefits expense	$ 5,123	$ 4,967	$ 4,849
Restructuring costs termination benefits	—	46	68
Transaction and integration expenses	1	38	1
Total salaries and benefits expense, including termination benefits	$ 5,124	$ 5,051	$ 4,918
Staff costs capitalized	86	102	96
Total staff costs	$ 5,210	$ 5,153	$ 5,014

(i) Salaries and other compensation includes: $3,270 million salaries and directors' fees, $1,146 million benefits and incentive awards and $5 million amortization of cash retention awards (2017: $3,131 million, $1,103 million and $6 million, respectively; 2016: $3,066 million, $1,034 million and $10 million, respectively).

(ii) Severance costs have arisen in the normal course of business.

(iii) 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 net periodic pension and postretirement benefit credits from Salaries and benefits to Other income, net within its consolidated profit and loss account. See Note 2 to the Consolidated Financial Statements for further details.

(iv) Includes 401(k) plans in the U.S.

18. DIRECTORS' AND AUDITOR'S REMUNERATION

Directors' remuneration set forth below represents remuneration for services to Willis Towers Watson.

Directors' remuneration in respect of services to the Parent Company are included and also disclosed in Note 4 to the Parent Company Financial Statements.

An analysis of directors' remuneration is as follows:

	Years ended December 31,		
	2018	2017	2016
Aggregate emoluments in respect of qualifying services (i) (ii)			
Director services (iii)	$ 3	$ 4	$ 3
Managerial services (iv)	4	12	13
Total emoluments	$ 7	$ 16	$ 16
Aggregate long term incentive scheme amounts in respect of qualifying services (excluding share options) - managerial services (iv)	—	—	—
Aggregate share options in respect of qualifying services - managerial services (iv)	—	—	—
Aggregate termination payments - managerial services (iv)	—	—	14
Defined contribution retirement scheme contributions – managerial services (iv) (v)	1	—	—
Total directors' remuneration (vi) (vii) (viii)	$ 8	$ 16	$ 30

(i) Emoluments information includes salaries, fees, bonuses, any sums paid by way of expenses allowance in so far as those sums are chargeable to income tax, and the estimated money value of any other benefits received otherwise than in cash, including vested share awards but excluding the value of any unvested share awards.

(ii) The Company reimburses directors for reasonable travel and related expenses incurred in connection with their participation in Board or Board committee meetings. The Company also hired auditors in Dublin, Ireland to prepare the directors' Irish 2018 tax returns, whose fees are expected to be less than $50,000 in the aggregate.

(iii) Includes director's fees of £55,000 received by Brendan R. O'Neill in connection with his appointment as a director of a subsidiary of the Company (2017: £43,333; 2016: nil).

(iv) Directors' remuneration for managerial services represents remuneration of John J. Haley (CEO) for services to Willis Towers Watson during the year (2017: John J. Haley; 2016: John J. Haley and Dominic J. Casserley, former CEO of Legacy Willis and Deputy CEO and President of Willis Towers Watson).

(v) Defined contribution retirement scheme contributions treated as paid or payable during 2018 were $808,148, in respect of the qualifying managerial services of one director (2017: $241,030, in respect of one director; 2016: $85,617, in respect of two directors). The increase in the actuarial present value of accumulated benefits under defined benefit retirement schemes during 2018 was $nil (2017: $127,370, in respect of the qualifying managerial services of one director; 2016: $653,345, in respect of the qualifying managerial services of one director).

(vi) In aggregate, directors made $nil gains on the exercise of share options during 2018, 2017 and 2016.

(vii) The amounts shown include all amounts paid or payable to a person connected with a director.

(viii) In 2018, 2017 and 2016 no additional amounts were paid or payable to past directors (i.e. directors who resigned or ceased to hold office before the start of the respective financial year) in respect of termination or retirement benefits.

An analysis of remuneration to Deloitte LLP and its affiliates is as follows:

	Years ended December 31,		
	2018	2017	2016
Audit fees	$ 15	$ 15	$ 17
Audit-related fees	2	3	2
Tax advisory services and Other non-audit services	—	—	—
Total auditor's remuneration	$ 17	$ 18	$ 19

An analysis of Deloitte LLP's remuneration is as follows:

	Years ended December 31,		
	2018	2017	2016
Audit of the Company's consolidated financial statements	$ 1	$ 1	$ 2
Other assurance services	3	3	3
Tax advisory services and Other non-audit services	—	—	—
Total auditor's remuneration (i)	$ 4	$ 4	$ 5

(i) Includes out-of-pocket expenses.

19. 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	$ 250	$ 164	$ 178

(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 to these Consolidated Financial Statements 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 profit and loss account.

20. 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)

20. ACCUMULATED OTHER COMPREHENSIVE LOSS (continued)

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 profit and loss account. See Note 10 to these Consolidated Financial Statements 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 to these Consolidated Financial Statements). These components are included in Other income, net in the accompanying consolidated profit and loss account.

21. 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 profit and loss account 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.

21. SHARE-BASED COMPENSATION (continued)

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%

21. SHARE-BASED COMPENSATION (continued)

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.

21. SHARE-BASED COMPENSATION (continued)

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.

21. SHARE-BASED COMPENSATION (continued)

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.

22. 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[(i)]
Net income attributable to Willis Towers Watson [(i)]	$ 695	$ 568	$ 450
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	$ 3.28
Dilutive effect of potentially issuable shares	(0.02)	(0.03)	(0.02)
Diluted earnings per share	$ 5.27	$ 4.18	$ 3.26

(i) Net income attributable to Willis Towers Watson for 2016 differs from Annual Form 10-K due to an additional provision relating to the Stanford Financial Group litigation reflecting a settlement in principle the Company entered into on March 31, 2016 being recognized in these Consolidated Financial Statements for 2015 but in Annual Form 10-K for the following year, 2016. Further details on this settlement in principle are given in Note 15 to these Consolidated Financial Statements.

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.

23. 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	$ —	$ —

24. 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 expenses	$ 2,033	$ 1,927	$ 1,842	$ 1,902
Operating income	$ 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 expenses	$ 1,918	$ 1,892	$ 1,878	$ 1,998
Operating income/(loss)	$ 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

25. SUBSIDIARY UNDERTAKINGS AND UNDERTAKINGS OF SUBSTANTIAL INTEREST

As of December 31, 2018, the Company included the following subsidiary undertakings principally affecting the assets, liabilities, financial position or profit or loss of the Company.

Subsidiary Name	Registered Office	Country of Registration and Principal Place of Business	Class of Share	Percentage Ownership
Indirect subsidiaries:				
Holding companies				
Trinity Acquisition plc	51 Lime Street, London EC3M 7DQ	England and Wales	Ordinary shares	100%
Willis International Limited	51 Lime Street, London EC3M 7DQ	England and Wales	Ordinary shares	100%
Willis US Holding Company, Inc. (now Willis US Holding Company, LLC)	200 Liberty Street, New York, NY 10281	USA	Common shares	100%
GS & Cie Groupe S.A.S.	Immeuble Quai 33, 33/34 Quai de Dion-Bouton, CS 70001, 92814 Puteaux Cedex	France	Ordinary shares	100%
Group services companies				
Willis Group Services Limited	51 Lime Street, London EC3M 7DQ	England and Wales	Ordinary shares	100%
WTW Global Delivery and Solutions India Pvt. Ltd	Plant No.6, Godrej & Boyce Mfg. Co. compound, LBS Marg, Vikhroli (West), Mumbai - 400079	India	Ordinary shares	100%
Insurance broking entities				
Willis Limited	51 Lime Street, London EC3M 7DQ	England and Wales	Ordinary shares	100%
Willis HRH, Inc.	200 Liberty Street, New York, NY 10281	USA	Common shares	100%
Willis North America, Inc.	200 Liberty Street, New York, NY 10281	USA	Common shares	100%
Willis of New York, Inc.	200 Liberty Street, New York, NY 10281	USA	Common shares	100%
Willis Re, Inc.	200 Liberty Street, New York, NY 10281	USA	Common shares	100%
Gras Savoye S.A.S.	Immeuble Quai 33, 33/34 Quai de Dion-Bouton, CS 70001, 92814 Puteaux Cedex	France	Ordinary shares	100%
Miller Insurance Services LLP	70 Mark Lane, London, EC3R 7NQ	England and Wales	Membership interest	85%
Actuarial, consulting and benefit exchange companies				
Towers Watson Delaware Inc. (now Willis Towers Watson US LLC)	160, Greentree Drive, Suite 101, Dover, Kent, DE 19904 (now 251 Little Falls Drive, Wilmington, New Castle County, DE 19808)	USA	Common shares	100%
Towers Watson Limited	Watson House, London Road, Reigate, Surrey, RH2 9PQ	England and Wales	Ordinary shares	100%
Extend Health, Inc. (now Extend Health LLC)	160, Greentree Drive, Suite 101, Dover, Kent, DE 19904 (now 251 Little Falls Drive, Wilmington, New Castle County, DE 19808)	USA	Common shares	100%
Acclaris, Inc.	160, Greentree Drive, Suite 101, Dover, Kent, DE 19904 (now 251 Little Falls Drive, Wilmington, New Castle County, DE 19808)	USA	Common shares	100%

As of December 31, 2018, the Company did not have investments in undertakings of substantial interest that substantially affected the net income or net assets of the Company.

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INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF WILLIS TOWERS WATSON PUBLIC LIMITED COMPANY

Report on the audit of the Parent Company financial statements

Opinion on the Parent Company financial statements of Willis Towers Watson Public Limited Company

In our opinion, the Parent Company financial statements:

- give a true and fair view of the assets, liabilities and financial position of the Company as at December 31, 2018 and of its profit for the financial year then ended; and
- have been properly prepared in accordance with the relevant financial reporting framework and, in particular, with the requirements of the Companies Act 2014.

The Parent Company financial statements we have audited comprise:

- the Statement of Financial Position;
- the Statement of Cash Flows;
- the Statement of Changes in Equity; and
- the related notes 1 to 19, including a summary of significant accounting policies as set out in Note 1.

The relevant financial reporting framework that has been applied in their preparation is the Companies Act 2014 and International Financial Reporting Standards ('IFRSs') as adopted by the European Union and as applied in accordance with the Companies Act 2014 ('relevant financial reporting framework').

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (Ireland) (ISAs (Ireland)) and applicable law. Our responsibilities under those standards are further described in the 'Auditor's responsibilities for the audit of the financial statements' section of our report.

We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in Ireland, including the Ethical Standard issued by The Irish Auditing and Accounting Supervisory Authority (IAASA), as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which ISAs (Ireland) require us to report to you where:

- the directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorized for issue.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current financial year and include the most significant assessed risks of material misstatement (whether or not due to fraud) we identified, including those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Impairment of investment in subsidiaries	
Key audit matter description	We have identified a key audit matter in relation to evaluation of impairment of investment in subsidiaries. There is a risk of material misstatement arising from the estimation of recoverable value, which is calculated as the higher of fair value less costs of disposal and value in use. Refer to Note 8 to the financial statements and the section 'Key sources of estimation uncertainty' in Note 1 to the financial statements.
How the scope of our audit responded to the key audit matter	We performed detailed substantive testing of the recoverable amount. This included evaluation of any indicators of impairment by performing a review of the financial statements of underlying subsidiaries. We performed substantive testing of the methodology used by the management for determining the recoverable amount.
Key observations	We performed the planned procedures without noting any material issues.

Our application of materiality

We define materiality as the magnitude of misstatement that makes it probable that the economic decisions of a reasonably knowledgeable person, relying on the financial statements, would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Based on our professional judgement, we determined materiality for the Company's financial statements as a whole as follows:

Materiality	$80 million (2017: $66 million)
Basis for determining materiality	The basis of materiality is net assets, taking into account the Group materiality of $85 million (2017: $73 million) as stated in our opinion on the consolidated financial statements of the Company. The materiality is approximately 0.7% (2017: 0.6%) of net assets.
Rationale for the benchmark applied	Materiality for the Company's financial statements is based on net assets as the principal activities of the Company are to hold investments in subsidiaries and debt.

We agreed with the Audit Committee that we would report to them any audit differences in excess of $4 million (2017: $3.3 million), as well as differences below that threshold which, in our view, warranted reporting on qualitative grounds. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

An overview of the scope of our audit

The scope of our audit was determined by obtaining an understanding of the Company and its environment, including controls and assessing the risk of material misstatement.

The Parent Company's financial statements were audited by us using the materiality described above. There were no components identified in relation to the Parent Company and accordingly there was no work performed by any component auditor. Audit work to respond to the risks of material misstatement was performed directly by the audit engagement team.

Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in respect of these matters.

Responsibilities of directors

As explained more fully in the directors' responsibilities statement set out on page 62, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view and otherwise comply with the Companies Act 2014, and for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the directors are responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the Company's financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (Ireland) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the IAASA's website at: http://www.iaasa.ie/getmedia/b2389013-1cf6-458b-9b8f-a98202dc9c3a/Descriptionofauditorsresponsiblitiesforaudit.pdf. This description forms part of our auditor's report.

Report on other legal and regulatory requirements

Opinions on other matters prescribed by the Companies Act 2014

Based solely on the work undertaken in the course of the audit, we report that:

- We have obtained all the information and explanations which we consider necessary for the purposes of our audit.
- In our opinion, the accounting records of the Company were sufficient to permit the financial statements to be readily and properly audited and the Statement of Financial Position is in agreement with the accounting records.
- In our opinion, the information given in those parts of the directors' report as specified for our review is consistent with the financial statements and has been prepared in accordance with the Companies Act 2014.

Matters on which we are required to report by exception

Based on the knowledge and understanding of the Company and its environment obtained in the course of the audit, we have not identified material misstatements in those parts of the directors' report that have been specified for our review.

We have nothing to report in respect of the provisions in the Companies Act 2014 which require us to report to you if, in our opinion, the disclosures of directors' remuneration and transactions required by Sections 305 to 312 of the Companies Act 2014 are not made.

Other matter

We have reported separately on the consolidated financial statements of Willis Towers Watson Public Limited Company and its subsidiaries for the financial year ended December 31, 2018.

Use of our report

Our report is made solely to the Company's members, as a body, in accordance with Section 391 of the Companies Act 2014. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members, as a body, for our audit work, for this report, or for the opinions we have formed.

Andrew Downes
For and on behalf of Deloitte LLP
Statutory Audit Firm
London, United Kingdom

27 March 2019

PARENT COMPANY STATEMENT OF FINANCIAL POSITION

	Note	December 31, 2018	2017
		(millions)	
NON-CURRENT ASSETS			
Investments in subsidiaries	8	$ 7,327	$ 6,079
		7,327	6,079
CURRENT ASSETS			
Receivables	10	4,755	6,202
Cash at bank and in hand		—	2
		4,755	6,204
CURRENT LIABILITIES			
Payables	11	96	87
		96	87
NET CURRENT ASSETS		4,659	6,117
TOTAL ASSETS LESS CURRENT LIABILITIES		11,986	12,196
NON-CURRENT LIABILITIES			
Long-term debt	12	498	497
		498	497
NET ASSETS		$ 11,488	$ 11,699
EQUITY			
Called up share capital	13	$ —	$ —
Share premium account		9,420	9,375
Other reserves		530	503
Profit and loss account (i)		1,538	1,821
SHAREHOLDERS' EQUITY		$ 11,488	$ 11,699

(i) The net profit for the year ended December 31, 2018 is $632 million (year ended December 31, 2017: net profit of $720 million).

The accompanying notes are an integral part of the Parent Company Financial Statements.

Approved by the Board of Directors on March 27, 2019 and signed on behalf of the Directors:

/s/ Victor F. Ganzi
Director

/s/ Brendan R. O'Neill
Director

PARENT COMPANY STATEMENT OF CASH FLOWS

	Years ended December 31,	
	2018	2017
	(millions)	
CASH FLOWS FROM OPERATING ACTIVITIES		
Profit/(loss) before tax	$ 632	$ 720
Adjustments for:		
Movement in other assets	(1,171)	19
Movement in other liabilities	2	4
Net cash (used in)/provided by operating activities	(537)	743
CASH FLOWS FROM INVESTING ACTIVITIES		
Proceeds, net of repayments, from intercompany investing activities	1,398	7
Net cash provided by investing activities	1,398	7
CASH FLOWS FROM FINANCING ACTIVITIES		
Repurchase of shares	(602)	(532)
Issue of shares under employee share compensation plans	45	61
Dividends paid	(306)	(277)
Net cash used in financing activities	(863)	(748)
(DECREASE)/INCREASE IN CASH AND CASH EQUIVALENTS	(2)	2
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	2	—
CASH AND CASH EQUIVALENTS, END OF YEAR (i)	$ —	$ 2

(i) Cash and cash equivalents relate only to cash at bank and in hand.

(ii) Cash payments for interest were $29 million (2017: $29 million).

PARENT COMPANY STATEMENT OF CHANGES IN EQUITY

	Share capital	Share premium account	Profit and loss account	Other reserves	Total
			(millions)		
At December 31, 2016	$ —	$ 9,313	$ 1,918	$ 436	$ 11,667
Shares repurchased [i]	—	—	(532)	—	(532)
Net profit	—	—	720	—	720
Dividends paid and payable	—	—	(285)	—	(285)
Issue of shares under employee share compensation plans	—	62	—	—	62
Share-based compensation	—	—	—	67	67
At December 31, 2017	$ —	$ 9,375	$ 1,821	$ 503	$ 11,699
Shares repurchased [i]	—	—	(602)	—	(602)
Net profit	—	—	632	—	632
Dividends paid and payable	—	—	(313)	—	(313)
Issue of shares under employee share compensation plans	—	45	—	—	45
Share-based compensation	—	—	—	27	27
At December 31, 2018	$ —	$ 9,420	$ 1,538	$ 530	$ 11,488

(i) Based on settlement date the Parent Company repurchased 3,918,689 shares (2017: 3,797,491 shares) at an average price of $153.54 in 2018 (2017: $140.19). The amounts used to purchase the shares during 2018 and 2017, which were subsequently canceled, were charged to distributable profits. In accordance with Irish law the parent company maintains a capital redemption reserve fund of $864.00. In addition, 1,415,199 shares were surrendered by shareholders in 2017 following Merger-related appraisal demands (2018: nil), with payment to shareholders being made by a subsidiary undertaking.

NOTES TO THE PARENT COMPANY FINANCIAL STATEMENTS

1. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES

Basis of presentation

Willis Towers Watson plc (the 'Parent Company') is a public company limited by shares incorporated and registered in the Republic of Ireland. Its registered address is Willis Towers Watson House, Elm Park, Merrion Road, Dublin 4, Ireland and its registered number is 475616.

The financial statements of the Parent Company have been prepared in accordance with International Financial Reporting Standards ('IFRSs') as adopted by the European Union and in accordance with the Companies Act 2014.

The financial statements have been prepared on the historical cost basis.

The significant accounting policies adopted by the Parent Company are set out below.

Significant accounting policies

Going concern

The Parent Company's business activities and the factors likely to affect its future development and position are set out in the Directors' Report. The Directors have conducted enquiries into the nature and quality of the assets, liabilities, and cash that make up the capital of the Parent Company and its subsidiaries. Furthermore the Directors' enquiries extend to the relationship of the Parent Company and its subsidiaries with external parties on a financial and non-financial level. Having assessed the responses to their enquiries, the Directors have no reason to believe that a material uncertainty exists that may cast significant doubt upon the ability of the Parent Company to continue as a going concern or its ability to repay loans due from time to time. As a consequence of the enquiries the Directors have a reasonable expectation that the Parent Company has appropriate resources to continue in operational existence for the foreseeable future. For this reason, they continue to adopt the going concern basis in preparing the financial statements.

Foreign currency translation

These financial statements are presented in US dollars which is the currency of the primary economic environment in which the Parent Company operates. Foreign currency transactions are translated using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the profit and loss account.

Dividends receivable

Income from shares in subsidiary undertakings is recognized when the right to receive payment is established.

1. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES (continued)

Dividends payable

Dividends payable are recognized as liabilities and in equity when the obligation to make payment arises.

Share-based payments

The Parent Company has equity-based compensation plans that provide for grants of restricted share units and stock options to directors of the Parent Company who perform services for the Company, and equity-based and cash-settled share-based compensation plans that provide for grants to employees of the Parent Company's subsidiaries. The awards under equity-based compensation are classified as equity and included as a component of equity on the Parent Company's balance sheet, as the ultimate payment of such awards will not be achieved through use of the Parent Company's cash or other assets.

The Parent Company expenses equity-based compensation for directors of the Parent Company on a straight-line basis over the requisite service period based upon the fair value of the award on the date of grant, the estimated achievement of any performance targets and anticipated staff retention. Where the Parent Company enters into share-based payment arrangements involving employees of subsidiaries, the cost of the arrangements is recognized as an addition to 'Investment in subsidiaries'. The Parent Company deducts from 'Investments in subsidiaries' certain recharges to subsidiaries of the cost of the arrangements.

Taxation

Corporation tax is provided at amounts expected to be paid or recovered using the tax rates and laws that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is generally recognized on all temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements although deferred income tax assets are recognized only to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, carried forward tax credits or tax losses can be utilized.

Investments

Investments in subsidiary undertakings are carried at cost less any accumulated allowance for impairment and are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the subsidiary may not be fully recoverable.

Financial assets and financial liabilities

Financial assets and financial liabilities include cash and cash equivalents and receivables as well as payables (including amounts owed to / by group undertakings).

The Parent Company classifies its financial assets as at amortised cost or at fair value through profit or loss, on the basis of the business model in which a financial asset is managed and its contractual cash flow characteristics.

Financial assets and financial liabilities at fair value through profit or loss are initially recognized at fair value, and are subsequently measured at fair value. Gains or losses arising from changes in fair value through profit and loss are presented in the income statement, within interest income or expense, in the period in which they arise.

Financial assets or financial liabilities at amortised cost are initially recognized at fair value, plus or minus transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability, and are subsequently measured at amortized cost using the effective interest method. Any resulting interest is recognized in interest income or interest expense, as appropriate.

The effective interest rate is the rate that exactly discounts estimated future cash receipts (including all fees paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial instrument, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

1. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES (continued)

Impairment of financial assets at amortized cost

At each reporting date, the Company measures the loss allowance for financial assets at amortised cost. Impairment losses on financial assets at amortised cost are recognized in profit or loss on an expected loss basis: lifetime expected losses are recognized for relevant financial assets for which there have been significant increases in credit risk since initial recognition, whereas 12-month expected losses (cash shortfalls over the life of the loan arising from a default in the next 12 months) are recognized if the credit risk on a financial asset has not increased significantly since initial recognition. There would be a rebuttable presumption that the credit risk on a financial asset had increased significantly if it were more than 30 days past due and a rebuttable presumption that a financial asset was in default if it were more than 90 days past due. The amount of any impairment loss is recognized in profit or loss.

Derecognition of financial liabilities

The Parent Company removes a financial liability (or a part of a financial liability) from its statement of financial position when, and only when, it is extinguished, i.e. when the obligation specified in the contract is discharged or cancelled or expires.

Contingencies

The Parent Company has guaranteed certain liabilities of group entities. The Parent Company reviews the status of these guarantees at each reporting date and considers whether it is required to make a provision for payment on those guarantees based on the probability of the commitment being called.

The provision required for the obligation under the guarantee would be measured initially at fair value and subsequently measured at the higher of: (i) the amount of loss allowance for expected credit losses, as determined in accordance with International Financial Reporting Standard ('IFRS') 9 'Financial Instruments'; and (ii) the amounts initially recognized less, where appropriate, the cumulative amount of income recognized in accordance with the principles of IFRS 15 'Revenue From Contracts With Customers'.

Significant recent accounting pronouncements adopted in the current period

In May 2014, the IASB issued IFRS 15 'Revenue From Contracts With Customers', whose core principle is that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This standard has been endorsed by the EU and became mandatorily effective for the Parent Company at the beginning of its 2018 financial year. The Parent Company elected to reflect the aggregate effect of any modifications made to contracts prior to the transition date, January 1, 2018, rather than retrospectively restating any contracts for each of these modifications. Adoption of the standard did not have any significant effect on the Parent Company's financial statements.

In July 2014, the IASB issued IFRS 9 'Financial Instruments', which includes requirements for classification and measurement of financial assets and liabilities, impairment of financial assets and hedge accounting. This standard has been endorsed by the EU and became mandatorily effective for the Parent Company at the beginning of its 2018 financial year. The Parent Company elected to make any required transition adjustments by adjusting the opening January 1, 2018 balance sheet rather than restating prior periods. Adoption of the standard did not have any significant effect on the Parent Company's financial statements.

With effect from 1 January 2018 the Company adopted IFRIC 22 'Foreign Currency Transactions and Advance Consideration' which clarifies how to determine the date of the transaction for the purpose of determining the exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration in a foreign currency: the date is the date on which an entity initially recognizes the non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration. Adoption of the interpretation did not have any significant effect on the Parent Company's financial statements.

With effect from 1 January 2018 the Company adopted the 'Classification and Measurement of Share-based Payment Transactions' amendments to IFRS 2 'Share-based Payment', which contains the following clarifications and amendments:

- cash-settled share-based payment transactions that include a performance condition: guidance on how vesting conditions affect the fair value of liabilities for cash-settled share-based payments; guidance that introduces accounting requirements for cash-settled share-based payments that follows the same approach as used for equity-settled share-based payments;
- share-based payment transactions with a net settlement feature for withholding tax obligations: introduction of an exception so that a share-based payment where the entity settles the share-based payment arrangement net is classified as equity-settled in its entirety provided the share-based payment would have been classified as equity-settled had it not included the net settlement feature); and

1. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES (continued)

- modifications of share-based payment transactions from cash-settled to equity-settled: introduction of the following clarifications: (i) on such modifications, the original liability recognized in respect of the cash-settled share-based payment is derecognized and the equity-settled share-based payment is recognized at the modification date fair value to the extent services have been rendered up to the modification date; and (ii) any difference between the carrying amount of the liability as at the modification date and the amount recognized in equity at the same date would be recognized in profit and loss immediately).

There was no significant effect on the Company's financial statements at the date of adoption, 1 January 2018, nor on profit or loss or cash flows for the year ended December 31, 2018. The effect of adoption on the financial statements at December 31, 2018 was that Share-based compensation (within Other reserves), Investment in subsidiaries (within Non-current assets) and Receivables (within Current assets) were, respectively, $8 million, $7million and $1 million lower than they would otherwise have been, in relation to share-based payment transactions with a net settlement feature for withholding tax obligations.

The Parent Company did not adopt any other new IFRSs or interpretations ('IFRICs') issued by the International Accounting Standards Board ('IASB') during the year ended 31 December 2018 and no other amendments to IFRSs or International Accounting Standards ('IASs') issued or adopted by the IASB had a significant effect on its financial statements.

Significant recent accounting pronouncements to be adopted in future periods

In January 2016, the IASB issued IFRS 16 'Leases', which introduces a single lessee accounting model and requires a lessee to recognize assets and liabilities for all leases with a term of more than twelve months, unless the underlying asset is of low value. This standard has been endorsed by the EU and will become mandatorily effective for the Parent Company at the beginning of its 2019 financial year. The Parent Company expects that this standard will have no significant effect on its financial statements when adopted.

Critical accounting judgments and estimates

The preparation of financial statements in conformity with IFRSs and in the application of the Parent Company's accounting policies, which are described above, requires management to make judgments, estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities as at the dates of the financial statements and the reported amounts of revenues and expenses during the year. Judgments, estimates and assumptions are made about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Critical judgments in applying the Parent Company's accounting policies

Management made no critical judgments, apart from those involving estimations (which are dealt with separately below), in the process of applying the Parent Company's accounting policies.

Key sources of estimation uncertainty

The key assumptions concerning the future, and other key sources of estimation uncertainty at the balance sheet date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are discussed below.

Impairment of investments in subsidiaries

Determining whether the Parent Company's investment in a subsidiary has been impaired requires estimations of the investment's recoverable amount, the higher of its fair value, less costs of disposal, and its value in use. Management judgment is required to identify comparable recent transactions and/or to estimate the future cash flows expected to arise from the investment and select a suitable discount rate to use in calculating present value. See Note 8 to these Parent Company Financial Statements for the carrying amount of investments in subsidiaries. No impairment loss was recognized in 2018 or 2017.

1. BASIS OF PRESENTATION, SIGNIFICANT ACCOUNTING POLICIES AND CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES (continued)

Impairment of financial assets at amortized cost

Management judgment is required to measure the loss allowance for financial assets at amortised cost at the end of each reporting period. See Note 10 to these Parent Company Financial Statements for the carrying amount of financial assets at amortised cost. No impairment loss was recognized in 2018 or 2017. Under IFRS 9 'Financial Instruments', management considers that there had been no significant increases in credit risk since initial recognition and that 12-month expected losses were nil.

Taxation

Management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the level of historical taxable income and projections for future taxable income. Further details are given in Note 6 to these Parent Company Financial Statements.

2. NET PROFIT/(LOSS)

As permitted by section 304 of the Companies Act 2014 the Parent Company is availing itself of the exemption from including its Parent Company only profit and loss account in these financial statements and from filing it with the Registrar of Companies. The net profit for the financial year dealt with in the Parent Company only financial statements amounts to $632 million (December 31, 2017: net profit of $720 million). There is no other comprehensive income in either the financial year ending December 31, 2018 or the preceding financial year.

For financial liabilities accounted for at amortized cost, total interest cost and amortization of transaction costs recognized in profit and loss were $29 million and $1 million, respectively (2017: $29 million and $1 million).

3. EMPLOYEES

The Parent Company employed no staff during the year ended December 31, 2018 and the preceding year.

4. DIRECTORS' REMUNERATION

Information regarding directors' remuneration is included in Note 18 to the Consolidated Financial Statements and Note 14 to these Parent Company Financial Statements.

Information regarding directors' interests in stock and stock options for the consolidated Company is included in the Directors' Report under the heading 'Directors' and Secretary's Interests'.

5. AUDITOR'S REMUNERATION

	Year ended December 31,	
	2018	2017
	(thousands)	
Audit of individual financial statements	$ 12	$ 10
Other assurance services (i)	1,271	1,291
Tax advisory services	—	—
Other non-audit services	—	—
Total remuneration (ii)	$ 1,283	$ 1,301

(i) Comprises $138,000 for audit of the Consolidated Financial Statements under Irish law and $1,133,000 for contribution to US GAAP audit of the Consolidated Financial Statements (2017: $155,000 and $1,136,000, respectively).

(ii) Excludes remuneration to Deloitte LLP's affiliates. Includes out-of-pocket expenses.

Note 18 to the Consolidated Financial Statements provides additional details of auditor's remuneration paid by the Company.

6. TAXATION

The tax charge on ordinary activities is shown below:

	Years ended December 31, 2018	Years ended December 31, 2017
	(millions)	
Analysis of tax charge for the year		
Current tax		
Irish corporation tax on non-trading profit at 25% (2017: 25%)	$ —	$ —
Current tax charge on profit on ordinary activities	$ —	$ —
Factors affecting tax charge for the year		
The tax assessed for the year is lower than the standard rate of corporation tax on non-trading activities in Ireland (25%). The differences are explained below:		
Profit before taxation	$ 632	$ 720
Profit multiplied by the standard rate of corporation tax on non-trading activities in Ireland of 25%	$ 158	$ 180
Effects of:		
Intercompany dividend income not taxable	(167)	(181)
Profit on share exchange on December 22, 2017 (see Note 8 to these Parent Company Financial Statements) not taxable	—	(9)
Non-deductible financing expenses	8	8
Disallowable expenditure	1	1
Losses surrendered for nil consideration	—	1
Total current tax charge for the year	$ —	$ —

7. DIVIDENDS

	Years ended December 31, 2018	Years ended December 31, 2017
	(millions)	
First interim payable April	$ 79	$ 72
Second interim payable July	76	72
Third interim payable October	80	71
Fourth interim payable January (i)	78	70
Total dividends (i) (ii) (iii)	$ 313	$ 285

(i) The 2018 interim dividends were each of $0.60 per share (2017: $0.53 per share). The dividend declared during the fourth quarter of 2018 of $78 million (2017: $70 million) was subsequently paid on January 15, 2019 (2017: January 16, 2018) to shareholders of record as at December 31, 2018 (2017: December 31, 2017).

(ii) The Parent Company has subsequently declared a first interim dividend in the first quarter of 2019 of $0.65 per share payable on or about April 15, 2019 to shareholders of record on March 31, 2019.

(iii) See Note 11 to these Parent Company Financial Statements for accrued dividends payable at December 31, 2018.

8. INVESTMENTS IN SUBSIDIARIES

	Subsidiary undertakings (millions)
Cost and carrying amount	
Balance at December 31, 2016	$ 5,011
Increase in investment in Willis Towers Watson Sub Holdings Unlimited Company by way of contribution	1,000
Willis Risk Services Holdings (Ireland) Limited shares transferred to direct subsidiary Willis Towers Watson Sub Holdings Unlimited Company	(104)
Increase in investment in Willis Towers Watson Sub Holdings Unlimited Company by way of share issue	139
Share-based compensation (i)	33
Balance at December 31, 2017	$ 6,079
Increase in investment in Willis Towers Watson Sub Holdings Unlimited Company by way of contribution	1,257
Share-based compensation (ii)	(9)
Balance at December 31, 2018	$ 7,327

(i) Net of $34 million share-based compensation recharged to subsidiaries.

(ii) Net of $36 million share-based compensation recharged to subsidiaries.

On February 28, 2017, the Parent Company and certain of its subsidiaries undertook a number of transaction steps to effect a refinancing:

- Willis Investment UK Holdings Limited and Willis Netherlands Holdings B.V. agreed to refinance $1,000 million of existing notes issued by Willis Investment UK Holdings Limited, and held by Willis Netherlands Holdings B.V., with a single 5-year interest-bearing note of $1,000 million, to facilitate the further integration and expansion of the merged group.
- Willis Netherlands Holdings B.V. then issued a new 5-year interest-free note of $1,000 million to Willis Towers Watson Sub Holdings Unlimited Company in exchange for a $1,000 million Transitory Note.
- Willis Netherlands Holdings B.V. then transferred the Transitory Note to the Parent Company in full and final settlement of $1,000 million of existing notes issued by Willis Netherlands Holdings B.V. and held by the Parent Company.
- The Parent Company then contributed the Transitory Note to Willis Towers Watson Sub Holdings Unlimited Company by way of a gift whereby the Transitory Note was extinguished.

On December 22, 2017, the Parent Company transferred its shares in Willis Risk Services Holdings (Ireland) Limited with a carrying amount of $104 million and a fair value of $139 million to Willis Towers Watson Sub Holdings Unlimited Company in exchange for one newly-issued share in Willis Towers Watson Sub Holdings Unlimited Company. The $35 million gain on the exchange has been recognized in the income statement.

On October 1, 2018, the Parent Company and certain of its subsidiaries undertook a number of transaction steps to effect a refinancing:

- Willis Netherlands Holdings B.V. issued an interest free loan for $1,257 million to Willis Towers Watson Sub Holdings Unlimited Company in exchange for two transitory notes, being ‘Transitory Note 1’ for $787 million and ‘Transitory Note 2’ for $470 million.
- Willis Investment UK Holdings Limited issued an interest bearing note for $787 million to Willis Netherlands Holdings B.V. in exchange for Transitory Note 1.
- TA I Limited issued an interest bearing note for $470 million to Willis Netherlands Holdings B.V. in exchange for Transitory Note 2.
- Willis Investment UK Holdings Limited transferred Transitory Note 1 to Willis Netherlands Holdings B.V. as full and final settlement of existing notes to the value of $787 million.
- TA I Limited transferred Transitory Note 2 to Willis Netherlands Holdings B.V. as full and final settlement of existing notes to the value of $470 million.

8. INVESTMENTS IN SUBSIDIARIES (continued)

- Willis Netherlands Holdings B.V. transferred Transitory Notes 1 and 2 to the Parent Company as full and final settlement of existing notes to the total value of $1,257 million.
- The Parent Company contributed Transitory Notes 1 and 2 to Willis Towers Watson Sub Holdings Unlimited Company by way of a gift whereby the Transitory Notes were extinguished.

9. SHARES IN SUBSIDIARY UNDERTAKINGS

As of December 31, 2018, the Parent Company controlled the following subsidiary undertakings principally affecting the assets, liabilities, financial position or profit or loss of the Company.

Subsidiary Name	Registered Office	Country of Registration and Principal Place of Business	Class of Share	Percentage Ownership
Indirect subsidiaries:				
Holding companies				
Trinity Acquisition plc	51 Lime Street, London EC3M 7DQ	England and Wales	Ordinary shares	100%
Willis International Limited	51 Lime Street, London EC3M 7DQ	England and Wales	Ordinary shares	100%
Willis US Holding Company, Inc. (now Willis US Holding Company, LLC)	200 Liberty Street, New York, NY 10281	USA	Common shares	100%
GS & Cie Groupe S.A.S.	Immeuble Quai 33, 33/34 Quai de Dion-Bouton, CS 70001, 92814 Puteaux Cedex	France	Ordinary shares	100%
Group services companies				
Willis Group Services Limited	51 Lime Street, London EC3M 7DQ	England and Wales	Ordinary shares	100%
WTW Global Delivery and Solutions India Pvt. Ltd	Plant No.6, Godrej & Boyce Mfg. Co. compound, LBS Marg, Vikhroli (West), Mumbai - 400079	India	Ordinary shares	100%
Insurance broking entities				
Willis Limited	51 Lime Street, London EC3M 7DQ	England and Wales	Ordinary shares	100%
Willis HRH, Inc.	200 Liberty Street, New York, NY 10281	USA	Common shares	100%
Willis North America, Inc.	200 Liberty Street, New York, NY 10281	USA	Common shares	100%
Willis of New York, Inc.	200 Liberty Street, New York, NY 10281	USA	Common shares	100%
Willis Re, Inc.	200 Liberty Street, New York, NY 10281	USA	Common shares	100%
Gras Savoye S.A.S.	Immeuble Quai 33, 33/34 Quai de Dion-Bouton, CS 70001, 92814 Puteaux Cedex	France	Ordinary shares	100%
Miller Insurance Services LLP	70 Mark Lane, London, EC3R 7NQ	England and Wales	Membership interest	85%
Actuarial, consulting and benefit exchange companies				
Towers Watson Delaware Inc. (now Willis Towers Watson US LLC)	160, Greentree Drive, Suite 101, Dover, Kent, DE 19904 (now 251 Little Falls Drive, Wilmington, New Castle County, DE 19808)	USA	Common shares	100%
Towers Watson Limited	Watson House, London Road, Reigate, Surrey, RH2 9PQ	England and Wales	Ordinary shares	100%
Extend Health, Inc. (now Extend Health LLC)	160, Greentree Drive, Suite 101, Dover, Kent, DE 19904 (now 251 Little Falls Drive, Wilmington, New Castle County, DE 19808)	USA	Common shares	100%
Acclaris, Inc.	160, Greentree Drive, Suite 101, Dover, Kent, DE 19904 (now 251 Little Falls Drive, Wilmington, New Castle County, DE 19808)	USA	Common shares	100%

The Parent Company did not have material undertakings of substantial interest at December 31, 2018.

10. RECEIVABLES

	December 31,	
	2018	2017
	(millions)	
Amounts due from subsidiary undertakings (i)	$ 4,755	$ 6,202
Total debtors	$ 4,755	$ 6,202

(i) The fair value of these amounts due from subsidiary undertakings, which are repayable on demand and non-interest bearing, was the same as the carrying amount as of December 31, 2018 and December 31, 2017.

11. CURRENT LIABILITIES

	December 31,	
	2018	2017
	(millions)	
Payables:		
Accrued dividends payable (i)	$ 84	$ 74
Accrued expenses	1	—
Interest payable	8	8
Other creditors	3	5
Total current liabilities (ii)	$ 96	$ 87

(i) Accrued dividends payable at December 31, 2018 includes $6 million dividends accrued in relation to share-based compensation units (December 31, 2017: $4 million).

12. NON-CURRENT LIABILITIES

	December 31,	
	2018	2017
	(millions)	
Long-term debt, net of debt issuance costs (i):		
5.750% senior notes due 2021	$ 498	$ 497
Total non-current liabilities (ii)	$ 498	$ 497

(i) The fair value of these senior notes as of December 31, 2018 was $519 million (2017: $541 million). The fair value is based on quoted market values and classified as a Level 2 measurement (fair value estimated using observable market-based inputs or unobservable inputs that are corroborated by market data).

(ii) The movements in non-current liabilities during 2018 and 2017 comprise non-cash changes.

13. CALLED UP SHARE CAPITAL

	December 31,	
	2018	2017
	Number (thousands)	
Authorized share capital		
Ordinary shares of €1 each	40	40
Ordinary shares of $0.000304635 (i) (ii)	1,510,004	1,510,004
Preferred shares of $0.000115	1,000,000	1,000,000

13. CALLED UP SHARE CAPITAL (continued)

	December 31,	
	2018	2017
	(thousands)	
Allotted, called up and fully paid		
128,921,530 ordinary shares in 2018 of $0.000304635 each (2017: 132,139,581) (i) (ii)	$ 39	$ 40
40,000 ordinary shares of €1 each	59	59
Balance at December 31	$ 98	$ 99

(i) At December 31, 2018 a subsidiary of the Parent Company held 17,519 ordinary shares of $0.000304635 par value (December 31, 2017: 17,519) in a trust.

(ii) At December 31, 2018 the Parent Company held nil treasury shares (December 31, 2017: nil).

The Parent Company is authorized to repurchase shares, by way of redemption, and considers it an effective mechanism for the return of excess cash to shareholders. The Parent Company will consider whether to do so from time to time based on market conditions and other desired uses of cash.

The following table presents specified information about the Parent 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

An analysis of movements on shares held by the Parent Company is as follows:

	Year Ended December 31, 2018					
	Ordinary shares, $0.000304635 nominal value			Ordinary shares, €1 nominal value		
	Number of shares	Percentage of the called-up share capital	Nominal value (thousands)	Number of shares	Percentage of the share class	Nominal value (thousands)
Balance at January 1, 2018	17,519	Under 0.01%	$—	40,000	100%	$—
Shares repurchased	3,918,689		1	—		—
Shares canceled	(3,918,689)		(1)	—		—
Balance at December 31, 2018	17,519	Under 0.01%	$—	40,000	100%	$—

14. RELATED PARTY TRANSACTIONS

The Parent Company's related parties include subsidiaries, associates and Key Management Personnel.

Transactions with Directors and other Key Management Personnel

Key Management Personnel are defined as those persons having authority and responsibility for planning, directing and controlling the activities of the Parent Company and comprise the Directors of the Parent Company as of December 31, 2018.

Remuneration of the Key Management Personnel for services rendered to the Parent Company during the year is analyzed below:

	Year ended December 31,	
	2018	2017
	(millions)	
Short-term employment benefits	$ 1	$ 1
Total remuneration of Key Management Personnel (i)	$ 1	$ 1

(i) Includes nil (2017: nil) paid or due to any connected persons.

14. RELATED PARTY TRANSACTIONS (continued)

The Parent Company entered into no other transactions with Key Management Personnel in 2018 or 2017, and there were no balances in respect of other transactions as of December 31, 2018 or December 31, 2017.

Transactions with subsidiaries

Transactions relating to the cost of the Parent Company's investment in its subsidiaries are described in Note 8 to these Parent Company Financial Statements.

Transactions of the Parent Company with its subsidiaries on intercompany debtor accounts during the year, and amounts due from subsidiaries as of the year end, are analyzed below:

	Year ended December 31,			
	2018		2017	
	Balance at the end of the financial year	Transactions in the financial year (i)	Balance at the end of the financial year	Transactions in the financial year (i)
	(millions)			
Willis Netherlands Holdings B.V.	$ 4,511	$ (1,257)	$ 5,768	$ (1,010)
Willis Group Services Limited	133	(226)	359	(51)
Other subsidiaries	111	36	75	34
Total	$ 4,755	$ (1,447)	$ 6,202	$ (1,027)

(i) Includes the effect of foreign exchange movements.

Transactions with Willis Netherlands Holdings B.V. in 2018 represent, primarily, the October 1, 2018 refinancing described in Note 8 to these Parent Company Financial Statements whereby Willis Netherlands Holdings B.V. transferred two Transitory Notes to the Parent Company in full and final settlement of $1,257 million of existing notes issued by Willis Netherlands Holdings B.V. and held by the Parent Company.

Transactions with Willis Netherlands Holdings B.V. in 2017 represent, primarily, the February 28, 2017 refinancing described in Note 8 to these Parent Company Financial Statements, whereby Willis Netherlands Holdings B.V. transferred a Transitory Note to the Parent Company in full and final settlement of $1,000 million of existing notes issued by Willis Netherlands Holdings B.V. and held by the Parent Company.

Transactions with Willis Group Services Limited in each of 2018 and 2017 represent the net decrease in lending by the Parent Company, the amount of lending by the Parent Company having been determined by the Parent Company's own need for cash. The movements during each of 2018 and 2017 in the amount lent to Willis Group Services Limited relate, primarily, to additional lending out of dividends received by the Parent Company from Willis Towers Watson Sub Holdings Unlimited Company and amounts received by the Parent Company on the exercise of share options, that were more than offset by reduced lending due to repurchase of the Parent Company's shares, dividend payments on the Parent Company's shares and interest payments on the Parent Company's senior debt.

Transactions with other subsidiaries in 2018 and 2017 represent share-based compensation recharges.

The balances are intercompany advances that are repayable on demand and non-interest bearing. The amounts outstanding are unsecured and no guarantees have been given or received in respect of them.

No impairment loss was recognized in 2018 or 2017 in respect of amounts owed by related parties.

See Note 15 to these Parent Company Financial Statements for details of guarantees given by the Parent Company.

Transactions with undertakings of substantial interest

There were no transactions with undertakings of substantial interest in 2018 or 2017, and no balances in respect of such transactions as of December 31, 2018 or December 31, 2017.

15. FINANCIAL GUARANTEE CONTRACTS

As the holding company of Willis Towers Watson, the Parent Company guarantees borrowings (as detailed below), certain local letters of credit, guarantees in respect of certain subsidiaries' leasehold obligations and guarantees in respect of certain of its UK and Irish subsidiaries' obligations to fund the UK and Irish defined benefit pension plans.

Borrowings

See Note 12 to these Parent Company Financial Statements for information about the Parent Company's debt.

The Parent Company previously guaranteed, on a joint and several basis with certain of its subsidiary undertakings, the following debt securities issued by its subsidiary undertaking Willis North America Inc.:

- $394 million 6.200% Senior Notes due 2017 (repaid on March 28, 2017)

The Parent Company guarantees, on a joint and several basis with certain of its subsidiary undertakings, the following debt securities issued by its subsidiary undertaking Willis North America Inc.:

- $187 million 7.000% Senior Notes due 2019
- $650 million 3.600% Senior Notes due 2024 (issued on May 16, 2017)
- $600 million 4.500% Senior Notes due 2028 (issued on September 10, 2018)
- $400 million 5.050% Senior Notes due 2048 (issued on September 10, 2018)

The Parent Company guarantees, on a joint and several basis with certain of its subsidiary undertakings, the following debt securities issued by its subsidiary undertaking Trinity Acquisition plc:

- $450 million 3.500% Senior Notes due 2021
- €540 million 2.125% Senior Notes due 2022
- $250 million 4.625% Senior Notes due 2023
- $550 million 4.400% Senior Notes due 2026
- $275 million 6.125% Senior Notes due 2043

The Parent Company previously guaranteed, on a joint and several basis with certain of its subsidiary undertakings, a $800 million revolving credit facility entered into by its subsidiary undertaking Trinity Acquisition plc that was replaced on March 7, 2017.

The Parent Company guarantees, on a joint and several basis with certain of its subsidiary undertakings, the replacement $1.25 billion revolving credit facility entered into by its subsidiary undertaking Trinity Acquisition plc on March 7, 2017 that will mature on March 7, 2022. Amounts outstanding under the facility 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 against the facility 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 entered into by Trinity Acquisition plc.

The Parent Company previously guaranteed, on a joint and several basis with certain of its subsidiary undertakings, a $400 million revolving note and cash subordination agreement entered into by its subsidiary undertaking Willis Securities Inc. The facility expired on April 28, 2017.

See Note 11 to the Consolidated Financial Statements for further details.

Taking into account the inherent uncertainties involved in estimating the cash flows under the financial guarantee contracts and the credit risk of the counterparties, the fair value of these inter-company guarantee contracts are considered to approximate carrying amount. Furthermore, the Company considers that it is more likely than not that such an amount will not be payable under the financial guarantee contracts.

15. FINANCIAL GUARANTEE CONTRACTS (continued)

UK pension scheme contributions

The Company is a guarantor, on a joint and several basis with certain of its subsidiary undertakings, of a schedule of contributions to the end of 2024, commencing April 1, 2018, agreed with the trustee of the Legacy Willis defined benefit pension plan in the U.K. by the employing companies. Based on this agreement, deficit funding contributions in 2019 will total approximately £25 million ($32 million) and ongoing contributions (excluding salary sacrifice) will total approximately £14 million ($18 million). Annual deficit funding contributions will remain at approximately £25 million ($32 million) to 2024, after which it is expected that contributions will cease. With regards to the annual deficit funding contributions payable from 2021, the employing companies and the Trustee will seek to reach agreement over the payment being made to a Reservoir Trust arrangement as well as the circumstances governing that arrangement.

16. SHARE-BASED PAYMENTS

Details of share-based compensation relating to the shares of the Parent Company are provided in Note 21 to the Consolidated Financial Statements.

Total share-based payment cost recognized in profit and loss was $1 million (2017: $2 million), relating to equity-settled share-based payment transactions.

17. CAPITAL MANAGEMENT AND FINANCIAL RISK MANAGEMENT

Capital management

The Parent Company manages its capital to ensure that it will be able to continue as a going concern. The Parent Company has both debt and equity capital which it uses to invest in the activities of Willis Towers Watson. Amounts are disclosed in Notes 12 and 13 to these Parent Company Financial Statements. The capital structure of the Parent Company is reviewed at least annually as part of the review of the Company's capital structure by the Board of Directors. The Parent Company is not subject to externally imposed capital requirements.

Financial risk management

The Parent Company's financial risks are managed by the Treasury function of Willis Towers Watson. These risks comprise market risk (including currency risk, interest rate risk and other price risk), credit risk and liquidity risk.

Market risk

The Parent Company transacts in certain other currencies in addition to the US Dollar, its functional currency, and is therefore exposed to movements in exchange rates, primarily in respect of Pounds Sterling and Euro. However, approximately 99 percent of the Parent Company's expenses in 2018 (2017: approximately 97 percent) were denominated in US dollars and the Parent Company's income, assets and liabilities at December 31, 2018 included no significant amounts that were not denominated in US dollars (2017: amounts due to subsidiaries of Euro 1 million).

The Parent Company pays fixed rate interest on its senior debt.

The Parent Company's profit for the 2018 financial year and equity as of December 31, 2018 would not have been significantly affected by a reasonably possible increase or decrease of 5% in the average rates for the year or the year-end rates of Pounds Sterling or Euro against the US Dollar.

Credit risk

The Parent Company is potentially exposed to credit risk from its investments in, and amounts due from, its subsidiary undertakings. An impairment allowance would be made if there were to be expected losses. No such expected losses have been identified.

The Parent Company's maximum exposure to credit risk in relation to financial assets is shown in Note 10 to these Parent Company Financial Statements. The Parent Company calculates expected credit losses on its receivables taking into account the probability of default and the loss given default. No receivables have been past due during 2018 or 2017 and the parent has had no cause to rebut the presumptions described in 'Impairment of financial assets at amortized cost' in Note 1 to these Parent Company Financial Statements. The Parent Company considers that as receivables comprise only amounts due from entities which it controls there is no significant probability of default in relation to these balances.

17. CAPITAL MANAGEMENT AND FINANCIAL RISK MANAGEMENT (continued)

Liquidity risk

The undiscounted remaining contractual maturity of the principal and interest amounts of the Parent Company's senior debt is analyzed below:

Obligations	Payments due by			
	Total	2019	2020	2021
	(millions)			
5.750% senior notes due 2021	$ 500	$ —	$ —	$ 500
Interest on senior notes	63	29	29	5
Total senior notes and related interest	$ 563	$ 29	$ 29	$ 505

The Parent Company, together with the Treasury function of Willis Towers Watson, manages amounts due from subsidiary undertakings to ensure that it has sufficient funds to repay senior debt, and interest on that debt, as it falls due.

18. IFRS 9 ADOPTION

	IAS 39 measurement category at December 31, 2017	IFRS 9 measurement category at January 1, 2018 and December 31, 2018	Carrying amount at December 31, 2017	IFRS 9 reclassification	IFRS 9 remeasurement including expected credit losses	Carrying amount at January 1, 2018
			(millions)			
Assets						
Investments in subsidiaries	N/A	N/A	$ 6,079	$ —	$ —	$ 6,079
Receivables	Amortized cost	Amortized cost	6,202	—	—	6,202
Cash at bank and in hand	Amortized cost	Amortized cost	2	—	—	2
Total assets			$ 12,283	$ —	$ —	$ 12,283
Liabilities						
Payables	Amortized cost	Amortized cost	$ 87	$ —	$ —	$ 87
Long-term debt	Amortized cost	Amortized cost	497	—	—	497
Total liabilities			$ 584	$ —	$ —	$ 584

19. SUBSEQUENT EVENTS

Dividend

On February 27, 2019, the Parent Company declared a first interim dividend of $0.65 per share, payable on or about April 15, 2019 to shareholders of record on March 31, 2019.