(Mark One)

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

✓ ANNUAL REPORT PU	RSUANT TO SECTIO For the fiscal ye		OF THE SECURITIES EXCHANGE ACT OF 1934 ber 31, 2019
	N REPORT PURSUAN ACT OF 1934	T TO SECTION	13 OR 15(d) OF THE SECURITIES
	For the transition period	od from	to
	Commissio	on file number 1	-13908
		Invesco vesco Ltd	
	(Exact Name of Regi		
Be	rmuda		98-0557567
(State or Other Jurisdiction of	f Incorporation or Organ	eization)	(I.R.S. Employer Identification No.)
1555 Peachtree Street, N.I	E., Suite 1800, Atla	nta, GA	30309
(Address of Princi	pal Executive Offices)		(Zip Code)
Reg	strant's telephone num	ber, including a	rea code: (404) 892-0896
Securities registered pursuant to Section 12(b) of t	he Act:		
Title of each class	Trading Symbol(s)		Name of each exchange on which registered
Common stock, \$0.20 par value	IVZ		New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None					
Indicate by check mark if the registrant is a well-known, seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☑ No □					
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes \square No \square					
Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes \square No \square	s (or				
Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this hapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes \square No \square Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the efinitions of "large accelerated filer," "scelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):					
Large accelerated filer ✓ Accelerated filer □ Non-accelerated filer □ Smaller reporting company					
Emerging growth company					
If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting tandards provided pursuant to Section 13(a) of the Exchange Act.					
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act.) Yes \square No \square At June 30, 2019, the aggregate market value of the voting stock held by non-affiliates was \$9.5 billion, based on the closing price of the registrant's Common Shares, par value U.S. \$0.20 per					

DOCUMENTS INCORPORATED BY REFERENCE

share, on the New York Stock Exchange. At January 31, 2020, the most recent practicable date, the number of Common Shares outstanding was 453,404,987.

The registrant will incorporate by reference information required in response to Part III, Items 10-14 in its definitive Proxy Statement for its annual meeting of shareholders, to be filed with the Securities and Exchange Commission within 120 days after December 31, 2019.

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SPECIAL CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Report, other public filings and oral and written statements by us and our management, may include statements that constitute "forward-looking statements" within the meaning of the United States securities laws. These statements are based on the beliefs and assumptions of our management and on information available to us at the time such statements are made. Forward-looking statements include information concerning future results of our operations, expenses, earnings, liquidity, cash flows and capital expenditures, industry or market conditions, assets under management, acquisitions and divestitures, debt and our ability to obtain additional financing or make payments, regulatory developments, demand for and pricing of our products, the prospects for certain legal contingencies, and other aspects of our business or general economic conditions. In addition, when used in this Report or such other documents or statements, words such as "believes," "expects," "anticipates," "intends," "plans," "estimates," "projects," "forecasts," and future or conditional verbs such as "will," "may," "could," "should," and "would," and any other statement that necessarily depends on future events, are intended to identify forward-looking statements.

Forward-looking statements are not guarantees and they involve risks, uncertainties and assumptions. Although we make such statements based on assumptions that we believe to be reasonable, there can be no assurance that actual results will not differ materially from our expectations. In most cases, such assumptions will not be expressly stated. We caution investors not to rely unduly on any forward-looking statements.

The following important factors, and other factors described elsewhere in this Report or contained in our other filings with the U.S. Securities and Exchange Commission (SEC), among others, could cause our results to differ materially from any results described in any forward-looking statements:

- significant fluctuations in the performance of capital and credit markets worldwide;
- adverse changes in the global economy;
- the performance of our investment products;
- significant changes in net asset flows into or out of the accounts we manage or declines in market value of the assets in, or redemptions or other withdrawals from, those accounts;
- competitive pressures in the investment management business, including consolidation, which may force us to reduce fees we earn;
- any inability to adjust our expenses quickly enough to match significant deterioration in markets;
- the effect of fluctuations in interest rates, liquidity and credit markets in the U.S. or globally, including regulatory reform of benchmarks, such as LIBOR;
- our ability to acquire and integrate other companies into our operations successfully and the extent to which we can realize anticipated product sales, cost savings or synergies from such acquisitions;
- the occurrence of breaches and errors in the conduct of our business, including any failure to properly safeguard confidential and sensitive information, cyber-attacks or acts of fraud;
- our ability to attract and retain key personnel, including investment management professionals;
- limitations or restrictions on access to distribution channels for our products;
- our ability to develop, introduce and support new investment products and services;
- our ability to comply with client contractual requirements and/or investment guidelines despite preventative compliance procedures and controls;
- · variations in demand for our investment products or services, including termination or non-renewal of our investment management agreements;
- harm to our reputation;
- our ability to maintain our credit ratings and access the capital markets in a timely manner;
- our debt and the limitations imposed by our credit facility;
- exchange rate fluctuations, especially as against the U.S. Dollar;
- the effect of political, economic or social instability in or involving countries in which we invest or do business (including the effect of terrorist attacks, war and other hostilities);
- the effect of failures or delays in support systems or customer service functions, and other interruptions of our operations;
- the effect of non-performance by our counterparties, third party service providers and other key vendors to fulfill their obligations;
- impairment of goodwill and other intangible assets;
- pandemics or other widespread health crises and governmental responses to the same;
- · adverse results in litigation and any other regulatory or other proceedings, governmental investigations, and enforcement actions; and

enactment of adverse federal, state or foreign legislation or changes in government policy or regulation (including accounting standards) affecting our
operations, our capital requirements or the way in which our profits are taxed.

Other factors and assumptions not identified above were also involved in the derivation of these forward-looking statements, and the failure of such other assumptions to be realized may also cause actual results to differ materially from those projected. For more discussion of the risks affecting us, please refer to Item 1A, "Risk Factors."

You should consider the areas of risk described above in connection with any forward-looking statements that may be made by us and our businesses generally. We expressly disclaim any obligation to update any of the information in this or any other public report if any forward-looking statement later turns out to be inaccurate, whether as a result of new information, future events or otherwise. For all forward-looking statements, we claim the "safe harbor" provided by Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended.

PART I

Item 1. Business

Introduction

Invesco Ltd. (Invesco or the company) is an independent investment management firm dedicated to delivering an investment experience that helps people get more out of life. Our comprehensive range of active, passive and alternative investment capabilities has been constructed over many years to help clients achieve their investment objectives. We draw on this comprehensive range of capabilities to provide customized solutions designed to deliver key outcomes aligned to client needs.

With more than 8,000 employees and an on-the-ground presence in 26 countries, Invesco is well positioned to meet the needs of investors across the globe. We have specialized investment teams managing investments across a broad range of asset classes, investment styles and geographies. For decades, individuals and institutions have viewed our organization as a trusted partner for a broad range of investment needs. We have a significant presence in the retail and institutional markets within the investment management industry in North America, EMEA (Europe, Middle East and Africa) and Asia-Pacific, serving clients in more than 120 countries. As of December 31, 2019, the firm managed approximately \$1.2 trillion in assets for investors around the world.

The key drivers of success for Invesco are long-term investment performance, competitive pricing which we achieve through scaling our business, high-quality client service and effective distribution relationships, delivered across a diverse spectrum of investment management capabilities, distribution channels, geographic areas and market exposures. By achieving success in these areas, we seek to deliver better outcomes for clients and generate competitive investment results, positive net flows, increased assets under management (AUM) and associated revenues. We are affected significantly by market movements, which are beyond our control; however, we endeavor to mitigate the impact of market movements by maintaining broad diversification across asset classes, investment vehicles, client domiciles and geographies. We've also taken a number of steps to increase our efficiency and effectiveness, which enable us to provide a high level of value to clients. We measure relative investment performance by comparing our investment capabilities to competitors' products, industry benchmarks and client investment objectives. Generally, distributors, investment advisors and consultants take into consideration longer-term investment performance (e.g., three-year and five-year performance) in their selection of investment products and manager recommendations to their clients, although shorter-term performance may also be an important consideration. Third-party ratings may also influence client investment decisions. We monitor quality of client service in a variety of ways, including periodic client satisfaction surveys, analysis of response times and redemption rates, competitive benchmarking of services and feedback from investment consultants.

Invesco Ltd. is organized under the laws of Bermuda. Our common shares are listed and traded on the New York Stock Exchange under the symbol "IVZ." We maintain a website at www.invesco.com. (Information contained on our website shall not be deemed to be part of, or be incorporated into, this document).

Strategy

The company focuses on four key long-term strategic objectives that are designed to sharpen our focus on client needs, further strengthen our business over time and help ensure our long-term success:

- Achieve strong, long-term investment performance across distinct investment capabilities with clearly articulated investment philosophies and
 processes, aligned with client needs;
- Be instrumental to our clients' success by delivering our distinctive investment capabilities worldwide to meet their needs;
- Harness the power of our global platform by continuously improving execution effectiveness to enhance quality and productivity, and allocating our resources to the opportunities that will best benefit clients and our business; and
- Perpetuate a high-performance organization by driving greater transparency, accountability, diversity of thought, fact-based decision making and
 execution at all levels.

As an integrated global investment manager, we are keenly focused on meeting clients' needs and operating effectively and efficiently. We take a unified approach to our business and present our financial statements and other disclosures under the single operating segment "investment management."

We believe one of Invesco's greatest strengths is our separate, distinct investment teams in multiple markets across the globe. A key focus of our business is fostering a strong investment culture and providing the support that enables our investment teams to maintain well-performing investment capabilities. We believe the ability to leverage the capabilities of our investment teams to help clients across the globe achieve their investment objectives is a significant differentiator for our firm.

Environmental, social and governance ("ESG") responsibility

ESG investment stewardship

Invesco's differentiated approach to ESG investment stewardship is guided by our purpose - to deliver an investment experience that helps people get more out of life. We define ESG investment stewardship as the inclusion of ESG issues in investment analysis and decisions, as well as the use of our rights and positions of ownership to seek to influence the activities or behaviors of companies we invest in on behalf of our clients.

Invesco has been implementing ESG investment strategies for over 30 years and today we deliver these strategies through certain equities, fixed income, multi-asset, alternatives, real estate, ETFs and bespoke investment solutions mandates. We aim for such mandates to continuously develop and deliver ESG investment solutions, which take into consideration ESG research, analysis, and risk assessments. We believe that material ESG risks inherent in or taken by a company in which we invest or seek to invest on behalf of our clients may adversely impact the fundamentals of that company and negatively impact achieving the investment objective of such mandates.

Our commitment to ESG investment stewardship is also evidenced, in part; by

- being a signatory to the United Nations Principles for Responsible Investment ("PRI");
- · receiving an annual assessment of "A+" for strategy and governance from PRI for three consecutive years; and
- being a signatory to the UK Stewardship Code and Japan Stewardship.

In addition, Invesco believes the voting of proxies of companies in which we invest should be managed with the same care as all other elements of the investment process. Our proxy voting process is driven by investment professionals and focuses on maximizing long-term value for our clients, which, in part, is driven by appropriate ESG practices. Our ESG practices seek, where appropriate, to promote sustainable social and environmental targets, in line with investor organizations like PRI, the stewardship codes discussed above and initiatives like the Task Force on Climate Related Disclosure.

For more information regarding Invesco's ESG investment stewardship, please see our most recent Investment Stewardship and Proxy Voting Report on the company's website.

Corporate Stewardship

At Invesco, corporate stewardship efforts are motivated by the belief that doing what is right for the environment, our people and the communities in which we have a presence helps us deliver positive outcomes for our shareholders. We actively partner with non-profits, start-ups and other organizations to improve financial education, protect the environment, promote environmental sustainability, champion diversity and inclusion in our industry and our company, and support and collaborate with our local civic and community organizations to improve life in our cities.

Operating environmentally responsibly is fundamental to our corporate stewardship. Invesco seeks to help protect our natural environment by implementing and maintaining environmental management processes - for example, at Invesco offices we aim to reduce utility consumption and carbon emissions, promote energy efficiency and utilize appropriate waste management practices. Some of our recent achievements include:

- For 2018, Invesco offset 13,877 tons of carbon dioxide emissions through our partnership with ClimateCare, representing all of our air and rail travel purchased through our third party travel agency, which represents the majority of our air and rail travel for 2018. We anticipate conducting a similar offset program in respect to 2019;
- Invesco has ISO 14001 environmental management certification to effectively manage our environmental responsibilities on locations representing 80% of our employee population; and
- We are certified by Carbon Trust in the UK regarding multiple standards, including carbon, waste and water reduction.

2019 Developments

Throughout 2019, global markets were strong, despite periods of volatility throughout the year. Uncertainty in the economic environment and weaker industry production metrics at times in the year led the US Fed and many other central banks to aggressively lower interest rates to support global growth. Despite this uncertainty, the global economy grew at a modest pace.

The most significant undertaking for Invesco in 2019 was the completion of our acquisition of OppenheimerFunds, and the integration of our two firms. We view the combination as a multi-year growth story that deepened our relationships with clients in the US, expanded the capabilities we can offer globally and further scaled our business for the benefit of clients and shareholders. The firm is highly focused on delivering the additional capabilities achieved through the combination to the institutional and ex-US markets, which we expect will help move our net flows in a positive direction. As a result of the acquisition, we are also better positioned to deliver strong outcomes for clients, since overall performance rankings for US mutual funds are consistently stronger for the combined firm than for either firm independently.

During 2019, we further expanded and enhanced our ability to help certain of our intermediary distributors engage with their clients and improve their investment experience through the expansion of our digital wealth platform. We launched several new products and further invested in key parts of our business that we believe will benefit our clients and enhance our competitiveness over the long term.

We continued to invest in capabilities where we see strong client demand or future opportunities by making key acquisitions, hiring world-class talent, further upgrading our technology platform, launching new products and providing additional resources where necessary. We believe the ability to leverage the capabilities developed by our investment teams to meet client demand across the globe is a significant differentiator for our firm, and we will continue to bring the best of Invesco to different parts of our business where it makes sense for our clients. Some highlights of 2019 are as follows:

- Invesco won the Deal of the Year honor at the 26th annual Mutual Fund Industry Awards for its \$5.6bn acquisition of MassMutual subsidiary
 OppenheimerFunds. The Deal Of the Year is awarded to the M&A deal that has most changed the landscape of the fund or retirement industry.
- Invesco QQQ celebrated 20 years of curating innovation. Since its inception in 1999, Invesco QQQ has grown to become one of the largest, most-traded and highest-performing ETFs in the history of the industry.
- Principles for Responsible Investment (PRI), a world leading proponent of responsible investment, rated Invesco with an A+ rating for the 3rd consecutive
 vear.
- Invesco ranked #5 in market penetration among ETF providers according to a 2019 Advisors Brandscape study.
- We further strengthened our market-leading solutions capability, leveraging one of the industry's strongest, most experienced solutions teams to enable customized outcomes for clients;
- Invesco announced the launch of a new suite of defined maturity BulletShares® ETFs with exposure to municipal debt issued by state and local government
- Invesco received the top prize of Asset Manager of the Year at AsianInvestor's Asset Management Awards 2019 in Hong Kong. We received the marquee
 award in recognition of our strong performance and AUM growth at a time when many fund houses were losing assets.
- Invesco China JV (IGW) won more than 50 awards in the asset management industry with a key highlight being China Securities Journal's Annual Golden Bull Fund Company Award for 2019.
- · Invesco High Yield Equity Dividend was named one of the Top 5 dividend funds in the U.S. for the past five years by Barron's.
- Invesco Japanese Equity Advantage Fund managed by Tadao Minaguchi was awarded the best Japan fund by Investment Week UK at their 2019 Funds Manager of the Year awards.
- Amalgamated Bank entered into an agreement with Invesco to become a sub-adviser for their investment management business. As a sub-adviser, Invesco will provide investment management services for Amalgamated Bank across asset classes.
- Jemstep, Invesco's digital advisor, acquired a key client, Infinex Financial Group, which has a network of greater than 650 advisors and 220 banks and credit unions.

- As announced in January 2020, Invesco's Jemstep digital wealth platform has been chosen to power Citi's investment service, Citi Wealth Builder, because of its goal-based client experience and the ability to configure its platform to meet Citi's requirements.
- Invesco launched a Blockchain ETF on the London Stock Exchange, providing an innovative way for investors to participate in this technology.
- Invesco launched Gilt ETFs, giving investors access to UK government bonds across the full maturity spectrum.
- Invesco's North America Marketing team and the Global Thought Leadership team won in a number of categories at the recent Gramercy Institution Financial Content Marketing Awards. These awards recognize excellence in financial marketing.
- · Invesco's Active Multi-Sector Credit Fund and Europlus Fund won the Lipper Fund Awards from Revinitiv.

Taken together, this work further expanded the broad range of capabilities Invesco uses to create solutions that deliver the outcomes clients are seeking, all wrapped in a robust, value-added client experience. These initiatives also further strengthened the firm's effectiveness and efficiency, providing greater economies of scale that we believe will enable us to provide a higher level of value to clients and further improve our competitive position.

Industry Trends

Trends around the world continue to transform the investment management industry and underscore the need to be well diversified with broad capabilities globally and across asset classes:

- Clients are demanding more from investment managers. While investment performance remains paramount, competitive pricing, client engagement and
 value-added services (including portfolio analytics and providing consultative solutions) increasingly differentiate managers. Invesco is working to
 enhance the client's user experience through digital marketing (web, mobile, social) and improved service. The building out of Invesco Solutions to
 respond to this trend is among the firm's top priorities.
- Investors are continuing to shift to alternative, passive, and smart beta strategies. As a consequence, Invesco and the industry are seeing client demand for core equities and fixed income portfolios decline as a share of global flows. Invesco is the #2 provider of smart beta AUM in the US and has 72 ETFs with greater than \$500 million in assets. Invesco also has a strong lineup of alternative and multi-asset strategies supported by ongoing product development.
- We are seeing increased pressure on pricing within the asset management industry, arising from increased use of low fee passive products and further
 concentration within our channel distribution partners (which increases their ability to negotiate pricing) and additional regulatory scrutiny on industry
 fees.
- Distribution partners are becoming more selective and are moving towards developing fewer relationships and partners, reducing the number of
 investment managers with whom they work.
- Regulatory activity remains at increased levels and is influencing competitive dynamics. Increased regulatory scrutiny of managers has focused on
 many areas including transparency/unbundling of fees, inducements, conflicts of interest, capital, liquidity, solvency, leverage, operational risk
 management, controls and compensation. Invesco continues to work proactively with regulators around the world. Efforts to further modernize and
 strengthen our global platform will enhance our ability to compete effectively across markets while complying with the variety of applicable regulatory
 regimes.
- Although the developed markets in the U.S. and Europe are currently the two largest markets for financial assets by a wide margin, other key emerging markets in the world, such as China and India, are positioned for future growth over the long term despite near-term headwinds. As these population-heavy markets mature, we believe investment managers that are truly global will be in the best position to capture this growth. Additionally, population age differences between emerging and developed markets will result in differing investment needs and horizons among countries. Asset allocation and retirement savings schemes also differ substantially among countries. We believe firms such as Invesco, with diversified investment capabilities and product types, are best positioned to meet clients' needs in this global competitive landscape. Invesco has a meaningful market presence in many of the world's most attractive regions, including North America, EMEA and Asia-Pacific. We believe our strong and growing presence in established and emerging markets provides significant long-term growth potential for our business.
- Technology advances are impacting core elements of the investment management industry which lags other industries in its use of technology. Clients increasingly seek to interact digitally with their investment portfolios. This is leading to established managers investing in and/or acquiring "robo" and other technology platforms. As the investment management business becomes more complex, automation will become increasingly important to serve clients effectively and efficiently. Invesco is leveraging technology across its business and exploring opportunities to work with third-party technology firms to enhance our clients' investment experience. Over the past few years, we have made strategic acquisitions to strengthen our overall digital wealth platform, including Jemstep and Intelliflo, our advisor-focused digital platforms. These acquisitions and others have strengthened our ability to offer competitive digital wealth capabilities and position us ahead of the evolving client needs.

As a result of the trends discussed above, clients are seeking to work with a smaller number of asset managers who can meet a comprehensive set of needs. They want money managers who can provide a robust set of capabilities and create investment solutions that deliver key outcomes aligned to their investment objectives. They also want greater value for their money, which means competitive pricing, investor education, thought leadership, digital platforms and other value added services that create an enhanced client experience. These dynamics are driving fundamental changes within our industry and that we believe will drive increasing consolidation. We believe the steps we have taken over the past decade and throughout 2019 strengthened our ability to meet client needs and will help ensure Invesco is well-positioned to compete and win within our industry.

Other External Factors Impacting Invesco

Invesco has a larger global presence in key markets than most of our peers. As one of the leading investment managers in the UK and Europe, we were more impacted by continuing uncertainties surrounding Brexit. Additionally, our strong position in Asia Pacific meant that Invesco was more affected than others by market uncertainties over the trade issues between China and the U.S.

Although negotiations between the UK and EU resulted in the UK leaving the EU under the terms of the Withdrawal Agreement on January 31, 2020, the longer term relationship between the UK and the EU is still uncertain. This may affect the levels and composition of our AUM and also negatively influence investor sentiment, which could result in reduced or negative flows. In addition, because the UK Pound Sterling is the functional currency for certain of our subsidiaries, any weakening of the UK Pound Sterling relative to the U.S. Dollar could negatively impact our reported financial results.

Invesco is a global business and has been committed for many years to meeting clients' needs across Europe in both EU and non-EU countries. Invesco has local teams of experts focused on servicing local clients and fund ranges in different countries to meet a variety of local, country and regional client needs. We currently have a presence in 12 member states across the EU (excluding the UK), employing over 440 staff; our staff will be able to continue to reside and work across the relevant regions. The change in the UK's status from an EU to a non-EU country will not change Invesco's focus or commitment to serve its clients across Europe. We have plans in place which will enable us to respond to a variety of different potential scenarios and we believe we are fully prepared to continue to operate and deliver for our clients with minimal disruption.

The manner in which interest rates are calculated could also impact our client portfolios. In July 2017, the Chief Executive of the U.K. Financial Conduct Authority (the "FCA"), which regulates LIBOR, announced that the FCA will no longer persuade or compel banks to submit rates for the calculation of the LIBOR benchmark after 2021. This announcement indicates that the continuation of LIBOR on the current basis cannot and will not be guaranteed after 2021, and it appears likely that LIBOR will be phased out or the methodology for determining LIBOR will be modified by 2021. Changes in the method pursuant to which LIBOR is determined or the discontinuance of LIBOR may adversely affect the amount of interest payable or interest receivable on certain portfolio investments. These changes may also impact the market liquidity and market value of these portfolio investments. Invesco is finalizing its global assessment of exposure in relation to funds utilizing LIBOR based instruments and benchmarks and is prioritizing the mitigation of risks associated with the forecast changes to financial instruments and performance benchmarks referencing existing LIBOR rates, and concurrently any impact on Invesco portfolios and investment strategies.

The spread of a new strain of the coronavirus may also impact Invesco, our operations and our employees. The virus has spread internationally and global stock markets have reacted negatively and with increased volatility. The market reaction may deepen further if the virus continues to spread, but if and when the coronavirus is successfully contained, the situation should normalize and financial markets will likely stabilize. Should the coronavirus spread without containment, however, the overall impact on the stock market may become more pronounced and may result in investors withdrawing from or delaying further investments in equity markets. Invesco's significant presence in Asia Pacific may make Invesco more vulnerable to the uncertainties surrounding the spread of the coronavirus and the corresponding economic disruption in this region.

Investment Management Capabilities

We believe that the proven strength of our distinct and globally located investment teams and their well-defined investment disciplines and risk management approach provide us with a robust competitive advantage. There are few independent investment managers with teams as globally diverse as Invesco's and with the same breadth and depth of investment capabilities and vehicles. We offer multiple investment objectives within the various asset classes and products that we manage. Our asset classes, broadly defined, include money market, balanced, equity, fixed income and alternatives.

The following sets forth our managed investment objectives by asset class:

Money Market	Balanced	Equity	Fixed Income	Alternatives
Cash Plus	 Balanced Risk 	 Custom Solutions 	 Convertibles 	 Absolute Return
 Custom Solutions 	 Custom Solutions 	 Emerging Markets 	●Core/Core Plus	 Commodities
•Environmental, Social and Governance	•Environmental, Social and Governance	•International/Global	•Custom Solutions	• Currencies
Government/Treasury	Global/Regional	 Large Cap Core 	 Emerging Markets 	 Custom Solutions
●Prime	• Single Country	•Large Cap Growth	•Enhanced Cash	•Environmental, Social and Governance
● Taxable	•Target Date	•Large Cap Value	•Environmental, Social and Governance	•Financial Structures
•Tax-Free	●Target Risk	•Environmental, Social and Governance	•Government Bonds	•Global Macro
	•Traditional Balanced	•Low Volatility/Defensive	•High-Yield Bonds	•Infrastructure and MLPs
		 Mid Cap Core 	•International/Global	 ◆Long/Short Equity
		 Mid Cap Growth 	•Investment Grade Credit	 Managed Futures
		 Mid Cap Value 	•Multi-Sector	 Multi-Alternatives
		Passive/Enhanced	 Municipal Bonds 	•Private and Distressed Debt
		•Regional/Single Country	Passive/Enhanced	 ◆Private Real Estate
		•Sector Funds	•Short Duration	Public Real EstateSecurities
		•Small Cap Core	•Stable Value	•Senior Secured Loans
		•Small Cap Growth	•Structured Securities	
		•Small Cap Value	•Smart Beta/Factor-based	
		•Smart Beta/Factor-based		

Distribution Channels

Retail AUM originates from clients investing into funds available to the public in the form of shares or units. Institutional AUM originates from entities such as individual corporate clients, insurance companies, endowments, foundations, government authorities, universities or charities. AUM disclosure by distribution channel represents consolidated AUM distributed by type of sales team (the company's internal distribution channels). AUM amounts disclosed as retail channel AUM represents AUM distributed by the company's retail sales team; whereas AUM amounts disclosed as institutional channel AUM represents AUM distributed by the company's institutional sales team.

The company operates as an integrated global investment manager, presenting itself as a single firm to clients around the world. Dedicated sales forces deliver our investment strategies through a variety of vehicles that meet the needs of retail and institutional clients. Note that not all products sold in the disclosed retail distribution channel are in "retail" vehicles, and not all products sold in the disclosed institutional channel are in "institutional" vehicles, as described in the table below. This aggregation, however, is viewed as a proxy for presenting AUM in the retail and institutional markets in which we operate.

The following lists our primary investment vehicles by distribution channel:

Retail

- Closed-end Mutual Funds
- Exchange-traded Funds (ETF)
- Individual Savings Accounts (ISA)
- Investment Companies with Variable Capital (ICVC)
- Investment Trusts
- Open-end Mutual Funds
- Separately Managed Accounts (SMA)
- Société d'investissement à Capital Variable (SICAV)
- Unit Investment Trusts (UIT)
- Variable Insurance Funds

Retail

Institutional

- Collective Trust Funds
- Exchange-traded Funds (ETF)
- Institutional Separate Accounts
- Open-end Mutual Funds
- Private Capital Funds

Retail AUM were \$878.2 billion at December 31, 2019. We offer retail products within all of the major asset classes. Our retail products are primarily distributed through third-party financial intermediaries, including major wire houses, fund supermarkets, regional broker-dealers, insurance companies, banks and financial planners in North America, and independent brokers and financial advisors, banks and supermarket platforms in Europe and Asia.

The Americas, UK and EMEA ex-UK retail operations rank among the largest by AUM in their respective markets. As of December 31, 2019, Invesco holds a leading position amongst retail fund providers in the UK; Invesco's U.S. retail business, including our ETF franchise, is a top 10 asset manager in the U.S. by long-term assets and Invesco in EMEA ex-UK was among the largest non-proprietary investment managers in the retail channel. Invesco Great Wall was one of the largest Sino-foreign managers of equity products in China, with total AUM of approximately \$41.3 billion as of December 31, 2019. We provide our retail clients with one of the industry's most robust and comprehensive product lines.

Institutional

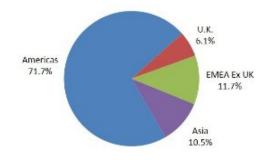
Institutional AUM were \$348.0 billion in AUM as of December 31, 2019. We offer a broad suite of domestic and global strategies, including traditional and quantitative equities, fixed income (including money market funds for institutional clients), real estate, financial structures and absolute return strategies. Regional sales forces distribute our products and provide services to clients and intermediaries around the world. We have a diversified client base that includes major public entities, corporations, unions, non-profit organizations, endowments, foundations, pension funds, financial institutions and sovereign wealth funds. Invesco's institutional money market funds serve some of the largest financial institutions, government entities and corporations in the world.

AUM Diversification

One of Invesco's greatest competitive strengths is the diversification in its AUM by client domicile, distribution channel and asset class. Our distribution network has attracted assets of 72% retail and 28% institutional as of December 31, 2019. By client domicile, 28% of client AUM are outside the U.S., and we serve clients in more than 120 countries. The following tables present a breakdown of AUM by client domicile, distribution channel and asset class as of December 31, 2019. Additionally, the fourth table below illustrates the split of our AUM as Passive and Active. Passive AUM include index-based ETFs, unit investment trusts (UITs), non-management fee earning AUM and other passive mandates. Active AUM is total AUM less Passive AUM. See the company's disclosures regarding the changes in AUM years ended December 31, 2019 in Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations - Assets Under Management" section for additional information regarding the changes in AUM.

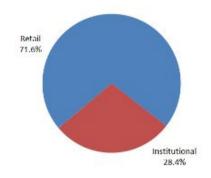
By Client Domicile

(\$ in billions)	Total	1-Yr Change
Americas	879.5	51.2 %
UK	74.4	(2.9)%
EMEA Ex UK	143.7	14.5 %
Asia	128.6	23.1 %
Total	1,226.2	



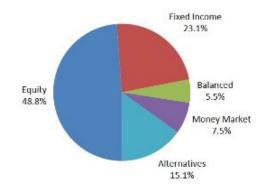
By Distribution Channel

(\$ in billions)	Total	1-Yr Change
Retail	878.2	55.0%
Institutional	348.0	8.2%
Total	1,226.2	



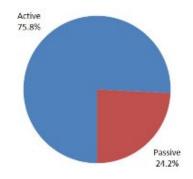
By Asset Class

(\$ in billions)	Total	1-Yr Change
Equity	598.8	62.2%
Fixed Income	283.5	35.9%
Balanced	67.3	21.5%
Money Market	91.4	1.7%
Alternatives	185.2	12.1%
Total	1,226.2	



Active vs. Passive

(\$ in billions)	Total	1-Yr Change
Active	929.2	39.3%
Passive	297.0	34.4%
Total	1,226.2	



Employees

As of December 31, 2019, the company had 8,821 employees across the globe (December 31, 2018: 7,459). Increases in 2019 relate primarily to the acquisition of OppenheimerFunds. None of our employees are covered under collective bargaining agreements.

Competition

The investment management business is highly competitive, with points of differentiation including investment performance, the level of fees, the range of products offered, brand recognition, business reputation, financial strength, the depth and continuity of relationships and quality of service. We compete with a large number of investment management firms, commercial banks, investment banks, broker dealers, hedge funds, insurance companies and other financial institutions. We believe that the quality and diversity of our investment capabilities, product types and channels of distribution enable us to compete effectively in the investment management business. We also believe being an independent investment manager is a competitive advantage, as our business model avoids conflicts that are inherent within institutions that both manage and distribute and/or service those products. Lastly, we believe continued execution against our strategic objectives will further strengthen our long-term competitive position.

Management Contracts

We derive substantially all of our revenues from investment management contracts with funds and other clients. Fees vary with the type of assets being managed, with higher fees earned on actively managed equity and balanced accounts, along with real estate and other alternative asset products, and lower fees earned on fixed income, money market and stable value accounts, as well as certain ETFs. Investment management contracts are generally terminable upon thirty or fewer days' notice. Typically, retail investors may withdraw their funds at any time without prior notice. Institutional clients typically may elect to terminate their relationship with us or reduce the aggregate amount of assets under management with very short notice periods.

Risk Management

Invesco is committed to continually strengthening and refining our risk management approach and process. We believe a key factor in our ability to manage through all market cycles is our integrated approach to risk management. Risk management is embedded in our daily operating activities, our day-to-day decision making as well as our strategic planning process. Our risk management framework provides the basis for consistent and meaningful risk dialogue up, down and across the company. Broadly, our approach includes two governance structures: (i) our Global Performance and Risk Committee assesses core investment risks; and (ii) our Corporate Risk Management Committee assesses strategic, operational and all other business risks. A network of business unit, geographic and specific risk management committees, under the auspices of the Corporate Risk Management Committee, maintains an ongoing risk assessment, management and monitoring process that provides a bottom-up perspective on the specific risks existing and emerging in the various domains of our business.

Available Information

The SEC maintains a website that contains reports, proxy and information statements and other information regarding issuers with the SEC, at www.sec.gov. We make available free of charge on our website, www.invesco.com, our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

Item 1A. Risk Factors

Volatility and disruption in world capital and credit markets, as well as adverse changes in the global economy, can negatively affect Invesco's revenues, operations, financial condition and liquidity.

In recent years, capital and credit markets have experienced substantial volatility. In this regard:

- In the event of extreme circumstances, including economic, political, or business crises, such as a widespread systemic failure or disruptions in the global financial system or failures of firms that have significant obligations as counterparties on financial instruments, we may suffer significant declines in AUM and severe liquidity or valuation problems in managed investment products in which client and company assets are invested, all of which would adversely affect our operating results, financial condition, liquidity, credit ratings, ability to access capital markets, and ability to retain and attract key employees. Additionally, these factors could impact our ability to realize the carrying value of our goodwill and other intangible assets.
- Illiquidity and/or volatility of the global fixed income and/or equity markets could negatively affect our ability to manage client inflows and outflows or
 to timely meet client redemption requests.
- Uncertainties regarding geopolitical developments can produce volatility in global financial markets. As an example, although negotiations between the UK and EU resulted in the UK leaving the EU under the terms of the Withdrawal Agreement on January 31, 2020, the longer term relationship between the UK and the EU is still uncertain. This may impact the levels and composition of our AUM and also negatively impact investor sentiment, which could result in reduced or negative flows. In addition, because the UK Pound Sterling is the functional currency for certain of our subsidiaries, any weakening of the UK Pound Sterling relative to the U.S. Dollar could negatively impact our reported financial results.
- Changes to United States tax, tariff and import/export regulations may have a negative effect on global economic conditions, financial markets and our business. Currently, there is significant uncertainty about the future relationship between the United States and other countries, including China and the EU, with respect to trade policies, treaties, taxes, government regulations and tariffs. It is unclear what changes may be considered or implemented and what the response will be to any such changes by other governments of such affected countries. These developments, or the perception that any of them could occur, may have a material adverse effect on global economic conditions and the stability of global financial markets, and may significantly reduce global trade and, in particular, trade between these nations and the United States. Given our strong position in Asia Pacific and EMEA, we could be more adversely affected than others by such market uncertainties.
- In the U.S., regulations requiring a variable ("floating") net asset value (NAV) for institutional prime and tax-free money market funds became effective in October 2016. Those same regulations also provide for the potential imposition of the assessment of fees in connection with redemptions and/or gates that postpone the time in which redemptions must be processed in the event those funds' weekly liquid assets fall below certain specified thresholds. Our government money market funds and retail prime and tax-free money market funds continue to offer a stable NAV of \$1.00 per common share and are not required to impose fees and gates; however, we do not guarantee such NAV level. Market conditions could lead to severe liquidity issues in money market products, which could lead to the imposition of fees or gates with respect to institutional prime and tax-free money market funds and an effect on the NAVs of government and retail prime and tax-free money market funds. If our institutional prime or tax-free money market funds were to impose redemption fees or gates delaying the payment of redemption proceeds, or the NAV of one of our government or retail prime or tax-free money market funds were to decline below \$1.00 per common share, such funds could experience significant redemptions in AUM, loss of shareholder confidence and reputational harm.

Our revenues and profitability would be adversely affected by any reduction in AUM as a result of either a decline in market value of such assets or net outflows, which would reduce the investment management fees we earn.

We derive substantially all our revenues from investment management contracts with clients. Under these contracts, the investment management fees paid to us are typically based on the market value of AUM. AUM may decline for various reasons. For any period in which revenues decline, our income and operating margin likely would decline by a greater proportion because a majority of our expenses remain fixed. Factors that could decrease AUM (and therefore revenues) include the following:

Declines in the market value of AUM in client portfolios. These could be caused by price declines in the securities markets generally or by price declines in the market segments in which our AUM are concentrated. Our AUM as of January 31, 2020 were \$1,218.7 billion. We cannot predict whether volatility in the markets will result in substantial or

sustained declines in the securities markets generally or result in price declines in market segments in which our AUM are concentrated. Any of the foregoing could negatively impact our revenues, income and operating margin.

Redemptions and other withdrawals from, or shifting among, client portfolios. These could be caused by investors (in response to adverse market conditions or pursuit of other investment opportunities) reducing their investments in client portfolios in general or in the market segments in which Invesco focuses; investors taking profits from their investments; poor investment performance (relative or absolute) of the client portfolios managed by Invesco; and portfolio risk characteristics, which could cause investors to move assets to other investment managers. Poor performance relative to other investment management firms tends to result in decreased sales and increased redemptions with corresponding decreases in our revenues. Failure of our client portfolios to perform well could, therefore, have a material adverse effect on us. Furthermore, the fees we earn vary with the types of assets being managed, with higher fees earned on actively managed equity and balanced accounts, along with real estate and other alternative asset products, and lower fees earned on fixed income, stable return accounts, and certain ETFs. Our revenues may decline if clients continue to shift their investments to lower fee accounts. In addition, the loss of key personnel or significant investment management professionals could reduce the attractiveness of our products to current and potential clients and adversely affect our revenues and profitability.

Investments in international markets. Investment products that we manage may have significant investments in international markets that are subject to significant risks of loss from political, economic, diplomatic developments, currency fluctuations, social instability, changes in governmental policies, expropriation, nationalization and asset confiscation. International trading markets, particularly emerging markets, are often smaller, less liquid, less regulated and significantly more volatile than those in the developed world.

Poor investment performance of our products could reduce the level of our AUM or affect our sales, and negatively impact our revenues and income.

Our investment performance, along with achieving and maintaining appropriate levels of distribution and client service, is critical to the success of our business. Strong investment performance often stimulates sales of our products. Poor investment performance as compared to third-party benchmarks or competitive products has in the past led, and could in the future lead, to a decrease in sales of our products and stimulate redemptions from existing products, generally lowering the overall level of AUM and reducing the management fees we earn. There is no assurance that past or present investment performance in our products will be indicative of future performance. If we fail, or appear to fail, to address successfully and promptly the underlying causes of any poor investment performance, we may be unsuccessful in reversing such under performance and our future business prospects would likely be negatively affected.

Competitive pressures may force us to reduce the fees we charge to clients, which could reduce our profitability.

The investment management business is highly competitive, and we compete based on a variety of factors, including investment performance, the range of products offered, brand recognition, business reputation, financial strength, stability and continuity of client and financial intermediary relationships, quality of service, level of fees charged for services and the level of compensation paid and distribution support offered to financial intermediaries. We continue to face market pressures regarding fee levels in many products. Investors remain attracted to lower fee passive products, which have gained and may continue to gain share at the expense of active products.

We face strong competition in every market in which we operate. Our competitors include a large number of investment management firms, commercial banks, investment banks, broker-dealers, hedge funds, insurance companies and other financial institutions. Some of these institutions have greater capital and other resources, and offer more comprehensive lines of products and services, than we do. Our competitors seek to expand their market share in many of the products and services we offer. If these competitors are successful, our revenues and profitability could be adversely affected. In addition, there are relatively few barriers to entry by new investment management firms, and the successful efforts of new entrants around the world have also resulted in increased competition.

In recent years there have been several instances of industry consolidation, both in the area of distributors and manufacturers of investment products. Further consolidation may occur in these areas in the future. The increasing size and market influence of certain distributors of our products and of certain direct competitors may have a negative impact on our ability to compete at the same levels of profitability in the future.

We may not adjust our expenses quickly enough to match significant declines in our revenues.

If we are unable to effect appropriate expense reductions in a timely manner in response to declines in our revenues, or if we are otherwise unable to adapt to rapid changes in the global marketplace or our AUM and revenues, our profitability, financial condition and results of operations would be adversely affected.

Our revenues and profitability from money market and other fixed income assets may be harmed by interest rate, liquidity and credit volatility.

Certain institutional investors using money market products and other short-term duration fixed income products for cash management purposes may shift these investments to direct investments in comparable instruments in order to realize higher yields than those available in money market and other fund products holding lower yielding instruments. These redemptions would reduce managed assets, thereby reducing our revenues. In addition, rising interest rates will tend to reduce the market value of fixed income investments and fixed income derivatives held in various investment portfolios and other products. Thus, increases in interest rates could have an adverse effect on our revenues from certain fixed income products. If securities within a money market portfolio default or investor redemptions force the portfolio to realize losses, there could be negative pressure on its NAV. Although money market investments are not guaranteed instruments, the company might decide, under such a scenario, that it is in its best interest to provide support in the form of a support agreement, capital infusion, or other methods to help stabilize a declining NAV. Some of these methods could have an adverse impact on our profitability. Additionally, we have investments in fixed income assets, including collateralized loan obligations and seed money in fixed income funds, the valuation of which could change with changes in interest and default rates.

The manner in which interest rates are calculated could also impact our client portfolios. For example, LIBOR, as well as other interest rate, equity, foreign exchange rate and other types of indices which are deemed to be "benchmarks," are the subject of ongoing international, national and other regulatory guidance and proposals for reform. Some of these reforms are already effective while others are still to be implemented. The U.S. Federal Reserve, based on the recommendations of the New York Federal Reserve's Alternative Reference Rate Committee (consisting of major derivative market participants and their regulators), has begun publishing a Secured Overnight Funding Rate (SOFR) which is intended to replace U.S. dollar LIBOR, and SOFR-based investment products have been issued in the U.S. Proposals for alternative reference rates for other currencies have also been announced or have already begun publication. Markets are slowly developing in response to these new rates and questions around liquidity in these rates and how to appropriately adjust these rates to eliminate any economic value transfer at the time of transition remain a significant concern for us and others in the marketplace. It is difficult to predict the full impact of the transition away from LIBOR on certain derivatives and floating rate securities we hold and any other assets or liabilities (as well as contractual rights and obligations) whose value is tied to LIBOR. The value or profitability of these products and instruments, and our costs of operations, may be adversely affected until new reference rates and fallbacks for both legacy and new products, instruments and contracts are commercially accepted.

We may engage in strategic transactions that could create risks.

We regularly review, and from time-to-time have discussions with and engage in, potential strategic transactions, including potential acquisitions, dispositions, consolidations, joint ventures or similar transactions, some of which may be material. There can be no assurance that we will find suitable candidates for strategic transactions at acceptable prices, have sufficient capital resources to pursue such transactions, be successful in negotiating the required agreements, or successfully close transactions after signing such agreements.

Acquisitions also pose the risk that any business we acquire may lose customers or employees or could underperform relative to expectations. We could also experience financial or other setbacks if pending transactions encounter unanticipated problems, including problems related to closing or integration. Following the completion of an acquisition, we may have to rely on the seller to provide administrative and other support, including financial reporting and internal controls, to the acquired business for a period of time. There can be no assurance that such sellers will do so in a manner that is acceptable to us.

We have incurred and will continue to incur transaction and integration costs in connection with the acquisition of OppenheimerFunds and the anticipated benefits of the acquisition may not offset these costs.

We have incurred and expect to continue to incur significant, non-recurring costs in connection with the acquisition and integration of OppenheimerFunds. There can be no assurances that the expected benefits and efficiencies related to the integration of the business will be realized to offset these transaction and integration costs over time. As part of the integration activities for the OppenheimerFunds business, the company has identified a matter that involves a possible loss contingency related to the operations of the acquired business. See Part II, See Item 8, Financial Statements and Supplementary Data - Note 19, "Commitments and Contingencies" for additional information.

In connection with the acquisition of OppenheimerFunds, we issued perpetual preferred stock having a value of approximately \$4 billion, which could adversely affect our ability to raise additional capital and may limit our ability to fund other priorities.

In connection with the acquisition of OppenheimerFunds, Invesco issued approximately \$4 billion of 5.9% fixed rate perpetual preferred stock to certain of OppenheimerFunds' former shareholders. This issuance may limit our ability to obtain additional financing for working capital, capital expenditures, debt service requirements, acquisitions and general corporate or other purposes; may restrict our ability to pay dividends to holders of common shares in certain circumstances; may increase our vulnerability to general economic and industry conditions; and will require a significant portion of cash flow from operations to make required dividend payments to preferred shareholders.

In connection with the acquisition of OppenheimerFunds, we issued approximately 81.9 million common shares, which could adversely impact our trading price upon resale of those common shares.

We issued approximately 81.9 million common shares in connection with the acquisition, most of which are held by Massachusetts Mutual Life Insurance Company (MassMutual). The common shares held by MassMutual are subject to an agreement not to sell those common shares for a period of two years following completion of the acquisition, subject to early termination, as well as to certain limitations on resales. However, MassMutual may in the future sell these common shares in the open market or through secondary offerings. If MassMutual were to sell its equity stake in Invesco, or express an intention to sell the stake, that action could have a significant impact on our common share trading price.

MassMutual has the ability to significantly influence our business and MassMutual's interest in our business may be different from that of other shareholders.

MassMutual is entitled to designate an individual to serve on our board so long as it beneficially owns at least (i) 10% of our issued and outstanding shares of common stock or (ii) (x) 5% of our issued and outstanding shares of common stock and (y) \$2.0 billion in aggregate liquidation preference of our Series A preferred shares. Additionally, we are not permitted to take certain actions without the prior written approval of MassMutual, including making certain changes in our capital structure or our organizational documents, adopting a shareholder rights plan or effectuating certain business combination transactions. MassMutual's level of ownership and influence may make some transactions (such as those involving mergers, material share issuances or changes in control) more difficult or impossible without the support of MassMutual, which in turn could adversely affect the market price of our shares of common stock or prevent our shareholders from realizing a premium over the market price for their shares of our common stock. The interests of MassMutual may conflict with the interests of other shareholders.

We depend on information technology, and any failures of or damage to, attack on or unauthorized access to our information technology systems or facilities, or those of third parties with which we do business, including as a result of cyber-attacks, could result in significant limits on our ability to conduct our operations and activities, costs and reputational damage.

We are highly dependent upon the use of various proprietary and third-party information and security technology, software applications and other technology systems to operate our business. We are also dependent on the effectiveness of our information and cyber security infrastructure, policies, procedures and capabilities to protect our computer and telecommunications systems and the data that reside on or are transmitted through them. We use our technology to, among other things, manage and trade portfolio investments, support our other operations, obtain securities pricing information, process client transactions, protect the privacy of clients', employees' and business partners' data and provide reports and other customer services to the clients of the funds we manage. Any inaccuracies, delays, systems failures or security breaches in these and other processes could disrupt our business operations, subject us to client, employee or business

partner dissatisfaction and losses, subject us to litigation or regulatory enforcement actions and/or subject us to reputational harm.

Our computer, communications, data processing, networks, backup, business continuity or other operating, information or technology systems and facilities, including those that we outsource to other providers, may fail to operate properly or become disabled, overloaded or damaged as a result of a number of factors, including events that are wholly or partially beyond our control. Further, third-party service providers may have limited indemnification obligations to us regarding cyber-incidents.

In recent years, several financial services firms suffered cyber-attacks launched both domestically and from abroad, resulting in the disruption of services to clients, loss or misappropriation of confidential data, litigation and regulatory enforcement actions and reputational harm. Cyber-security incidents and cyber-attacks have been occurring globally at a more frequent and severe level. Our status as a global financial institution and the nature of our client base may enhance the risk that we are targeted by such cyber-threats. Although we seek to take protective measures, including measures to effectively secure information through system security technology, and seek to continually monitor and develop our systems to protect our technology infrastructure and data from misappropriation or corruption, our technology systems may still be vulnerable to unauthorized access, computer viruses or other events that have a security impact, such as an external hacker attack by one or more cyber criminals or an authorized employee or vendor causing us to release confidential information inadvertently or through malfeasance, or lose temporarily or permanently data or applications or systems, which could materially harm our operations and reputation. The third parties with which we do business or which facilitate our business activities, including financial intermediaries and technology infrastructure and service providers, are also susceptible to the foregoing risks (including regarding the third parties with which they are similarly interconnected or on which they otherwise rely), and our or their business operations and activities may therefore be adversely affected, perhaps materially, by failures, terminations, errors or malfeasance by, or attacks or constraints on, one or more financial, technology or infrastructure institutions or intermediaries with whom we or they are interconnected or conduct business.

Breach of our technology systems could damage our reputation and could result in the unauthorized disclosure or modification or loss of sensitive or confidential information (including client data); unauthorized disclosure, modification or loss of proprietary information relating to our business; inability to process client or company transactions and processes; breach and termination of client contracts; liability for stolen assets, information or identity; remediation costs to repair damage caused by the breach, including damage to systems and recovery of lost data; additional security costs to mitigate against future incidents; regulatory actions (including fines and penalties, which could be material) and litigation costs resulting from the incident. Such consequences could result in material financial loss and have a negative effect on our revenues and profitability.

Our investment management professionals and other key employees are a vital part of our ability to attract and retain clients, and the loss of key individuals or a significant portion of those professionals could result in a reduction of our revenues and profitability.

Retaining highly skilled investment management personnel is important to our ability to attract and retain our clients. The market for skilled investment management professionals is highly competitive. The market for investment professionals and other key personnel is at times characterized by the movement of these professionals among different firms. Our policy has been to provide our investment management professionals and other key personnel with a supportive professional working environment and compensation and benefits (including equity and other forms of deferred compensation) that we believe are competitive with other leading investment management firms. However, we may not be successful in retaining our key personnel, and the loss of significant investment professionals or other key personnel could reduce the attractiveness of our products to potential and current clients and could, therefore, adversely affect our revenues and profitability.

Changes in the distribution channels on which we depend could reduce our net revenues and hinder our growth.

We sell substantially all of our retail investment products through a variety of third party financial intermediaries, including major wire houses, fund supermarkets, regional broker-dealers, insurance companies, banks and financial planners in North America, and independent brokers and financial advisors, banks and supermarket platforms in Europe and Asia. No single one of these intermediaries is material to our business. Increasing competition for these distribution channels could nevertheless cause our distribution costs to rise, which would lower our net revenues. Following the financial crisis, there has been consolidation of banks and broker-dealers, particularly in the U.S., and a limited amount of migration of brokers and financial advisors away from major banks to independent firms focused largely on providing

advice. If these changes continue, our distribution costs could increase as a percentage of our revenues generated. Additionally, particularly outside of the U.S., certain of the third party intermediaries upon whom we rely to distribute our investment products also sell their own competing proprietary funds and investment products, which could limit the distribution of our products. Investors, particularly in the institutional market, rely on external consultants and other third parties for advice on the choice of investment manager. These consultants and third parties tend to exert a significant degree of influence over their clients' choices, and they may favor a competitor of Invesco as better meeting their particular clients' needs. There is no assurance that our investment products will be among their recommended choices in the future. Similarly, particularly in the United States, certain distributors have substantially reduced the number of investment funds they make available to their customers. If a material portion of our distributors were to substantially narrow their product offerings, it could have a significant adverse effect on our revenues and profitability. More broadly, in both retail and institutional channels, intermediaries (distribution firms and consultants) are seeking to reduce the number of investment management firms they do business with. While this offers opportunities to the company to have broader and deeper relationships with firms that continue to do business with us, it also poses risks of additional lost business if a particular entity chooses to stop or significantly reduce its business relationship with the company. Any failure to maintain strong business relationships with these distribution sources and the consultant community do to any of the above-described factors would impair our ability to sell our products, which in turn could have a negative effect on our revenues and profitability.

We may be unable to develop new products and services and the development of new products and services may expose us to additional costs or operational risk.

Our financial performance depends, in part, on the company's ability to develop, market and manage new investment products and services. The development and introduction of new products and services requires continued innovative efforts on our part and may require significant time and resources as well as ongoing support and investment. Substantial risk and uncertainties are associated with the introduction of new products and services, including the implementation of new and appropriate operational controls and procedures, shifting client and market preferences, the introduction of competing products or services and compliance with regulatory requirements. New products often must be in the market place for three or more years in order to generate track records required to attract significant AUM inflows. Increasingly clients and intermediaries are looking to investment managers to be able to deliver investment outcomes tailored to particular circumstances and needs, and to augment traditional investment management products and services with additional value-added services. The company has sought to make investment designed to enable it to meet these evolving expectation, which the company believes it will need to meet in in order to maintain and grow its business. A failure to continue to innovate to introduce successful new products and services or to manage effectively the risks associated with such products and services may impact our market share relevance and may cause our AUM, revenue and earnings to decline.

Our financial condition and liquidity would be adversely affected by losses on our seed capital and co-investments.

The company has investments in managed investment products that invest in a variety of asset classes, including, but not limited to equities, fixed income products, commodities, derivatives, and similar financial instruments, private equity and real estate. Investments in these products are generally made to establish a track record, meet purchase size requirements for trading blocks, or demonstrate economic alignment with other investors in our funds. Adverse market conditions may result in the need to write down the value of these seed capital and co-investments. A reduction in the value of these investments may adversely affect our results of operations or liquidity. As of December 31, 2019, the company had approximately \$1,074.4 million in seed capital and co-investments, including direct investments in consolidated investment products (CIP).

Failure to comply with client contractual requirements and/or investment guidelines could result in costs or correction, damage awards or regulatory fines and penalties against us and loss of revenues due to client terminations.

Many of the investment management agreements under which we manage assets or provide products or services specify investment guidelines or requirements, such as adherence to investment restrictions or limits, that we are required to observe in the provision of our services. Laws and regulations impose similar requirements for certain client portfolios (such as registered funds). A failure to comply with these guidelines or requirements could result in damage to our reputation or in our clients seeking to recover losses, withdrawing their assets or terminating their contracts. Regulators likewise may commence enforcement actions for violations of such requirements, which could lead to fines and penalties against the company. Any such effects could cause our revenues and profitability to decline. We maintain various compliance procedures and other controls to seek to prevent, detect and correct such errors. When an error is detected,

payment will typically be made into the applicable client account to correct it. Significant errors for which we are responsible could impact our reputation, results of operations, financial condition or liquidity.

Our investment advisory agreements are subject to termination or non-renewal, and our fund and other investors may withdraw their assets at any time.

Substantially all our revenues are derived from investment management agreements. Investment management agreements are generally terminable upon 30 or fewer days' notice. Agreements with U.S. registered funds may be terminated with notice, or terminated in the event of an "assignment" (as defined in the Investment Company Act of 1940, as amended), and must be renewed annually by the disinterested members of each fund's Board of Trustees or Directors, as required by law. In addition, the Boards of Trustees or Directors of certain other fund accounts generally may terminate these investment management agreements upon written notice for any reason. Open-end registered fund and unit trust investors may generally withdraw their funds at any time without prior notice. Institutional clients may elect to terminate their relationships with us or reduce the aggregate amount of AUM, generally on short notice. Any termination of or failure to renew a significant number of these agreements, or any other loss of a significant number of our clients or AUM, would adversely affect our revenues and profitability.

If our reputation is harmed, we could suffer losses in our business, revenues and net income.

Our business depends on earning and maintaining the trust and confidence of clients, regulators and other market participants, and our good reputation is critical to our business. Our reputation is vulnerable to many threats that can be difficult or impossible to control, and costly or impossible to remediate. Regulatory inquiries, investigations or findings of wrongdoing, intentional or unintentional misrepresentation of our products and services in advertising materials, public relations information, social media or other external communications, operational failures (including cyber breaches), employee dishonesty or other misconduct and rumors, among other things, can substantially damage our reputation, even if they are baseless or eventually satisfactorily addressed.

Our business also requires us to continuously manage actual and potential conflicts of interest, including situations where our services to a particular client conflict, or are perceived to conflict, with the interests of other clients or those of Invesco. The willingness of clients to enter into transactions in which such a conflict might arise may be affected if we fail - or appear to fail - to deal appropriately with conflicts of interest. In addition, potential or perceived conflicts could give rise to litigation or regulatory enforcement actions.

We have procedures and controls that are designed to address and manage these risks, but this task can be complex and difficult, and if our procedures and controls fail, our reputation could be damaged. Any damage to our reputation could impede our ability to attract and retain clients and key personnel, and lead to a reduction in the amount of our AUM, any of which could have a material adverse effect on our results of operations, financial condition or liquidity.

The failure or negative performance of products offered by competitors may have a negative impact on similar Invesco products irrespective of our performance.

Many competitors offer similar products to those offered by us and the failure or negative performance of competitors' products could lead to a loss of confidence in similar Invesco products, irrespective of the performance of our products. Any loss of confidence in a product type could lead to withdrawals, redemptions and liquidity issues in such products, which could have a material adverse effect on our results of operations, financial condition or liquidity.

The soundness of other financial institutions could adversely affect us or the client portfolios we manage.

Financial services institutions are interrelated as a result of trading, clearing, counterparty, or other relationships. We, and the client portfolios that we manage, have exposure to many different industries and counterparties, and routinely execute transactions with counterparties in the financial services industry, including brokers and dealers, commercial banks, investment banks, clearing organizations, hedge funds and other institutions. Many of these transactions expose us or such client portfolios to credit risk in the event of default of its counterparty. While we regularly conduct assessments of such risk posed by counterparties, the risk of non-performance by such parties is subject to sudden swings in the financial and credit markets. Such non-performance could produce a financial loss for the company or the client portfolios we manage.

Our ability to maintain our credit ratings and to access the capital markets in a timely manner should we seek to do so depends on a number of factors.

Our access to the capital markets depends significantly on our credit ratings. We have received credit ratings of A2/Stable, BBB+/Stable and A-/Positive from Moody's Investor Services ("Moody's"), Standard & Poor's Ratings Service ("S&P"), and Fitch Ratings ("Fitch"), respectively, as of the date hereof. We believe that rating agency concerns include but are not limited to the fact that our revenues are exposed to equity market volatility and the potential impact from regulatory changes to the industry. Additionally, the rating agencies could decide to downgrade the entire investment management industry, based on their perspective of future growth and solvency. Material deterioration of these factors, and others defined by each rating agency, could result in downgrades to our credit ratings, thereby limiting our ability to access additional financing. Management believes that solid investment grade ratings are an important factor in winning and maintaining institutional business and strives to manage the company to maintain such ratings.

Our credit facility borrowing rates are tied to our credit ratings. A reduction in our long-term credit ratings could increase our borrowing costs, could limit our access to the capital markets and may result in outflows thereby reducing AUM and revenues. Volatility in global finance markets may also affect our ability to access the capital markets should we seek to do so. If we are unable to access capital markets in a timely manner, our business could be adversely affected.

Our indebtedness could adversely affect our financial position or results of operations.

As of December 31, 2019, we had outstanding total debt of \$2,080.3 million, excluding debt of CIP, and total equity attributable to Invesco Ltd. of \$13,862.5 million. The amount of indebtedness we carry could limit our ability to obtain additional financing for working capital, capital expenditures, acquisitions, debt service requirements or other purposes, increase our vulnerability to adverse economic and industry conditions, limit our flexibility in planning for, or reacting to, changes in our business or industry and place us at a disadvantage in relation to our competitors. Any or all of the above factors could materially adversely affect our financial position or results of operations.

Our credit facility imposes restrictions on our ability to conduct business and, if amounts borrowed under it were subject to accelerated repayment, we might not have sufficient assets or liquidity to repay such amounts in full.

Our credit facility requires us to maintain specified financial ratios, including maximum debt-to-earnings and minimum interest coverage ratios. The credit facility also contains customary affirmative operating covenants and negative covenants that, among other things, restrict certain of our subsidiaries' ability to incur debt and restrict our ability to transfer assets, merge, make loans and other investments and create liens. The breach of any covenant would result in a default under the credit facility. In the event of any such default, lenders that are party to the credit facility could refuse to make further extensions of credit to us and require all amounts borrowed under the credit facility, together with accrued interest and other fees, to be immediately due and payable. If any indebtedness under the credit facility were subject to accelerated repayment and if we had at that time a significant amount of outstanding debt under the credit facility, we might not have sufficient liquid assets to repay such indebtedness in full.

Performance fees may increase revenue and earnings volatility.

A portion of the company's revenues is derived from performance fees on investment advisory agreements. Performance fees represented \$102.2 million, or 1.7%, of total operating revenues for the year ended December 31, 2019. In most cases, performance fees are based on relative or absolute investment returns, although in some cases they are based on achieving specific service standards. Generally, the company is entitled to performance fees only if the returns on the related portfolios exceed agreed-upon periodic or cumulative return targets. If these targets are not exceeded, performance fees for that period will not be earned and, if targets are based on cumulative returns, the company may not earn performance fees in future periods. Performance fees will vary from period to period in relation to volatility in investment returns and the timing of revenue recognition, causing our earnings to be more volatile.

Distribution of earnings of our subsidiaries may be subject to limitations, including net capital requirements.

Substantially all our operations are conducted through our subsidiaries. As a result, our cash flow and our ability to fund operations are dependent upon the earnings of our subsidiaries and the distribution of earnings, intercompany loans or other payments by our subsidiaries to us. Any payments to us by our subsidiaries could be subject to statutory or contractual restrictions and are contingent upon our subsidiaries' earnings and business considerations. For example, certain of our subsidiaries are required under applicable laws and regulations to maintain appropriate levels of capital. Such requirements may change from time-to-time as additional guidance is released based on a variety of factors,

including balance sheet composition, assessment of risk exposures and governance and review from regulators. These and other similar provisions of applicable laws and regulations may have the effect of limiting withdrawals of capital, repayment of intercompany loans and payment of dividends by such entities. All of our regulated EU and UK subsidiaries are subject to consolidated capital requirements under applicable EU and UK requirements, including those arising from the EU's Capital Requirements Directive and the UK's Internal Capital Adequacy Assessment Process (ICAAP), and capital is maintained within this European subgroup to satisfy these regulations. We meet these requirements in part by holding cash and cash equivalents. This retained cash can be used for general business purposes in the European sub-group in the countries where it is located. Due to the capital restrictions, the ability to transfer cash between certain jurisdictions may be limited. In addition, transfers of cash between international jurisdictions may have adverse tax consequences. As of December 31, 2019, the company's minimum regulatory capital requirement was \$753.6 million. Complying with our regulatory commitments may result in an increase in the capital requirements applicable to the European sub-group. As a result of corporate restructuring and regulatory requirements, certain of these subsidiaries may be required to limit their dividends to the ultimate parent company, Invesco Ltd. Our financial condition or liquidity could be adversely affected if certain of our subsidiaries are unable to distribute funds to us.

We are exposed to a number of risks arising from our international operations.

We operate in a number of jurisdictions outside of the United States. We have offices in numerous countries and sponsor many cross border and local proprietary funds that are domiciled outside the United States and may face difficulties in managing, operating and marketing our international operations. Our international operations expose us to the political and economic consequences of operating in foreign jurisdictions and subject us to expropriation risks, expatriation controls and potential adverse tax consequences.

Since many of our subsidiary operations are located outside of the United States and have functional currencies other than the U.S. Dollar, changes in the exchange rates to the U.S. Dollar affect our reported financial results from one period to the next.

The largest component of our net assets, revenues and expenses, as well as our AUM, is presently denominated in U.S. Dollars. However, we have a large number of subsidiaries outside of the United States whose functional currencies are not the U.S. Dollar. As a result, fluctuations in the exchange rates to the U.S. Dollar affect our reported financial results from one period to the next. Consequently, significant strengthening of the U.S. Dollar relative to the UK Pound Sterling, Euro, or Japanese Yen, among other currencies, could have a material negative impact on our reported financial results.

Terrorist activity and the continued threat of terrorism, increased geopolitical unrest, natural or man-made disasters could adversely affect the global economy or specific international, regional and domestic markets, which may cause our AUM, revenue and earnings to decline.

Terrorist activity and the continued threat of terrorism, acts of civil or international unrest or hostility, natural disasters, pandemic disease and man-made disasters, within the United States and abroad, as well as ongoing military and other actions and heightened security measures in response to these types of threats, may cause significant volatility and declines in the global markets and reduced economic activity. (For example, the spread of a new strain of coronavirus at the end of 2019 may impact global markets in Asia. The market reaction may deepen further if the virus spreads.) Any of these events that adversely affect the global economy, capital markets or specific international, regional or domestic markets may cause our AUM, revenue and earnings to decline and may have a materially negative impact on our financial results.

If we are unable to successfully recover from a disaster or other business continuity problem, we could suffer material financial loss, loss of human capital, regulatory actions, reputational harm or legal liability.

If we were to experience a local or regional disaster or other business continuity problem, such as a pandemic or other natural or man-made disaster, our continued success will depend, in part, on the availability of our personnel, our office facilities and the proper functioning of our computer, telecommunication and other related systems and operations. In such an event, we believe our operational size, the multiple locations from which we operate, and our existing back-up systems should mitigate adverse impacts. Nevertheless, we could still experience near-term operational problems with regard to particular areas of our operations. Further, as we strive to achieve cost savings by shifting certain business processes to lower-cost geographic locations such as India, the potential for particular types of natural or man-made disasters, political, economic or infrastructure instabilities, or other country- or region-specific business continuity risks increases. Although we seek to assess regularly and improve our existing business continuity plans, a major disaster, or one that affected certain important operating areas, or our inability to recover successfully 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 or legal liability.

Failure to establish adequate controls and risk management policies, the circumvention of controls and policies or fraud could have an adverse effect on our reputation and financial position.

Although we seek to foster a positive workplace culture, have adopted a comprehensive risk management process and continue to enhance various controls, procedures, policies and systems to monitor and manage risks, we cannot ensure that our workplace culture or such controls, procedures, policies and systems will successfully identify and manage internal and external risks to our business. We are subject to the risk that our employees, contractors or other third parties may deliberately or recklessly seek to circumvent established controls to commit fraud (including through cyber breaches) or act in ways that are inconsistent with our controls, policies and procedures. Persistent or repeated attempts involving conflicts of interests, circumvention of policies and controls or fraud could have a materially adverse impact on our reputation, could lead to costly regulatory inquiries, fines and/or sanctions and may cause our AUM, revenue and earning to decline.

Our business is vulnerable to deficiencies and failures in support systems and customer service functions that could lead to breaches and errors or reputational harm, resulting in loss of customers or claims against us or our subsidiaries.

In addition to investment management, our services include fund administration, sales, distribution, marketing, shareholder servicing and trust, custody and other fiduciary services. In order to be competitive and comply with our agreements, we must properly perform our fund and portfolio administration and related responsibilities, including portfolio recordkeeping and accounting, security pricing, corporate actions, investment restrictions compliance, daily net asset value computations, account reconciliations and required distributions to fund shareholders. The ability to consistently and reliably obtain accurate securities pricing information, process client portfolio and fund shareholder transactions and provide reports and other customer service to fund shareholders and clients in accounts managed by us is essential to our continuing success. Certain types of securities may experience liquidity constraints that would require increased use of fair value pricing, which is dependent on certain subjective judgments that have the potential to be challenged. Any delays or inaccuracies in obtaining pricing information, processing such transactions or such reports or other breaches and errors and any inadequacies in other customer service, could result in reimbursement obligations or other liabilities, or alienate clients or distributors and potentially give rise to claims against us. Our customer service capability, as well as our ability to obtain prompt and accurate securities pricing information and to process transactions and reports, is highly dependent on communications and information systems and on third-party service providers. Certain of these processes involve a degree of manual input, and thus problems could occur from time-to-time due to human error. Our failure to properly perform and monitor our operations or our otherwise suffering deficiencies and failures in these systems or service functions could result in material financial loss or costs, regulatory actions, breach of client contracts, reput

The failure of one of our third party service providers or other key vendors to fulfill its obligations could have a material adverse effect on our reputation or business, which may cause our AUM, revenue and earnings to decline.

We depend on third party service providers and other key vendors for various fund administration, accounting, custody, risk analytics, market data, market indices and transfer agent roles, and other distribution and operational needs. If our

third party service providers or other key vendors fail to fulfill their obligations to us, it could lead to operational and regulatory problems, including with respect to certain of our products, which could result in losses, enforcement actions, or reputational harm and may cause our AUM, revenue and earnings to decline.

The carrying value of goodwill and other intangible assets on our balance sheet could become impaired, which would adversely affect our results of operations.

We have goodwill and indefinite-lived intangible assets on our balance sheet that are subject to annual impairment reviews. We also have definite-lived intangible assets on our balance sheet that are subject to impairment testing if indicators of impairment are identified. Goodwill and intangible assets totaled \$8,509.4 million and \$7,358.3 million, respectively, at December 31, 2019. We may not realize the value of such assets. We perform impairment reviews of the book values of these assets on an annual basis or more frequently if impairment indicators are present. A variety of factors could cause such book values to become impaired. Should valuations be deemed to be impaired, a write-down of the related assets would occur, adversely affecting our results of operations for the period. See Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations - Critical Accounting Policies - Goodwill" and "-Intangibles," for additional details of our impairment analysis process.

We operate in an industry that is highly regulated in many countries, and any enforcement action or adverse changes in the laws or regulations governing our business could decrease our revenues and profitability.

As with all investment management companies, our activities are highly regulated in almost all countries in which we conduct business. Laws and regulations applied at the national, state or provincial and local level generally grant governmental agencies and industry self-regulatory authorities broad administrative discretion over our activities, including the power to require registration or licenses, limit or restrict our business activities, conduct examinations, risk assessments, investigations and capital adequacy reviews and impose remedial programs to address perceived deficiencies. As a result of regulatory oversight, we could face requirements which negatively impact the way in which we conduct business, increase compliance costs and/or impose additional capital requirements. Our regulators likewise have the authority to commence enforcement actions which could lead to sanctions up to and including the revocation of licenses to operate certain businesses, the suspension or expulsion from a particular jurisdiction or market of any of our business organizations or their key personnel or the imposition of fines and censures on us or our employees. Further, regulators across borders could coordinate actions against us as issues arise resulting in impacts on our business in multiple jurisdictions. Judgments or findings of wrongdoing by regulatory or governmental authorities, or in private litigation against us, could affect our reputation, increase our costs of doing business and/or negatively impact our revenues. Any of the effects discussed above could have a material negative impact on our results of operations, financial condition or liquidity.

A substantial portion of the products and services we offer are regulated by the Securities and Exchange Commission (SEC), Financial Industry Regulatory Authority (FINRA), the Commodities Future Trading Commission (CFTC), the National Futures Association (NFA) and the Texas Department of Banking in the United States and by the Financial Conduct Authority (FCA) and the Prudential Regulatory Authority (PRA) in the United Kingdom. Subsidiaries operating in the European Union (EU) are subject to various EU Directives, which generally are implemented by member state national legislation and by EU Regulations. Our operations elsewhere in the world are regulated by similar regulatory organizations.

The regulatory environment in which we operate frequently changes and has seen a significant increase in regulation in recent years. Various changes in laws and regulations have been enacted or otherwise implemented in multiple jurisdictions globally in response to the crisis in the financial markets that began in 2007. Various other proposals remain under consideration by legislators, regulators, other government officials and other public policy commentators. Certain enacted provisions and certain other proposals are potentially far reaching and, depending upon their implementation, could have a material impact on our business. While certain of these provisions appear to address perceived problems in the banking sector, some will or may be applied more broadly and affect other financial services companies, including investment managers. While Invesco does not believe that the these post-crisis developments have or will fundamentally change the investment management industry or cause Invesco to reconsider its basic strategy, certain provisions have required, and other provisions will or may require, us to change or impose new limitations on the manner in which we conduct business; they also have increased regulatory burdens and related compliance costs, and will or may continue to do so. More broadly, we may be adversely affected as a result of new or revised legislation or regulations or by changes in the interpretation or enforcement of existing laws and regulations. To the extent that existing regulations are interpreted or amended or future regulations are adopted in a manner that reduces the sale, or increases the redemptions, of our products and services, or that negatively affects the investment performance of our products or impacts our product mix, our

aggregate AUM and our revenues could be adversely affected. In addition, regulatory changes have imposed and may continue to impose additional costs or capital requirements, which could negatively impact our profitability or return on equity.

The EU has promulgated or is considering various new or revised directives pertaining to financial services, including investment managers. Such directives are progressing at various stages, and generally have been, are being or will or would be implemented by national legislation in member states. Ongoing changes in the EU's regulatory framework applicable to our business, including changes related to Brexit and any other changes in the composition of the EU's member states, may add further complexity to our global risks and operations.

Developments under regulatory changes will or may include, without limitation:

- New or increased capital requirements and related regulation.
- Limitations on holdings of certain commodities under proposed regulations of the CFTC which could result in capacity constraints for our products that employ commodities as part of their investment strategy.
- Potential limitations on the ability of our U.S. registered funds to enter into derivatives transactions under regulations of the SEC.
- · Regulations impacting the standard of care a financial adviser owes to its clients including the SEC's best interests standard.
- Other changes to the distribution of investment funds and other investment products.
- In 2015, the FCA undertook a study of the asset management industry and released their final report in June 2017. The report highlighted a number of specific industry issues and proposed a number of remedies that will take place in a number of stages, including: changes to governance, changes to fee structures to provide clients with increased transparency, improved disclosure in client documentation, improved ability for retail clients to change share classes, changes to pension pooling and investment consultant regulations in the institutional segment and new requirements that fund sponsors evaluate the degree to which their funds provide value to fund shareholders.
- The Markets in Financial Instruments Directive II (MiFID II) in the EU, effective in January 2018, seeks to promote a single market for wholesale and retail transactions in financial instruments. MiFID II addresses the conduct of business rules for intermediaries providing investment services and the effective, efficient and safe operation of financial markets. Key elements of MiFID II are the extent to which retrocessions may be paid and the use of trading commissions to fund research. Beginning in January 2018, the company has absorbed external research costs incurred for MiFID II impacting funds and client accounts in Europe. While the foregoing provisions only impact the EU, client-driven competitive pressures may cause an expansion of these principles to other business regions in which we operate, including the United States.
- Forthcoming EU regulations pertaining to integrating environmental, social and governance (ESG) topics may materially impact the asset management industry in member states that adopt such legislation. For example, the EU's recent action plan on financing sustainable growth includes initiatives to integrate ESG into the financial system, including such areas as MiFID2, UCITS and AIFMD regulations.
- An increased focus on liquidity in funds (including fixed income funds), an example of which is the SEC's rules with respect to liquidity and liquidity risk management applicable to certain types of registered U.S. funds that took effect in 2018.
- Increased requirements to provide regulators and investors more granular detail regarding our products and services, including the SEC's reporting modernization rule applicable to certain types of registered U.S. funds that took effect in 2018.
- Regulations pertaining to the privacy of data with respect to clients, employees and business partners. The introduction of the EU's General Data Protection Regulation (GDPR) in 2018 strengthened privacy rules for individuals within the EU, and greatly increased penalties for non-compliance. The GDPR has also influenced direction on privacy regulations outside of the EU, most recently the State of California adopted the California Consumer Privacy Act (CCPA) in January 2020 granting California consumers more control over the use of their personal information by organizations doing business with them. A failure to comply can result in fines levied by the California Attorney General or private rights of action by consumers. Looking forward, various other U.S. states are seeking to establish similar laws to CCPA, and privacy laws are being updated and strengthened in various jurisdictions globally, such as Canada, India, China, and Hong Kong.
- Increased regulatory scrutiny on operations of private capital funds.
- Requirements pertaining to the trading of securities and other financial instruments, such as swaps and other derivatives, including certain provisions of
 the Dodd-Frank Act and European Market Infrastructure Regulation; these include significant reporting requirements, designated trading venues,
 mandated central

- clearing arrangements, restrictions on proprietary trading by certain financial institutions, other conduct requirements and potentially new taxes or similar fees.
- Phase out of the LIBOR benchmark, which will impact interest payables or receivables on certain portfolio investments.
- Heightened regulatory examinations and inspections, including enforcement reviews, and a more aggressive posture regarding commencing
 enforcement proceedings resulting in fines, penalties and additional remedial activities to firms and to individuals. Without limiting the generality of the
 foregoing, regulators in the United States and the United Kingdom have taken and can be expected to continue to take a more aggressive posture on
 bringing enforcement proceedings.
- Enhanced licensing and qualification requirements for key personnel, including the United Kingdom Senior Managers and Certification Regime, which became effective in December 2019.
- Guidelines regarding the structure and components of fund manager compensation and other additional rules and regulations and disclosure requirements. Certain provisions impose additional disclosure burdens on public companies. Certain proposals could impose requirements for more widespread disclosures of compensation to highly-paid individuals. Depending upon the scope of any such requirements, Invesco could be disadvantaged in retaining key employees vis-à-vis private companies, including hedge fund sponsors.
- Strengthening standards regarding various ethical matters, including compliance with the Foreign Corrupt Practices Act, the UK Bribery Act and antimoney-laundering laws and regulations.
- Regulations promulgated to address perceptions that the asset management industry, or certain of its entities or activities, pose systematic risks to the financial system.
- Regulations promulgated to protect personal data and address risks of fraud, malfeasance or other adverse consequences stemming from cyber attacks.
- Other changes impacting the identity or the organizational structure of regulators with supervisory authority over Invesco.

We cannot at this time predict the full impact of potential legal and regulatory changes or possible enforcement proceedings on our business. Such changes have imposed, and may continue to impose, new compliance costs and/or capital requirements or impact Invesco in other ways that could have a material adverse impact on our results of operations, financial condition or liquidity. Moreover, certain legal or regulatory changes could require us to modify our strategies, businesses or operations, and we may incur other new constraints or costs, including the investment of significant management time and resources in order to satisfy new regulatory requirements or to compete in a changed business environment. In recent years, certain regulatory developments have also added downward pressures regarding fee levels.

To the extent that existing or future regulations affecting the sale of our products and services or cause or contribute to reduced sales or increased redemptions of our products or services, impair the investment performance of our products or services or impact our product mix, our AUM and results of operations might be adversely affected.

Civil litigation and governmental investigations and enforcement actions could adversely affect our AUM and future financial results, and increase our costs of doing business.

Invesco and certain related entities have in recent years been subject to various legal proceedings, including civil litigation and governmental investigations and enforcement actions. These actions can arise from normal business operations and/or matters that have been the subject of previous regulatory reviews. As a global company with investment products registered in numerous countries and subject to the jurisdiction of one or more regulators in each country, at any given time, our business operations may be subject to review, investigation or disciplinary action. For example, in the United States, United Kingdom and other jurisdictions in which the company operates, governmental authorities regularly make inquiries, hold investigations and administer market conduct examinations with respect to the company's compliance with applicable laws and regulations. Lawsuits or regulatory enforcement actions arising out of these inquiries may in the future be filed against the company and related entities and individuals in the United States, United Kingdom and other jurisdictions in which the company and its affiliates operate. See Item 8, Financial Statements and Supplementary Data, Note 19 -- "Commitments and Contingencies," for additional information. Judgments in civil litigation or findings of wrongdoing by regulatory or governmental authorities against us could affect our reputation, increase our costs of doing business and/or negatively impact our revenues, any of which could have a material negative impact on our results of operations, financial condition or liquidity.

Insurance May Not Be Available at a Reasonable Cost to Protect Us from Liability.

We face the inherent risk of liability related to claims from clients, third-party vendors or others, actions taken by regulatory agencies and costs and losses associated with operations failures (which could include cyber incidents). To help protect against these risks, we purchase insurance in amounts, and against potential liabilities, that we consider appropriate, where such insurance is available at prices we deem reasonable. There can be no assurance, however, that a claim or claims will be covered by insurance or, if covered, will not exceed coverage limits, or that an insurer will meet its obligations regarding coverage, or that coverage will continue to be available on a cost effective basis. Insurance costs are impacted by market conditions and the risk profile of the insured, and may increase significantly over relatively short periods. In addition, certain insurance coverage may not be available or may only be available at prohibitive costs. Renewals of insurance policies may expose us to additional costs through higher premiums or the assumption of higher deductibles or co-insurance liability.

Legislative and other measures that may be taken by U.S. and/or other governmental authorities could materially increase our tax burden or otherwise adversely affect our financial condition, results of operations or cash flows.

Under current laws, as the company is domiciled and tax resident in Bermuda, taxation in other jurisdictions is dependent upon the types and the extent of the activities of the company undertaken in those jurisdictions. There is a risk that changes in either the types of activities undertaken by the company or changes in tax rules relating to tax residency could subject the company and its shareholders to additional taxation.

The international tax environment continues to change as a result of both coordinated actions by governments and unilateral measures designed by individual countries, both intended to tackle concerns over base erosion and profit shifting (BEPS) and perceived international tax avoidance techniques. The recommendations of the BEPS Project led by the Organization for Economic Cooperation and Development (OECD) and the Anti-Tax Avoidance Directive (ATAD) from the European Union (EU) are involved in much of the coordinated activity, including:

- In 2018, the EU introduced mandatory disclosure rules (DAC6) requiring disclosure to tax authorities of cross-border arrangements entered into by taxpayers that fall within certain, broadly defined hallmarks beginning in July 1, 2020. There also are separate transitional rules that require separate reporting for any disclosable transactions occurring after June 25, 2018.
- On July 1, 2018, the OECD enacted the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent Base Erosion and Profit Shifting (the Multilateral Instrument or MLI). The MLI implements several BEPS initiatives: Action 2 hybrid mismatch arrangements; Action 6-treaty abuse; Action 7 definition of permanent establishment; and Action 14- mutual agreement procedures (MAP) as well as arbitration.
- The OECD has adopted a global common reporting standard for the automatic exchange of financial information among participating countries ("CRS"), aimed at ensuring that persons with financial assets located outside of their tax residence country pay required taxes. In many cases, intergovernmental agreements between the participating countries will govern implementation of the new CRS rules. CRS is being implemented over a multi-year period and we will continue to monitor the implementing regulations and corresponding intergovernmental agreements to determine our requirements.
- The OECD has also undertaken BEPS 2.0 focused on "Addressing the Tax Challenges of the Digitalization of the Economy." This project may impact all multinational businesses by allocating a greater share of taxing rights to countries where consumers are located regardless of the current physical presence of a business, and by implementing a global minimum tax. There is significant uncertainty regarding such proposals, including that a few EU countries have unilaterally enacted or proposed a tax on digital services ahead of any EU wide proposal.
- The OECD has also launched an Analytical Database on Individual Multinationals and Affiliates ("ADIMA"), a database containing public information on the physical and digital locations of corporations (including revenue, profit, income tax and number of employees.
- Bermuda has recently adopted economic substance regulations to comply with the EU Code of Conduct for business taxation and tax policies which will require Invesco Ltd. to file annual declarations beginning June 2020 demonstrating economic substance within Bermuda.

As with any global implementation process there are concerns about potential lack of consistency in the local application of these items. Some of the recommendations are complex while others contain optional routes, thereby increasing the likelihood of only partial or limited implementation. 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. This could lead to increased uncertainty with tax positions as well as

increase the potential for double taxation.

We continually assess the impact of various U.S. federal, state and foreign legislative proposals, and modifications to existing tax treaties between the United States and foreign countries, which could result in a material increase in our U.S. federal, state or foreign taxes. We cannot predict the outcome of any specific legislative proposals. However, if such proposals were to be enacted, or if modifications were to be made to certain existing tax treaties, the consequences could have a materially adverse impact on the company, including increasing our tax burden, increasing costs of our tax compliance or otherwise adversely affecting our future results of operations, financial condition or liquidity.

On June 21, 2018, in South Dakota v. Wayfair, Inc. (Wayfair), the U.S. Supreme Court overruled prior Court decisions that had precluded states from imposing a sales and use tax collection obligation on sellers unless they had a physical presence in the state. The Wayfair decision as expected, has led to increased state nexus expansion as more states turn to economic nexus threshold laws and away from physical presence nexus tests.

The Tax Cuts and Jobs Act (the 2017 Tax Act) enacted on December 22, 2017, significantly reformed the taxation of business entities and included changes to U.S. federal tax rates, significant additional limitations on the deductibility of interest, and migrating from a "worldwide" system of taxation to a territorial system. Regulations and guidance implementing the changes continue to be issued and therefore the ultimate impact of the 2017 Tax Act on our business and financial condition remains to be determined.

On October 21, 2016, the United States Treasury and the IRS published final and temporary regulations under section 385 of the Internal Revenue Code ("385 Regulations") that target the inbound financing of a foreign-parented multinational group's U.S. subsidiaries. There continues to be no immediate impacts to the company's financial position as a result of the application of the 385 Regulations, however, in the future they could limit our ability to efficiently finance or otherwise choose between debt and equity transactions with our U.S. subsidiaries.

Examinations and audits by tax authorities could result in additional tax payments for prior periods.

The company and its subsidiaries are subject to both income and non-income based taxes, in the United States and various foreign jurisdictions which are subject to current and potentially future tax audits in these jurisdictions. The calculation of our tax liabilities involves dealing with uncertainties in the application of complex tax regulations in a multitude of jurisdictions across our global operations. Tax authorities may disagree with certain positions we have taken and assess additional taxes (and, in certain cases, interest, fines or penalties). We recognize potential liabilities and record tax liabilities for anticipated tax audit issues based on our estimate of whether, and the extent to which, additional income taxes will be due. We adjust these liabilities in light of changing facts and circumstances. Due to the complexity of some of these uncertainties, however, the ultimate resolution may result in a payment that is materially different from our current estimate of the tax liabilities.

The European Commission continues to investigate certain tax rulings and beneficial regimes provided by Member States to particular taxpayers that it believes may have violated the EU restriction on State Aid. The investigation was triggered by the OECD / BEPS action plan as well as the EU's own agenda to tackle aggressive tax planning and tax avoidance. There is considerable uncertainty with the approach being taken, including retroactive application (10 year period), conflicts with OECD Transfer Pricing Guidelines and implications to bilateral tax treaties. While the company does not believe it has received State Aid, and is not a party to any investigation, due to the uncertainty of the process and retroactive nature of the assessments any potential future findings could have a materially adverse impact on the company, including increasing our tax burden, increasing costs of our tax compliance or otherwise adversely affecting our future results of operations, financial condition or liquidity.

Bermuda law differs from the laws in effect in the United States and may afford less protection to shareholders.

Our shareholders may have more difficulty protecting their interests than shareholders of a company incorporated in a jurisdiction of the United States. As a Bermuda company, we are governed by the Companies Act 1981 of Bermuda (Companies Act). The Companies Act differs in some material respects from laws generally applicable to United States corporations and shareholders, including provisions relating to interested directors, mergers, amalgamations and acquisitions, takeovers, shareholder lawsuits and indemnification of directors.

Under Bermuda law, the duties of directors and officers of a company are generally owed to the company only. Shareholders of Bermuda companies do not generally have rights to take action against directors or officers of the company, and may only do so in limited circumstances described in the following paragraph. However, directors and officers may owe duties to a company's creditors in cases of impending insolvency. Directors and officers of a Bermuda

company must, in exercising their powers and performing their duties, act honestly and in good faith with a view to the best interests of the company and must exercise the care and skill that a reasonably prudent person would exercise in comparable circumstances. Directors have a duty not to put themselves in a position in which their duties to the company and their personal interests may conflict and also are under a duty to disclose any personal interest in any material contract or proposed material contract with the company or any of its subsidiaries. If a director or officer of a Bermuda company is found to have breached such director's duties to that company, the director may be held personally liable to the company in respect of that breach of duty.

Class actions and derivative actions are generally not available to shareholders under the laws of Bermuda. However, the Bermuda courts ordinarily would be expected to follow English case law precedent, which would permit a shareholder to commence an action in a company's name against the directors and officers to remedy a wrong done to the company where the act complained of is alleged to be beyond the company's corporate power or is illegal or would result in the violation of the company's memorandum of association or Bye-Laws. Furthermore, consideration would be given by the court to acts that are alleged to constitute a fraud against the minority shareholders or where an act requires the approval of a greater percentage of shareholders than actually approved it. Under our Third Amended and Restated Bye-Laws (Bye-Laws), each of our shareholders agrees to waive any claim or right of action, both individually and on our behalf, other than those involving fraud or dishonesty, against the company or any of our officers, directors or employees. The waiver applies to any action taken by a director, officer or employee, or the failure of such person to take any action, in the performance of his or her duties, except with respect to any matter involving any fraud or dishonesty on the part of the director, officer or employee. This waiver limits the right of shareholders to assert claims against our directors, officers and employees unless the act or failure to act involves fraud or dishonesty.

Our Bye-Laws also provide for indemnification of our directors and officers in respect of any loss arising or liability attaching to them in respect of any negligence, default, breach of duty or breach of trust of which a director or officer may be guilty in relation to the company other than in respect of his or her own fraud or dishonesty, which is the maximum extent of indemnification permitted under the Companies Act.

Because we are incorporated in Bermuda, it may be difficult for shareholders to serve process or enforce judgments against us or our directors and officers.

The company is organized under the laws of Bermuda. In addition, certain of our officers and directors reside in countries outside the United States. A substantial portion of the company's assets and the assets of these officers and directors are or may be located outside the United States. Investors may have difficulty effecting service of process within the United States on our directors and officers who reside outside the United States or recovering against the company or these directors and officers on judgments of U.S. courts based on civil liabilities provisions of the U.S. federal securities laws, even though the company has appointed an agent in the United States to receive service of process.

Further, it may not be possible in Bermuda or in countries other than the United States where the company has assets to enforce court judgments obtained in the United States against the company based on the civil liability provisions of U.S. federal or state securities laws. In addition, there is some doubt as to whether the courts of Bermuda and other countries would recognize or enforce judgments of U.S. courts obtained against the company or our directors or officers based on the civil liability provisions of the U.S. federal or state securities laws or would hear actions against the company or those persons based on those laws. We have been advised by our legal advisors in Bermuda that the United States and Bermuda do not currently have a treaty providing for the reciprocal recognition and enforcement of judgments in civil and commercial matters. Some remedies available under the laws of the United States or the states therein, including some remedies available under the U.S. federal securities laws, may not be allowed in Bermuda courts because they may be found to be contrary to Bermuda public policy. Therefore, a final judgment for the payment of money rendered by any federal or state court in the United States based on civil liability, whether or not based solely on U.S. federal or state securities laws, would not automatically be enforceable in Bermuda. Similarly, those judgments may not be enforceable in other countries other than the United States.

We have anti-takeover provisions in our Bye-Laws that may discourage a change of control.

Our Bye-Laws contain provisions that could make it more difficult for a third-party to acquire us or to obtain majority representation on our Board of Directors without the consent of our Board. As a result, shareholders may be limited in their ability to obtain a premium for their shares under such circumstances.

Specifically, our Bye-Laws contain the following provisions that may impede or delay an unsolicited takeover of the company:

- we are prohibited from engaging, under certain circumstances, in a business combination (as defined in our Bye-Laws) with any interested shareholder (as defined in our Bye-Laws) for three years following the date that the shareholder became an interested shareholder;
- our Board of Directors, without further shareholder action, is permitted by our Bye-Laws to issue preference shares, in one or more series, and determine by resolution any designations, preferences, qualifications, privileges, limitations, restrictions, or special or relative rights of an additional series. The rights of preferred shareholders may supersede the rights of common shareholders;
- shareholders may only remove directors for "cause" (defined in our Bye-laws to mean willful misconduct or gross negligence which is materially
 injurious to the company, fraud or embezzlement, or a conviction of, or a plea of "guilty" or "no contest" to, a felony);
- · our Board of Directors is authorized to expand its size and fill vacancies; and
- shareholders cannot act by written consent unless the consent is unanimous.

Item 1B. Unresolved Staff Comments

None

Item 2. Properties

Our registered office is located in Hamilton, Bermuda, and our corporate headquarters is in leased office space at 1555 Peachtree Street N.E., Suite 1800, Atlanta, Georgia, 30309, U.S.A. Our principal regional centers are maintained in leased facilities, except as noted below, in the following locations:

- North America: 11 Greenway Plaza, Houston, Texas 77046; 225 Liberty St, New York City, New York 10281
- EMEA: Perpetual Park, Henley-on-Thames, Oxfordshire, RG9 1HH, United Kingdom (owned facilities)
- Asia: Champion Tower, No. 3 Garden Road, Hong Kong

We maintain a global enterprise center in Hyderabad, India in leased facilities at DivyaSree Orion in the Ranga Reddy District of Hyderabad, India. We lease office space in 26 countries.

Item 3. Legal Proceedings

See Item 8, Financial Statements and Supplementary Data, Note 19 -- "Commitments and Contingencies - Legal Proceedings," for information regarding legal proceedings.

Item 4. Mine Safety Disclosures

Not applicable

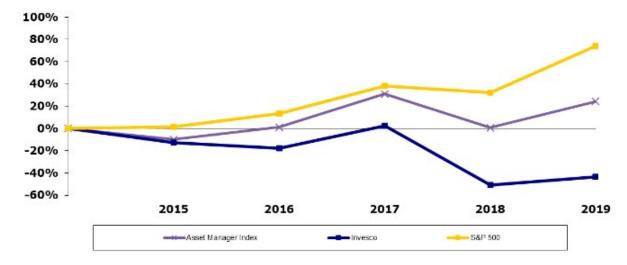
PART II

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

Invesco Ltd. is organized under the laws of Bermuda, and our common shares are listed and traded on the New York Stock Exchange under the symbol "IVZ." At January 31, 2020, there were approximately 5,300 holders of record of our common shares.

The following graph illustrates the cumulative total shareholder return of our common shares over the five-year period beginning from the market close on the last trading day of 2014 through and including the last trading day in the fiscal year ended December 31, 2019, and compares it to the cumulative total return of the Standard and Poor's (S&P) 500 Index and to a group of peer investment management companies. This table is not intended to forecast future performance of our common shares.

Cumulative Shareholder Returns



Note: Asset Manager Index includes Affiliated Managers Group, AllianceBernstein, Ameriprise Financial, Bank of New York Mellon, BlackRock, Charles Schwab, Eaton Vance, Federated Hermes, Franklin Resources, Invesco Ltd., Lazard, Legg Mason, Northern Trust, Principal Financial, State Street, TD Ameritrade, and T. Rowe Price.

Securities Authorized for Issuance under Equity Compensation Plans

The equity compensation plan information required in Item 201(d) of Regulation S-K is set forth in the definitive Proxy Statement for the company's annual meeting of shareholders, which will be filed with the SEC no later than 120 days after the close of the fiscal year ended December 31, 2019 and is incorporated by reference in this Report.

Repurchases of Equity Securities

The following table shows common share repurchase activity during the three months ended December 31, 2019:

Month	Total Number of Common Shares Purchased ⁽¹⁾		rage Price Paid Common Share			Approximate Dollar Value of Common Shares that May Yet Be Purchased Under the Plans or Programs ⁽²⁾ (millions)	
October 1 - 31, 2019	75,380	\$	16.22	_	\$	743.0	
November 1 - 30, 2019	33,583	\$	17.15	_	\$	743.0	
December 1 - 31, 2019	680,087	\$	17.92	600,000	\$	732.2	
	789,050	=" =		600,000			

⁽¹⁾ An aggregate of 189,050 common shares were surrendered to us by Invesco employees to satisfy tax withholding obligations in connection with the vesting of equity awards during the three months ended December 31, 2019.

⁽²⁾ At December 31, 2019, a balance of \$732.2 million remains available under the common share repurchase authorization approved by the Board on July 22, 2016.

Item 6. Selected Financial Data

The following tables present selected consolidated financial information for the company as of and for each of the five fiscal years in the period ended December 31, 2019. Except as otherwise noted below, the consolidated financial information has been prepared in accordance with U.S. generally accepted accounting principles.

	As of and For The Years Ended December 31,				
\$ in millions, except per common share and other data	2019	2018	2017	2016	2015
Operating Data:					
Operating revenues	6,117.4	5,314.1	5,160.3	4,734.4	5,122.9
Net revenues (1)	4,415.1	3,818.1	3,754.9	3,393.2	3,643.2
Operating income	808.2	1,204.9	1,279.1	1,152.4	1,344.7
Adjusted operating income (2)	1,655.8	1,391.7	1,482.2	1,297.4	1,480.0
Operating margin	13.2%	22.7%	24.8%	24.3%	26.2%
Adjusted operating margin (2)	37.5%	36.5%	39.5%	38.2%	40.6%
Net income attributable to Invesco Ltd.	564.7	882.8	1,127.3	854.2	968.1
Adjusted net income attributable to Invesco Ltd. (3)	1,124.0	1,002.7	1,105.9	924.1	1,048.7
Per Common Share Data:					
Earnings per common share:					
-basic	1.29	2.14	2.75	2.06	2.26
-diluted	1.28	2.14	2.75	2.06	2.26
Adjusted diluted EPS (3)	2.55	2.43	2.70	2.23	2.44
Dividends declared per common share	1.23	1.19	1.15	1.11	1.06
Balance Sheet Data:					
Total assets	39,420.3	30,978.4	31,668.8	25,734.3	25,073.2
Long-term debt	2,080.3	2,408.8	2,075.8	2,102.4	2,072.8
Debt of consolidated investment products (CIP)	6,234.6	5,226.0	4,799.8	4,403.1	5,437.0
Total equity attributable to Invesco Ltd.	13,862.5	8,578.8	8,696.1	7,503.8	7,885.3
Total permanent equity	14,318.3	8,936.2	8,955.6	7,611.8	8,695.7
Other Data:					
Ending AUM (in billions)	1,226.2	888.2	937.6	812.9	775.6
Average AUM (in billions)	1,094.4	958.7	875.0	788.8	794.7
Headcount	8,821	7,459	7,030	6,790	6,490

- (1) Net revenues is a non-GAAP financial measure. See Item 7, "Summary Operating Information," footnote 1, for the definition of this measure and the related reconciliation reference.
- (2) Adjusted operating income and adjusted operating margin are non-GAAP financial measures. See Item 7, "Summary Operating Information," footnote 2, for the definition of these measures and the related reconciliation reference.
- (3) Adjusted net income attributable to Invesco Ltd. and adjusted diluted EPS are non-GAAP financial measures. See Item 7, "Summary Operating Information," footnote 3, for the definition of these measures and the related reconciliation reference.

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

Management has elected to apply the FAST Act Modernization and Simplification of Regulation S-K, which provides the option to limit the discussion to the two most recent calendar years. The discussion and analysis disclosed herein apply to material changes in the consolidated financial statements for 2019 and 2018. For the comparison of 2018 and 2017, see the Management's Discussion and Analysis of Financial Condition and Results of Operations in Part II, Item 7 of the company's 2018 Annual Report on Form 10-K, filed with the Securities and Exchange Commission on February 22, 2019.

Executive Overview

The following executive overview summarizes the significant trends affecting our results of operations and financial condition for the periods presented. This overview and the remainder of this management's discussion and analysis supplements and should be read in conjunction with the Consolidated Financial Statements of Invesco Ltd. and its subsidiaries (collectively, the "company" or "Invesco") and the notes thereto contained elsewhere in this Annual Report on Form 10-K.

Global financial markets in 2019 were strong, despite periods of volatility throughout the year. The year saw global policy uncertainty and rising trade barriers. Uncertainty in the economic environment and weaker industry production metrics at times in the year led the US Fed and many other central banks to lower interest rates to support global growth. Despite this uncertainty, the global economy grew at a modest pace. The U.S. economy grew in 2019, while the European economy slowed during the year. Japan's economy expanded slightly; while China's economy grew at slightly lower levels than the prior year. Global inflation fell slightly in the year.

2019 was almost entirely positive for U.S. equities, despite the uncertainty throughout the year over future Fed policy and concerns about trade tensions between the U.S. and China. The central bank cut rates three times in 2019 to counter concerns about inflation growth. The S&P 500 posted multiple all-time high closing price levels and finished the year up 28.9%.

European markets were volatile in 2019, reacting to signs of weakening growth and tense trade talks, but were similarly assisted by continued accommodative monetary policies from central banks. The Brexit debate continued within the UK weighing on UK equities; the UK election in December brought political clarity. Also boosted by eased monetary policy, the FTSE 100 ended the year up 12.1%.

Japanese equities advanced in the year despite overall sentiment of a weakening economy and a difficult global trade environment. The Bank of Japan maintained its accommodative monetary policy. The Nikkei 225 finished the period up 18.2%.

Emerging market stocks also gained during the period, overcoming uncertainties over the US-China trade negotiations, general easing of growth in China and a strong US dollar.

Investors sought the relative safety of bonds amidst global growth concerns and geopolitical uncertainties. The U.S. Aggregate Bond Index was higher by 8.7% for the year.

The table below summarizes the year ended December 31 returns based on price appreciation/(depreciation) of several major market indices for 2019 and 2018:

	<u> </u>	Year ended	December 31,
Equity Index	Index expressed in currency	2019	2018
S&P 500	U.S. Dollar	28.9%	(7.0)%
FTSE 100	British Pound	12.1%	(12.4)%
FTSE 100	U.S. Dollar	16.7%	(17.8)%
Nikkei 225	Japanese Yen	18.2%	(12.1)%
Nikkei 225	U.S. Dollar	19.9%	(10.4)%
MSCI Emerging Markets	U.S. Dollar	15.4%	(16.9)%
Bond Index			
Barclays U.S. Aggregate Bond	U.S. Dollar	8.7%	(0.2)%

The company's financial results are impacted by the fluctuations in exchange rates against the U.S. Dollar, as discussed in the "Foreign Exchange Impact on Balance Sheet, Assets Under Management and Results of Operations" section and the "Results of Operations for the Years Ended December 31, 2019 compared to December 31, 2018" section below.

Our revenues are directly influenced by the level and composition of our AUM. Therefore, movements in global capital market levels, net new business inflows (or outflows) and changes in the mix of investment products between asset classes and geographies may materially affect our revenues from period to period. As fee rates differ across geographic locations, changes to exchange rates have an impact on the net revenue yields.

Invesco benefits from our long-term efforts to ensure a diversified base of AUM. One of Invesco's core strengths, and a key differentiator for the company within the industry, is our broad diversification across client domiciles, asset classes and distribution channels. Our geographic diversification recognizes growth opportunities in different parts of the world. This broad diversification mitigates the impact on Invesco of different market cycles and enables the company to take advantage of growth opportunities in various markets and channels.

On May 24, 2019, the company completed the acquisition of OppenheimerFunds, an investment management subsidiary of MassMutual, for \$5.6 billion. The strategic acquisition brings Invesco's total assets under management to approximately \$1.2

trillion, further enhancing the company's ability to meet client needs through its comprehensive range of high-conviction active, passive and alternative capabilities.

The highly complementary investment and distribution capabilities of Invesco and OppenheimerFunds strengthen the combined organization's ability to provide more relevant investment outcomes to an expanded number of institutional and retail clients in the US and around the globe. Both Invesco's and OppenheimerFunds' clients benefit from the acquisition, which incorporates OppenheimerFunds' high-performing investment capabilities and its powerful U.S. third-party distribution platform with Invesco's strong and diversified product lineup, global presence, and solutions-driven client outreach. We view this as a multi-year growth story that expands the capabilities we can offer globally while further scaling our business for the benefit of clients.

Invesco has made significant progress toward the integration of the two firms through the combination of middle- and back- office, location strategy and leveraging the scale of the global operating platform. To date, Invesco has achieved \$501 million in annualized net expense synergies related to integration of the OppenheimerFunds business, which is in excess of our \$475 million target and ahead of schedule. Transaction, integration, and restructuring costs related to the acquisition are expected to increase from the original projection as a result of expenses related to fund mergers that were not contemplated at close, as well as incremental severance costs related to achieving increased net expense synergies. The company also will continue to incur incremental non-cash transaction, integration, and restructuring charges related to accelerated vesting of common share-based awards for terminated employees and acceleration of depreciation for software and leasehold improvement assets, as well as \$120 million related to compensation payments to certain OppenheimerFunds employees, which were funded by MassMutual under the terms of the acquisition.

During the year, the company purchased \$669.8 million of its common shares. This amount reflects \$500 million (25.8 common shares) through forward contracts, \$110.8 million of common shares repurchased in the market at cost (5.6 million common shares) and \$59.0 million (3.3 million common shares) relating to purchases of common shares from employees to satisfy tax withholding requirements at the time of common share vesting. At December 31, 2019, a balance of \$732.2 million remains available under the common share repurchase authorization approved by the Board on July 22, 2016. Since announcing the \$1.2 billion stock repurchase plan in October 2018, the company has repurchased \$973 million of its common shares to date and is on target to repurchase the remaining \$227 million by the first quarter of 2021.

Invesco continues to demonstrate its commitment to supporting financial advisors with industry leading tools and resources, such as Jemstep, our advisor-powered digital advice capability, and Intelliflo, our advisor-focused digital platform. The range of investment capabilities available through Jemstep are broad across the firm's active, alternative and ETF offerings. Additionally, Jemstep offers open architecture to help advisors provide customized solutions for clients. As a market-leading provider of digital solutions, Jemstep continues to expand its capabilities and market presence, and is an integral part of Invesco's growth strategy.

Presentation of Management's Discussion and Analysis of Financial Condition and Results of Operations -- Impact of Consolidated Investment Products

The company provides investment management services to, and has transactions with, various retail mutual funds and similar entities, private equity, real estate, fund-of-funds, collateralized loan obligation products (CLOs), and other investment entities sponsored by the company for the investment of client assets in the normal course of business. The company serves as the investment manager, making day-to-day investment decisions concerning the assets of the products. The company is required to consolidate certain of these managed funds from time-to-time, as discussed more fully in Item 8, Financial Statements and Supplementary Data, Note 1 -- "Accounting Policies -- Basis of Accounting and Consolidation." Investment products that are consolidated are referred to in this Form 10-K (Report) as consolidated investments products (CIP). The company's economic risk with respect to each investment in CIP is limited to its equity ownership and any uncollected management and performance fees.

The majority of the company's CIP balances are CLO-related. The collateral assets of the CLOs are held solely to satisfy the obligations of the CLOs. The company has no right to the benefits from, nor does it bear the risks associated with, the collateral assets held by the CLOs, beyond the company's direct investments in, and management and performance fees generated from, the CLOs. If the company were to liquidate, the collateral assets would not be available to the general creditors of the company, and as a result, the company does not consider them to be company assets. Likewise, the investors in the CLOs have no recourse to the general credit of the company for the notes issued by the CLOs. The company therefore does not consider this debt to be a company liability.

The impact of CIP is so significant to the presentation of the company's Consolidated Financial Statements that the company has elected to deconsolidate these products in its non-GAAP disclosures. The following discussion therefore combines the results presented under U.S. generally accepted accounting principles (U.S. GAAP) with the company's non-GAAP presentation. This Management's Discussion and Analysis of Financial Condition and Results of Operations contains four distinct sections, which follow after the Assets Under Management discussion:

- Results of Operations (year ended December 31, 2019 compared to December 31, 2018);
- Schedule of Non-GAAP Information;
- Balance Sheet Discussion; and
- · Liquidity and Capital Resources.

To assess the impact of CIP on the company's Results of Operations and Balance Sheet Discussion, refer to Part II, Item 8, Financial Statements, Note 20, "Consolidated Investment Products." The impact on the company's results of operations is illustrated by a column which shows the dollar-value change in the consolidated figures, as caused by the consolidation of CIP. For example, the impact of CIP on operating revenues for the year ended December 31, 2019 was a reduction of \$33.5 million. This indicates that their consolidation reduced consolidated revenues by this amount, reflecting the elimination upon their consolidation of the operating revenues earned by Invesco for managing these investment products.

Wherever a non-GAAP measure is referenced, a disclosure will follow in the narrative or in the note referring the reader to the Schedule of Non-GAAP Information, where additional details regarding the use of the non-GAAP measure by the company are disclosed, along with reconciliations of the most directly comparable U.S. GAAP measures to the non-GAAP measures. To further enhance the readability of the Results of Operations section, separate tables for each of the revenue, expense, and other income and expenses (non-operating income/expense) sections of the income statement introduce the narrative that follows, providing a section-by-section review of the company's income statements for the periods presented.

Summary Operating Information

Summary operating information for 2019, 2018 and 2017 is presented in the table below.

\$ in millions, other than per common share amounts, operating margins and AUM	Yea	r ended December 31,	
U.S. GAAP Financial Measures Summary	2019	2018	2017
Operating revenues	6,117.4	5,314.1	5,160.3
Operating income	808.2	1,204.9	1,279.1
Operating margin	13.2%	22.7%	24.8%
Net income attributable to Invesco Ltd.	564.7	882.8	1,127.3
Diluted EPS	1.28	2.14	2.75
Non-GAAP Financial Measures Summary			
Net revenues (1)	4,415.1	3,818.1	3,754.9
Adjusted operating income (2)	1,655.8	1,391.7	1,482.2
Adjusted operating margin (2)	37.5%	36.5%	39.5%
Adjusted net income attributable to Invesco Ltd. (3)	1,124.0	1,002.7	1,105.9
Adjusted diluted EPS (3)	2.55	2.43	2.70
Assets Under Management			
Ending AUM (billions)	1,226.2	888.2	937.6
Average AUM (billions)	1,094.4	958.7	875.0

⁽¹⁾ Net revenues is a non-GAAP financial measure. Net revenues are operating revenues plus the net revenues of our Great Wall joint venture; less pass-through revenue adjustments to investment management fees, service and distribution fees and other; plus management and performance fees earned from CIP. See "Schedule of Non-GAAP Information" for the reconciliation of operating revenues to net revenues.

⁽²⁾ Adjusted operating income and adjusted operating margin are non-GAAP financial measures. Adjusted operating margin is adjusted operating income divided by net revenues. Adjusted operating income includes operating income plus the net

- operating income of our joint venture investments, the operating income impact of the consolidation of investment products, transaction, integration and restructuring adjustments, compensation expense related to market valuation changes in deferred compensation plans and other reconciling items. See "Schedule of Non-GAAP Information," for the reconciliation of operating income to adjusted operating income.
- (3) Adjusted net income attributable to Invesco Ltd. and adjusted diluted EPS are non-GAAP financial measures. Adjusted net income attributable to Invesco Ltd. is net income attributable to Invesco Ltd. adjusted to exclude the net income of CIP, transaction, integration and restructuring adjustments, the net income impact of deferred compensation plans and other reconciling items. Adjustments made to net income attributable to Invesco Ltd. are tax-affected in arriving at adjusted net income attributable to Invesco Ltd. divided by the weighted average number of common shares outstanding (for diluted EPS). See "Schedule of Non-GAAP Information," for the reconciliation of net income attributable to Invesco Ltd. to adjusted net income attributable to Invesco Ltd..

Investment Capabilities Performance Overview

Invesco's first strategic objective is to achieve strong investment performance over the long-term for our clients. As of December 31, 2019, 64%, 53%, 54%, and 82% of measured ranked actively managed assets performed in the top half of peer groups on a one-, three-, five- and ten-year basis, respectively. The table below presents the one-, three-, five- and ten-year performance of our measured ranked actively managed investment products measured by the percentage of AUM ahead of benchmark and AUM in the top half of peer group. (1)

	Benchmark Comparison				Peer Group Comparison			
	% of AUM Ahead of Benchmark				% of AUM In Top Half of Peer Group			
	1yr	3yr	5yr	10yr	1yr	3yr	5yr	10yr
Equities (2)								
U.S. Core (4%)	67%	9%	10%	10%	67%	19%	15%	58%
U.S. Growth (5%)	82%	43%	43%	36%	80%	26%	24%	41%
U.S. Value (8%)	8%	34%	82%	32%	8%	0%	0%	69%
Sector (1%)	74%	93%	65%	88%	73%	43%	44%	43%
UK (2%)	13%	16%	16%	100%	11%	15%	11%	21%
Canadian (0%)	57%	0%	0%	32%	57%	0%	0%	31%
Asian (3%)	70%	93%	89%	88%	16%	91%	85%	85%
Continental European (3%)	2%	2%	51%	99%	11%	2%	28%	98%
Global (7%)	74%	74%	78%	86%	80%	26%	34%	90%
Global Ex U.S. and Emerging Markets (14%)	98%	87%	87%	100%	98%	66%	65%	97%
Fixed Income (2)								
Money Market (13%)	97%	98%	99%	99%	80%	80%	80%	98%
U.S. Fixed Income (12%)	87%	94%	95%	96%	79%	84%	83%	87%
Global Fixed Income (5%)	72%	74%	68%	80%	78%	78%	58%	60%
Stable Value (5%)	100%	100%	100%	100%	100%	100%	100%	100%
Other (2)								
Alternatives (11%)	59%	61%	58%	58%	30%	36%	54%	70%
Balanced (7%)	46%	38%	45%	53%	49%	46%	51%	95%

Note:

⁽¹⁾ Excludes passive products, closed-end funds, private equity limited partnerships, non-discretionary funds, unit investment trusts, fund of funds with component funds managed by Invesco, stable value building block funds and CDOs. Certain funds and products were excluded from the analysis because of limited benchmark or peer group data. Had these been available, results may have been different. These results are preliminary and subject to revision. AUM measured in the one, three, five and ten-year quartile rankings represents 58%, 57%, 57% and 51% of total Invesco AUM, respectively, and AUM measured versus benchmark on a one, three, five and ten year basis represents 68%, 67%, 65% and 57% of total Invesco AUM as of 12/31/19. Peer group rankings are sourced from a widely-used third party ranking agency in each fund's market (Lipper, Morningstar, IA, Russell, Mercer, eVestment Alliance, SITCA, Value Research) and asset-weighted in USD. Rankings are as of prior quarter-end for most institutional products and prior month-end for

Australian retail funds due to their late release by third parties. Rankings are calculated against all funds in each peer group. Rankings for the primary share class of the most representative fund in each composite are applied to all products within each composite. Performance assumes the reinvestment of dividends. Past performance is not indicative of future results and may not reflect an investor's experience.

(2) Numbers in parenthesis reflect percentage of Total Ranked AUM. Total Ranked AUM is \$696.5 billion for the fourth quarter.

Foreign Exchange Impact on Balance Sheet, Assets Under Management and Results of Operations

A significant portion of our business is based outside of the U.S. The strengthening or weakening of the U.S. Dollar against other currencies, primarily the Pound Sterling, Euro and Japanese Yen, will impact our assets, liabilities, AUM and reported revenues and expenses from period to period. The assets, liabilities and AUM of foreign subsidiaries are translated at period end spot foreign currency exchange rates. The income statements of foreign currency subsidiaries are translated into U.S. Dollars, the reporting currency of the company, using average foreign exchange rates for the relevant period.

The table below sets forth the spot foreign exchange rates used for translation of non-U.S. Dollar denominated asset, liabilities and AUM into U.S. Dollars:

Spot Foreign Exchange Rates	December 31, 2019	December 31, 2018	December 31, 2017
Pound Sterling (\$ per £)	1.324	1.274	1.353
Japan (¥ per \$)	108.650	109.735	112.645
Euro (\$ per Euro)	1.122	1.143	1.201

The table below sets forth the average foreign exchange rates used for translation of non-U.S. Dollar denominated income, including revenues and expenses, into U.S. Dollars:

	Years	31,	
Average Foreign Exchange Rates	2019	2018	2017
Pound Sterling (\$ per £)	1.277	1.336	1.288
Japan (¥ per \$)	109.009	110.353	112.137
Euro (\$ per Euro)	1.120	1.181	1.129

A comparison of period end spot rates between December 31, 2019 and December 31, 2018 shows a strengthening of the Pound Sterling and the Japanese Yen relative to the U.S. Dollar, while the Euro weakened, which is reflected in the translation of our Pound Sterling-based, Japanese Yen-based and Euro-based assets, liabilities and AUM into U.S. Dollars, respectively.

A comparison of the average foreign exchange rates used for the year ended December 31, 2019 when compared to the year ended December 31, 2018 shows a weakening of the Pound Sterling and the Euro relative to the U.S. Dollar, while the Japanese Yen strengthened, which is reflected in the translation of our Pound Sterling-based, Euro-based and Japanese Yen-based revenue and expenses into U.S. Dollars, respectively.

Assets Under Management

The following presentation and discussion of AUM includes Passive and Active AUM. Passive AUM include index-based ETFs, unit investment trusts (UITs), non-management fee earning AUM and other passive mandates. Active AUM is total AUM less Passive AUM.

Non-management fee earning AUM includes non-management fee earning ETFs, UIT and product leverage. The net flows in non-management fee earning AUM can be relatively short-term in nature and, due to the relatively low revenue yield, these can have a significant impact on overall net revenue yield.

The AUM tables and the discussion below refer to certain AUM as long-term. Long-term inflows and the underlying reasons for the movements in this line item include investments from new clients, existing clients adding new accounts/funds or contributions/subscriptions into existing accounts/funds. Long-term outflows reflect client redemptions from accounts/funds and include the return of invested capital on the maturity. We present net flows into money market funds separately because shareholders of those funds typically use them as short-term funding vehicles and because their flows are particularly sensitive to short-term interest rate movements.

In the second quarter of 2019, the company changed the presentation of its AUM. The new presentation reflects the combination of the U.S and Canada to form Americas and Continental Europe to now be EMEA ex UK. As part of the change in the presentation of AUM, the company made certain reclassifications between geographies, asset classes and active and passive classifications to better reflect the underlying AUM. In the AUM tables below, all periods have been reclassified to conform to the new presentation and reclassifications.

2010

Changes in AUM were as follows:

		2019		2018			2017		
\$ in billions	Total AUM	Active	Passive	Total AUM	Active	Passive	Total AUM	Active	Passive
January 1	888.2	667.2	221.0	937.6	738.8	198.8	812.9	668.5	144.4
Long-term inflows	227.5	146.8	80.7	209.8	139.4	70.4	183.3	140.7	42.6
Long-term outflows	(261.9)	(196.5)	(65.4)	(248.8)	(176.4)	(72.4)	(178.8)	(140.7)	(38.1)
Long-term net flows	(34.4)	(49.7)	15.3	(39.0)	(37.0)	(2.0)	4.5	_	4.5
Net flows in non-management fee earning AUM	9.2	(0.1)	9.3	2.5	_	2.5	3.0	_	3.0
Net flows in institutional money market funds	(2.0)	(2.0)	_	7.6	7.6	_	(3.2)	(3.2)	_
Total net flows	(27.2)	(51.8)	24.6	(28.9)	(29.4)	0.5	4.3	(3.2)	7.5
Reinvested distributions	17.9	17.9	_	11.4	11.4	_	7.0	7.0	_
Market gains and losses	120.4	73.5	46.9	(67.0)	(52.1)	(14.9)	66.0	45.3	20.7
Acquisitions ⁽¹⁾	224.4	219.9	4.5	47.6	10.5	37.1	26.0	_	26.0
Foreign currency translation	2.5	2.5	_	(12.5)	(12.0)	(0.5)	21.4	21.2	0.2
December 31	1,226.2	929.2	297.0	888.2	667.2	221.0	937.6	738.8	198.8
Average AUM									
Average long-term AUM	887.1	734.7	152.4	785.5	646.5	139.0	721.5	632.8	88.7
Average AUM	1,094.4	830.1	264.3	958.7	726.6	232.1	875.0	705.6	169.4
Revenue yield									
Gross revenue yield on AUM (2)	57.8	69.1	23.9	56.3	66.2	26.3	59.6	68.4	23.3
Gross revenue yield on AUM before performance fees (2)	56.8	67.8	23.9	55.7	65.4	26.3	58.2	66.7	23.3
Net revenue yield on AUM (3)	40.3	48.6	14.6	39.8	47.5	15.9	42.9	48.9	18.1
Net revenue yield on AUM before performance fees (3)	39.4	47.2	14.6	39.2	46.7	15.9	41.5	47.1	18.1

- (1) The acquisition of OppenheimerFunds business on May 24, 2019 added \$224.4 billion in AUM at that date. The acquisition of Guggenheim Investments' ETF business on April 6, 2018 added \$38.1 billion in AUM at that date. As of July 1, 2018, we began including 100% of Invesco Great Wall, which added \$9.5 billion in AUM during the third quarter of 2018. The acquisition of the European ETF business added \$26.0 billion in AUM in 2017.
- (2) Gross revenue yield on AUM is equal to annualized total operating revenues divided by average AUM, excluding Invesco Great Wall AUM. Prior to the third quarter 2018, management reflected its interests in Invesco Great Wall on a proportional consolidation basis, which was consistent with the presentation of our share of the AUM from these investments. Given the company's influence on Invesco Great Wall, a change in regulation allowing increased foreign ownership and reaching oral agreement in principle to obtain majority stake of the joint venture, the company began reporting 100% of the flows and AUM for Invesco Great Wall beginning in the third quarter of 2018. Our share of the average AUM in 2019 for our JVs in China was \$35.6 billion (2018: \$16.2 billion, 2017: \$8.5 billion). It is appropriate to exclude the average AUM of our JVs for purposes of computing gross revenue yield on AUM, because the revenues resulting from these AUM are not presented in our operating revenues. Under U.S. GAAP, our share of the net income of the JVs is recorded as equity in earnings of unconsolidated affiliates on our Consolidated Statements of Income. Additionally, the numerator of the gross revenue yield measure, operating revenues, excludes the management fees earned from CIP and our JVs in China; however, the denominator of the measure includes the AUM of these investment products. Therefore, the gross revenue yield measure is not considered representative of the company's true effective fee rate from AUM.
- (3) Net revenue yield on AUM is equal to annualized net revenues divided by average AUM. See "Schedule of Non-GAAP Information" for a reconciliation of operating revenues to net revenues.

Flows

There are numerous drivers of AUM inflows and outflows, including individual investor decisions to change investment preferences, fiduciaries and other gatekeepers making broad asset allocation decisions on behalf of their clients and reallocation of investments within portfolios. We are not a party to these asset allocation decisions, as the company does not generally have access to the underlying investor's decision-making process, including their risk appetite or liquidity needs. Therefore, the company is not in a position to provide meaningful information regarding the drivers of inflows and outflows.

Average AUM during the year ended December 31, 2019, were \$1,094.4 billion, compared to \$958.7 billion for the year ended December 31, 2018.

Market Returns and Reinvested Distributions

Market gains and losses include the net change in AUM resulting from changes in market values of the underlying securities from period to period. As discussed in the "Executive Overview" section of this Management's Discussion and Analysis, during 2019, global financial markets were strong, despite periods of volatility throughout the year.

Foreign Exchange Rates

During the year ended December 31, 2019, we experienced increases in AUM of \$2.5 billion due to changes in foreign exchange rates (December 31, 2018: AUM decreased by \$12.5 billion). See the company's disclosures regarding the changes in foreign exchange rates during the year ended December 31, 2019 in the "Foreign Exchange Impact on Balance Sheet, Assets Under Management and Results of Operations" section above for additional information regarding the movement of foreign exchange rates.

Acquisitions

During the year ended December 31, 2019, we completed the acquisition of OppenheimerFunds which added \$224.4 billion in AUM during the year. For the year ended December 31, 2018, we completed the acquisition of Guggenheim Investments' ETF business, which added \$38.1 billion in AUM, and we began including 100% of Invesco Great Wall Fund Management Company, which added \$9.5 billion in AUM during the year.

Revenue Yield

Changes in our AUM mix significantly impact our net revenue yield. Passive AUM generally earn a lower effective fee rate than active asset classes, and changes in the mix of products therefore have an impact on our net revenue yield. Additionally, as a significant proportion of our AUM is based outside of the U.S., changes in foreign exchange rates result in a change to the mix of U.S. Dollar denominated AUM with AUM denominated in other currencies. As fee rates differ across geographic locations, changes to exchange rates have an impact on the net revenue yields. See the company's disclosures regarding the changes in foreign exchange rates in the "Foreign Exchange Impact on Balance Sheet, Assets Under Management and Results of Operations" section for additional information regarding the movement of foreign exchange rates.

In the year ended December 31, 2019, the net revenue yield was 40.3 basis points compared to 39.8 basis points in the year ended December 31, 2018, an increase of 0.5 basis points. As a result of the acquisition of OppenheimerFunds, AUM increased \$224.4 billion during the second quarter of 2019, which was comprised of \$219.9 billion of active and \$4.5 billion of passive AUM, increasing the proportion of active AUM and positively impacting net revenue yield.

At December 31, 2019, active AUM were \$929.2 billion, representing 75.8% of total AUM at that date; whereas at December 31, 2018, active AUM were \$667.2 billion, representing 75.1% of our total AUM at that date. In the year ended December 31, 2019, the net revenue yield on active AUM was 48.6 basis points compared to 47.5 basis points in the year ended December 31, 2018, an increase of 1.1 basis points.

At December 31, 2019, passive AUM were \$297.0 billion, representing 24.2% of total AUM at that date; whereas at December 31, 2018, passive AUM were \$221.0 billion, representing 24.9% of our total AUM at that date. In the year ended December 31, 2019, the net revenue yield on passive AUM was 14.6 basis points compared to 15.9 basis points in the year ended December 31, 2018, a decrease of 1.3 basis points.

Changes in our AUM by channel, asset class, and client domicile, and average AUM by asset class, are presented below:

Total AUM by Channel (1)

December 31, 2018 88.82 56.7 321.5 Lang-term inflows 227.5 1 175.2 3.3 Long-term cuttlows (26.0) (20.0) (3.1) Net flows in non-management fee carning AUM 92 4.9 4.3 Net flows in institutional money market funds (27.2) (26.1) (1.1) Reinvested distributions 17.9 17.6 0.3 Market gains and losses 120.4 102.4 18.0 Acquisitions ⁶ 224.4 215.8 8.6 Foreign currency translation 23.6 18.0 0.7 December 31, 2017 37.6 60.6 330.0 December 31, 2017 397.6 607.6 330.0 Long-term inflows 29.8 18.8 10.0 Long-term fullows 29.8 18.8 10.0 Long-term fullows 29.8 18.8 10.0 Long-term inflows 29.8 18.8 10.0 Long-term fullows 20.8 18.2 10.2 Net flows	\$ in billions	Total	Retail	Institutional
Description of those	December 31, 2018	888.2	566.7	321.5
Long-term net flows (34.4) (35.2) 0.8 Net flows in non-management fee earning AUM 9.2 4.9 4.3 Net flows in institutional money market funds (2.0) 4.2 (6.2) Total net flows (27.2) (26.1) (1.1) Reinvested distributions 17.9 17.6 0.3 Market gains and losses 120.4 102.4 18.0 Acquisitions ⁶⁴ 224.4 215.8 8.6 Foreign currency translation 2.5 1.8 0.7 December 31, 2019 1,226.2 878.2 348.0 December 31, 2017 937.6 607.6 33.0 Long-term untflows 209.8 158.8 51.0 Long-term outflows 209.8 158.8 51.0 Long-term telf 0se 30.0 30.3 37.7 Net flows in institutional money market funds 7.6 9.0 1.4 Total net flows 28.9 23.6 (5.3) Reinvested distributions 28.9 (23.6) (5.3)	Long-term inflows	227.5	175.2	52.3
Net flows in institutional money market funds 9.2 4.9 4.3 Net flows in institutional money market funds (20) 4.2 (6.2) Total net flows (27.2) (26.1) (1.1) Reinvested distributions 17.9 17.6 0.3 Market gains and losses 120.4 102.4 180 Acquisitions ⁶³ 224.4 215.8 8.6 Foreign currency translation 2.5 1.8 0.7 December 31, 2019 1,226.2 878.2 3480 December 31, 2017 937.6 607.6 330.0 Long-term inflows 209.8 158.8 510.0 Long-term ent flows 209.8 158.8 510.0 Net flows in institutional money market funds 2.6 2.7 0.2 Net flows in institutional money market funds 7.6 9.0 1.4 Total net flows (28.9) (23.6) (53.3 Reinvested distributions 11.4 11.4 1.4 Market gains and losses 67.0 (62.4 <td>Long-term outflows</td> <td>(261.9)</td> <td>(210.4)</td> <td>(51.5)</td>	Long-term outflows	(261.9)	(210.4)	(51.5)
Net flows in institutional money market funds 9.2 (2.0) 4.2 (6.2) Total net flows (27.0) (36.1) (1.1) Reinvested distributions 17.9 17.6 0.3 Market gains and losses 120.4 102.4 18.0 Acquisitions ⁶ 224.4 215.8 8.6 Foreign currency translation 2.5 1.8 0.7 December 31, 2019 37.6 607.6 330.0 Long-term inflows 29.8 158.8 51.0 Long-term inflows 29.8 158.8 51.0 Long-term intflows 29.8 158.8 51.0 Long-term outflows 248.8 194.1 (54.7) Long-term intelfows 28.9 158.8 51.0 Net flows in institutional money market funds 2.5 2.7 0.2 Net flows in institutional money market funds 7.6 9.0 (1.4 Total net flows (28.9) (23.5) (5.3 Reinvested distributions 11.4 11.4 -1.4	Long-term net flows	(34.4)	(35.2)	0.8
Net flows in institutional money market funds (2.0) 4.2 (6.2) Total net flows (27.2) (6.0) (1.1) Reinvested distributions 17.9 17.6 0.3 Market gains and losses 120.4 10.24 18.0 Acquisitions ⁶⁰ 224.4 215.8 8.6 Foreign currency translation 2.5 1.8 0.7 December 31, 2019 37.6 607.6 330.0 Long-term inflows 209.8 158.8 51.0 Long-term net flows (39.0) (35.3) 3.7 Net flows in non-management fee earning AUM 2.5 2.7 (0.2) Net flows in institutional money market funds 7.6 9.0 1.4 Total net flows (28.9) (23.6) (5.3) Reinvested distributions 11.4 11.4 — Market gains and losses (67.0) (6.2.4) (4.6) Acquisitions ⁶⁰ 47.6 49.0 (4.6) Acquisitions ⁶⁰ 47.6 49.0 50.0	Net flows in non-management fee earning AUM			
Total net flows (27.2) (26.1) (1.1) Reinvested distributions 17.9 17.6 0.3 Market gains and losses 120.4 102.4 18.0 Acquisitions ⁶⁹ 224.4 215.8 8.6 Foreign currency translation 2.5 1.8 0.7 December 31, 2019 937.6 607.6 330.0 Long-term inflows 209.8 15.8 51.0 Long-term inflows 29.0 15.3 37.0 Long-term inflows 39.0 35.3 37.0 Net flows in non-management fee earning AUM 2.5 2.7 (0.2) Net flows in institutional money market funds 7.6 9.0 1.4 Total net flows (28.9) (23.6) (5.3 Reinvested distributions 11.4 11.4 - Market gains and losses (67.0) (62.4) (4.6 Acquisitions ⁶⁹ 47.6 42.6 5.0 December 31, 2016 812.9 50.7 311.2 Long-ter				
Reinvested distributions 17.9 17.6 0.3 Market gains and losses 120.4 12.4 18.0 Acquisitions ⁶¹ 22.44 215.8 8.6 Foreign currency translation 2.5 1.8 0.7 December 31, 2019 1,226.2 878.2 348.0 December 31, 2017 937.6 607.6 330.0 Long-term inflows 209.8 15.8 51.0 Long-term outflows 209.8 15.8 51.0 Net flows in non-management fee earning AUM 2.5 2.7 (0.2 Net flows in institutional money market funds 2.5 2.7 (0.2 Net flows in institutional money market funds 2.8 9 (3.6) (3.3) Reinvested distributions 11.4 11.4 - - Market gains and losses (57.0) (62.4) (4.6) 5.0 Foreign currency translation (12.5) (8.9) (3.6) December 31, 2018 812.9 50.7 321.5 December 31, 2016 <td>Net flows in institutional money market funds</td> <td>(2.0)</td> <td>4.2</td> <td>(6.2)</td>	Net flows in institutional money market funds	(2.0)	4.2	(6.2)
Market gains and losses 120,4 102,4 18.0 Acquisitions ⁶⁹ 224,4 215,8 8.6 Foreign currency translation 2.5 1.8 0.7 December 31, 2019 37,6 607,6 330,0 Long-term inflows 209,8 15,8 51,0 Long-term outflows (248,8) (194,1) (54,7) Long-term inflows 30,0 35,3 37,7 Net flows in non-management fee earning AUM 2.5 2,7 (0,2 Net flows in institutional money market funds 7,6 9,0 (1,4 Total net flows (28,9) (23,6) (5,3) Reinvested distributions 11,4 11,4 — Market gains and losses (67,0) (62,4) (4,6) Acquisitions ⁶⁹ 47,6 42,6 5,0 Foreign currency translation 12,5 8,9 36,6 December 31, 2016 812,9 50,7 311,2 Long-term inflows 183,3 14,1 39,2	Total net flows	(27.2)	(26.1)	(1.1)
Acquisitions ⁽⁴⁾ 224,4 215,8 8.6 Foreign currency translation 2.5 1.8 0.7 December 31, 2019 1,226,2 878.2 348.0 December 31, 2017 937.6 607.6 330.0 Long-term inflows 2048.8 194.1 (54.7) Long-term outflows (39.0) 35.3 3.7 Net flows in non-management fee earning AUM 2.5 2.7 (0.2) Net flows in institutional money market funds 7.6 9.0 1.4 Total net flows (28.9) (23.6) 55.3 Reinvested distributions 11.4 11.4 1.4 - Market gains and losses (67.0) (62.4) (4.6) Acquisitions ⁶⁰ 47.6 42.6 50. Foreign currency translation (12.5) (8.9) (3.6) December 31, 2016 812.9 501.7 311.2 Long-term outflows 183.3 144.1 39.2 Long-term inflows 183.3 144.1 39.2	Reinvested distributions	17.9	17.6	0.3
Foreign currency translation 2.5 1.8 0.7 December 31, 2019 1,226.2 878.2 348.0 December 31, 2017 937.6 607.6 330.0 Long-term inflows 209.8 158.8 51.0 Long-term outflows (248.8) (194.1) (54.7) Long-term net flows (39.0) (35.3) (3.7) Net flows in non-management fee earning AUM 2.5 2.7 (0.2) Net flows in institutional money market funds 7.6 9.0 (1.4) Total net flows (28.9) (23.0) (5.3) Reinvested distributions 11.4 11.4 — Acquisitions ⁶¹ 47.6 42.6 5.0 Foreign currency translation (12.5) (8.9) 3.6 December 31, 2018 888.2 56.7 321.5 December 31, 2016 812.9 50.7 311.2 Long-term inflows 18.8 14.8 3.0 1.2 Long-term inflows 4.5 3.3 1.2	Market gains and losses	120.4	102.4	18.0
December 31, 2019 1,226.2 878.2 348.0	Acquisitions ⁽⁴⁾	224.4	215.8	8.6
December 31, 2017 937.6 607.6 330.0 Long-term inflows 209.8 158.8 51.0 Long-term outflows (248.8) (194.1) (54.7) Long-term net flows (39.0) (35.3) (3.7) Net flows in non-management fee earning AUM 2.5 2.7 (0.2) Net flows in institutional money market funds 7.6 9.0 (1.4) Total net flows (28.9) (23.6) (5.3) Reinvested distributions 11.4 11.4	Foreign currency translation	2.5	1.8	0.7
Long-term inflows 209.8 158.8 51.0 Long-term outflows (248.8) (194.1) (54.7) Long-term net flows (39.0) (35.3) (3.7) Net flows in non-management fee earning AUM 2.5 2.7 (0.2) Net flows in institutional money market funds 7.6 9.0 (1.4) Total net flows (28.9) (23.6) (5.3) Reinvested distributions 11.4 11.4 — Market gains and losses (67.0) (62.4) (4.6) Acquisitions ⁽⁴⁾ 47.6 42.6 5.0 Foreign currency translation (12.5) (8.9) (3.6) December 31, 2016 812.9 501.7 311.2 Long-term inflows 183.3 144.1 39.2 Long-term inflows 183.3 144.1 39.2 Long-term inflows 3.3 1.2 Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds 3.0 0.1 2.9	December 31, 2019	1,226.2	878.2	348.0
Long-term inflows 209.8 158.8 51.0 Long-term outflows (248.8) (194.1) (54.7) Long-term net flows (39.0) (35.3) (3.7) Net flows in non-management fee earning AUM 2.5 2.7 (0.2) Net flows in institutional money market funds 7.6 9.0 (1.4) Total net flows (28.9) (23.6) (5.3) Reinvested distributions 11.4 11.4 — Market gains and losses (67.0) (62.4) (4.6) Acquisitions ⁽⁴⁾ 47.6 42.6 5.0 Foreign currency translation (12.5) (8.9) (3.6) December 31, 2016 812.9 501.7 311.2 Long-term inflows 183.3 144.1 39.2 Long-term inflows 183.3 144.1 39.2 Long-term inflows 3.3 1.2 Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds 3.0 0.1 2.9				
Cong-term outflows C34.8 C194.1 C54.7 Long-term net flows C39.0 C35.3 C3.7 Net flows in non-management fee earning AUM C2.5 C.7 C0.2 Net flows in institutional money market funds C3.5 C3.7 C3.0 Total net flows C38.9 C3.6 C3.3 Reinvested distributions C38.9 C3.6 C3.0 Acquisitions C47.6 C42.6 C3.0 Acquisitions C47.6 C42.6 C3.0 Acquisitions C47.6 C47.6 C47.6 Acquisitions C47.6 C47.6 C47.6 Acquisitions C47	December 31, 2017	937.6	607.6	330.0
Cong-term net flows Cong-term net flows Cong-term net flows in non-management fee earning AUM Cong-term net flows Cong-ter	Long-term inflows	209.8	158.8	51.0
Net flows in non-management fee earning AUM 2.5 2.7 (0.2) Net flows in institutional money market funds 7.6 9.0 (1.4) Total net flows (28.9) (23.6) (5.3) Reinvested distributions 11.4 11.4 11.4 Market gains and losses (67.0) (62.4) (4.6) Acquisitions ⁽⁴⁾ 47.6 42.6 5.0 Foreign currency translation (12.5) (8.9) (3.6) December 31, 2018 888.2 566.7 321.5 December 31, 2016 812.9 501.7 311.2 Long-term inflows 183.3 144.1 39.2 Long-term outflows (178.8) (140.8) (38.0) Long-term net flows 4.5 3.3 1.2 Net flows in institutional money market funds 3.0 0.1 2.9 Net flows in institutional money market funds 3.3 1.0 Total net flows 4.3 3.3 1.0 Reinvested distributions 7.0 7.0 7.0	Long-term outflows	(248.8)	(194.1)	(54.7)
Net flows in institutional money market funds 7.6 9.0 (1.4) Total net flows (28.9) (23.6) (5.3) Reinvested distributions 11.4 11.4 — Market gains and losses (67.0) (62.4) (4.6) Acquisitions(4) 47.6 42.6 5.0 Foreign currency translation (12.5) (8.9) (3.6) December 31, 2018 888.2 566.7 321.5 December 31, 2016 812.9 501.7 311.2 Long-term inflows 183.3 144.1 39.2 Long-term outflows (178.8) (140.8) (38.0) Long-term net flows 4.5 3.3 1.2 Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds 3.0 0.1 2.9 Net flows in institutional money market funds 3.0 0.1 2.9 Meinvested distributions 7.0 7.0 — Market gains and losses 66.0 55.9 10.1 Acquisitions(4) 26.0 26.0 <t< td=""><td>Long-term net flows</td><td>(39.0)</td><td>(35.3)</td><td>(3.7)</td></t<>	Long-term net flows	(39.0)	(35.3)	(3.7)
Net flows in institutional money market funds 7.6 9.0 (1.4) Total net flows (28.9) (23.6) (5.3) Reinvested distributions 11.4 11.4 — Market gains and losses (67.0) (62.4) (4.6) Acquisitions ⁽⁴⁾ 47.6 42.6 5.0 Foreign currency translation (12.5) (8.9) (3.6) December 31, 2018 88.2 566.7 321.5 December 31, 2016 812.9 501.7 311.2 Long-term inflows 183.3 144.1 39.2 Long-term outflows (178.8) (140.8) (38.0) Long-term net flows 4.5 3.3 1.2 Net flows in institutional money market funds 3.0 0.1 2.9 Net flows in institutional money market funds 3.0 0.1 2.9 Net flows in institutional money market funds 3.0 0.1 2.9 Net flows in institutional money market funds 3.0 0.1 2.9 Market gains and losses 66.0 <td>Net flows in non-management fee earning AUM</td> <td></td> <td></td> <td></td>	Net flows in non-management fee earning AUM			
Total net flows (28.9) (23.6) (5.3) Reinvested distributions 11.4 11.4 ————————————————————————————————————		2.5	2.7	(0.2)
Reinvested distributions 11.4 11.4 — Market gains and losses (67.0) (62.4) (4.6) Acquisitions(4) 47.6 42.6 5.0 Foreign currency translation (12.5) (8.9) (3.6) December 31, 2018 888.2 566.7 321.5 December 31, 2016 812.9 501.7 311.2 Long-term inflows 183.3 144.1 39.2 Long-term outflows (178.8) (140.8) (38.0) Long-term net flows 4.5 3.3 1.2 Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds (3.2) (0.1) (3.1) Total net flows 4.3 3.3 1.0 Reinvested distributions 7.0 7.0 — Market gains and losses 66.0 55.9 10.1 Acquisitions(4) 26.0 26.0 — Foreign currency translation 21.4 13.7 7.7	Net flows in institutional money market funds	7.6	9.0	(1.4)
Market gains and losses (67.0) (62.4) (4.6) Acquisitions ⁽⁴⁾ 47.6 42.6 5.0 Foreign currency translation (12.5) (8.9) (3.6) December 31, 2018 888.2 566.7 321.5 December 31, 2016 812.9 501.7 311.2 Long-term inflows 183.3 144.1 39.2 Long-term outflows (178.8) (140.8) (38.0) Long-term et flows 4.5 3.3 1.2 Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds 3.0 0.1 2.9 Net flows in institutional money market funds 3.2 (0.1) (3.1) Total net flows 4.3 3.3 1.0 Reinvested distributions 7.0 7.0 - Market gains and losses 66.0 55.9 10.1 Acquisitions ⁽⁴⁾ 26.0 26.0 - Foreign currency translation 21.4 13.7 7.7	Total net flows	(28.9)	(23.6)	(5.3)
Acquisitions(4) 47.6 42.6 5.0 Foreign currency translation (12.5) (8.9) (3.6) December 31, 2018 888.2 566.7 321.5 December 31, 2016 812.9 501.7 311.2 Long-term inflows 183.3 144.1 39.2 Long-term outflows (178.8) (140.8) (38.0) Long-term net flows 4.5 3.3 1.2 Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds (3.2) (0.1) (3.1) Total net flows 4.3 3.3 1.0 Reinvested distributions 7.0 7.0 - Market gains and losses 66.0 55.9 10.1 Acquisitions(4) 26.0 26.0 - Foreign currency translation 21.4 13.7 7.7	Reinvested distributions	11.4	11.4	_
Foreign currency translation (12.5) (8.9) (3.6) December 31, 2018 888.2 566.7 321.5 December 31, 2016 812.9 501.7 311.2 Long-term inflows 183.3 144.1 39.2 Long-term outflows (178.8) (140.8) (38.0) Long-term net flows 4.5 3.3 1.2 Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds (3.2) (0.1) (3.1) Total net flows 4.3 3.3 1.0 Reinvested distributions 7.0 7.0 — Market gains and losses 66.0 55.9 10.1 Acquisitions(4) 26.0 26.0 — Foreign currency translation 21.4 13.7 7.7	Market gains and losses	(67.0)	(62.4)	(4.6)
December 31, 2018 888.2 566.7 321.5 December 31, 2016 812.9 501.7 311.2 Long-term inflows 183.3 144.1 39.2 Long-term outflows (178.8) (140.8) (38.0) Long-term net flows 4.5 3.3 1.2 Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds (3.2) (0.1) (3.1) Total net flows 4.3 3.3 1.0 Reinvested distributions 7.0 7.0 — Market gains and losses 66.0 55.9 10.1 Acquisitions(4) 26.0 26.0 — Foreign currency translation 21.4 13.7 7.7	Acquisitions ⁽⁴⁾	47.6	42.6	5.0
December 31, 2016 812.9 501.7 311.2 Long-term inflows 183.3 144.1 39.2 Long-term outflows (178.8) (140.8) (38.0) Long-term net flows 4.5 3.3 1.2 Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds (3.2) (0.1) (3.1) Total net flows 4.3 3.3 1.0 Reinvested distributions 7.0 7.0 — Market gains and losses 66.0 55.9 10.1 Acquisitions(4) 26.0 26.0 — Foreign currency translation 21.4 13.7 7.7	Foreign currency translation	(12.5)	(8.9)	(3.6)
Long-term inflows 183.3 144.1 39.2 Long-term outflows (178.8) (140.8) (38.0) Long-term net flows 4.5 3.3 1.2 Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds (3.2) (0.1) (3.1) Total net flows 4.3 3.3 1.0 Reinvested distributions 7.0 7.0 — Market gains and losses 66.0 55.9 10.1 Acquisitions(4) 26.0 26.0 26.0 — Foreign currency translation 21.4 13.7 7.7	December 31, 2018	888.2	566.7	321.5
Long-term inflows 183.3 144.1 39.2 Long-term outflows (178.8) (140.8) (38.0) Long-term net flows 4.5 3.3 1.2 Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds (3.2) (0.1) (3.1) Total net flows 4.3 3.3 1.0 Reinvested distributions 7.0 7.0 — Market gains and losses 66.0 55.9 10.1 Acquisitions(4) 26.0 26.0 26.0 — Foreign currency translation 21.4 13.7 7.7				
Long-term outflows (178.8) (140.8) (38.0) Long-term net flows 4.5 3.3 1.2 Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds (3.2) (0.1) (3.1) Total net flows 4.3 3.3 1.0 Reinvested distributions 7.0 7.0 — Market gains and losses 66.0 55.9 10.1 Acquisitions ⁽⁴⁾ 26.0 26.0 — Foreign currency translation 21.4 13.7 7.7	December 31, 2016	812.9	501.7	311.2
Long-term net flows 4.5 3.3 1.2 Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds (3.2) (0.1) (3.1) Total net flows 4.3 3.3 1.0 Reinvested distributions 7.0 7.0 — Market gains and losses 66.0 55.9 10.1 Acquisitions ⁽⁴⁾ 26.0 26.0 — Foreign currency translation 21.4 13.7 7.7	Long-term inflows	183.3	144.1	39.2
Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds (3.2) (0.1) (3.1) Total net flows 4.3 3.3 1.0 Reinvested distributions 7.0 7.0 — Market gains and losses 66.0 55.9 10.1 Acquisitions ⁽⁴⁾ 26.0 26.0 — Foreign currency translation 21.4 13.7 7.7	Long-term outflows	(178.8)	(140.8)	(38.0)
Net flows in institutional money market funds 3.0 0.1 2.9 Net flows in institutional money market funds (3.2) (0.1) (3.1) Total net flows 4.3 3.3 1.0 Reinvested distributions 7.0 7.0 — Market gains and losses 66.0 55.9 10.1 Acquisitions ⁽⁴⁾ 26.0 26.0 — Foreign currency translation 21.4 13.7 7.7	Long-term net flows	4.5	3.3	1.2
Net flows in institutional money market funds (3.2) (0.1) (3.1) Total net flows 4.3 3.3 1.0 Reinvested distributions 7.0 7.0 — Market gains and losses 66.0 55.9 10.1 Acquisitions ⁽⁴⁾ 26.0 26.0 — Foreign currency translation 21.4 13.7 7.7	Net flows in non-management fee earning AUM			
Total net flows 4.3 3.3 1.0 Reinvested distributions 7.0 7.0 — Market gains and losses 66.0 55.9 10.1 Acquisitions ⁽⁴⁾ 26.0 26.0 — Foreign currency translation 21.4 13.7 7.7				
Reinvested distributions 7.0 7.0 — Market gains and losses 66.0 55.9 10.1 Acquisitions ⁽⁴⁾ 26.0 26.0 — Foreign currency translation 21.4 13.7 7.7			(0.1)	(3.1)
Market gains and losses 66.0 55.9 10.1 Acquisitions ⁽⁴⁾ 26.0 26.0 — Foreign currency translation 21.4 13.7 7.7	Total net flows	4.3	3.3	1.0
Acquisitions $^{(4)}$ 26.026.0—Foreign currency translation21.413.77.7	Reinvested distributions	7.0	7.0	_
Foreign currency translation 21.4 13.7 7.7	Market gains and losses	66.0	55.9	10.1
	Acquisitions ⁽⁴⁾	26.0	26.0	_
December 31, 2017 937.6 607.6 330.0	Foreign currency translation	21.4	13.7	7.7
	December 31, 2017	937.6	607.6	330.0

See accompanying notes immediately following these AUM tables.

Passive AUM by Channel (1)

December 31, 2018 221,0 204,6 1.64 Long-term inflows 80.7 80.1 0.6 Long-term net flows 65.4 (65.4) — Net flows in non-management fee earning AUM 9.3 5.1 42 Net flows in institutional money market funds — — — Total net flows 24.6 19.8 4.8 Reinvested distributions — — — Market gains and fosses 46.9 46.9 — Acquisitions ⁶⁰ 45.5 4.5 — Foreign currency translation — — — December 31, 2019 297.0 275.8 21.2 December 31, 2017 198.8 181.9 16.9 Long-term inflows 70.4 — — Long-term net flows 72.0 (72.4) (72.4) — Net flows in institutional money market funds — — — Net flows in institutional money market funds — — — Net	\$ in billions	Total	Retail	Institutional
Long-term outflows 153 147 06 Long-term net flows 153 147 06 Net flows in non-management fee earning AUM 93 5.1 42 Net flows in institutional money market funds	December 31, 2018	221.0	204.6	16.4
Description of the time of t	Long-term inflows	80.7	80.1	0.6
Net flows in institutional money market funds 9.3 5.1 4.2 Net flows in institutional money market funds — — — Total net flows 24.6 19.8 4.8 Reinvested distributions — — — Acquisitions ⁶⁰ 46.9 46.9 — Acquisitions ⁶⁰ 45 45 — Foreign currency translation — — — December 31, 2019 198.8 181.9 16.9 December 31, 2017 198.8 181.9 16.9 Long-term inflows 70.4 70.4 — Long-term net flows 70.2 (72.4) — Net flows in non-management fee earning AUM 2.5 2.7 (0.2) Net flows in institutional money market funds — — — Total net flows 0.5 0.7 (0.2) Reinvested distributions — — — December 31, 2016 14.4 12.9 15.4 December 31, 2016 <t< td=""><td>Long-term outflows</td><td>(65.4)</td><td>(65.4)</td><td>_</td></t<>	Long-term outflows	(65.4)	(65.4)	_
Net flows in institutional money market funds 9.3 5.1 4.2 Total net flows 246 19.8 4.8 Reinvested distributions — — — Market gains and losses 46.9 46.9 — Acquisitions ⁶ 45. 45. — Foreign currency translation — — — December 31, 2019 198.8 181.9 16.9 Long-term outflows 70.4 70.4 — Long-term inflows 70.4 70.4 — Long-term outflows 72.4 (72.4) — Long-term ent flows 2.2 2.7 (0.2) Net flows in institutional money market funds — — — Total net flows 0.5 0.7 0.2 Reinvested distributions — — — Market gains and losses (14.9) (14.5) (0.4) Acquisitions ⁴⁰ 37.1 37.1 — December 31, 2016 14.4 129.0	Long-term net flows	15.3	14.7	0.6
Net flows in institutional money market funds	Net flows in non-management fee earning AUM			
Total net flows 24.6 19.8 4.8 Reinvested distributions — — — — — — — — — — — — — — — — — —		9.3	5.1	4.2
Reinvested distributions — — — Market gains and losses 46.9 46.9 — Acquisitions ⁶⁴ — — — Foreign currency translation — — — December 31, 2019 297.0 275.8 21.2 December 31, 2017 198.8 181.9 16.9 Long-term inflows 70.4 70.4 — Long-term outflows (72.4) (72.4) — Long-term ent flows (2.0) (2.0) — Net flows in non-management fee earning AUM 2.5 2.7 (0.2) Net flows in institutional money market funds — — — Total net flows 0.5 0.7 (0.2) Reinvested distributions — — — Market gains and losses (14.9) (14.5) (0.4) Acquisitions ⁶⁴ 37.1 37.1 — Foreign currency translation (0.5) (0.6) 0.1 December 31, 2016 144.4	Net flows in institutional money market funds			
Market gains and losses 46.9 46.9 — Acquisitions ⁶¹ 4.5 4.5 — Foreign currency translation — — — December 31, 2019 297.0 275.8 21.2 December 31, 2017 198.8 181.9 16.9 Long-term outflows 7.4 7.2.4 — Long-term outflows (2.0 (2.0) — Net flows in non-management fee carning AUM 2.5 2.7 (0.2) Net flows in institutional money market fluids — — — Total net flows 0.5 0.7 (0.2) Reinvested distributions — — — Market gains and losses (14.9) (14.5) (0.4) Acquisitionsf ⁶¹ 37.1 37.1 — Foreign currency translation (0.5) (0.6) 0.1 December 31, 2016 144.4 129.0 15.4 Long-term inflows 42.6 42.5 0.1 Long-term net flows 5.6 </td <td></td> <td>24.6</td> <td>19.8</td> <td>4.8</td>		24.6	19.8	4.8
Acquisitions ⁽⁴⁾ 4.5 4.5 — Foreign currency translation —	Reinvested distributions	_	_	_
Poeember 31, 2019 297.0 275.8 21.2		46.9	46.9	_
December 31, 2019 297.0 275.8 21.2	Acquisitions ⁽⁴⁾	4.5	4.5	_
December 31, 2017 198.8 181.9 16.9 Long-term inflows 70.4 70.4 70.4 70.4 Long-term outflows (72.4) (72.4) 72.4 Long-term net flows (2.0) (2.0) 7.5 Net flows in non-management fee earning AUM 2.5 2.7 (0.2) Net flows in institutional money market funds 7.5 7.7 (0.2) Reinvested distributions 7.5 7.7 (0.2) Reinvested distributions 7.5 7.1 7.5 Foreign currency translation (0.5) (0.6) (0.1) December 31, 2016 144.4 129.0 15.4 Long-term inflows 42.6 42.5 (0.1) Long-term outflows (38.1) (36.9) (1.2) Long-term outflows (38.1) (36.9) (1.2) Long-term net flows 4.5 5.6 (1.1) Net flows in non-management fee earning AUM 3.0 (0.1) Net flows in institutional money market funds 7.5 5.7 1.8 Reinvested distributions 7	Foreign currency translation	<u> </u>		_
Long-term inflows 70.4 70.4 - Long-term outflows (72.4) (72.4) - Long-term net flows (2.0) (2.0) - Net flows in institutional money market funds - - - Net flows in institutional money market funds - - - Total net flows 0.5 0.7 (0.2) Reinvested distributions - - - Market gains and losses (14.9) (14.5) (0.4) Acquisitions ⁽⁴⁾ 37.1 37.1 37.1 - Foreign currency translation (0.5) (0.6) 0.1 December 31, 2018 221.0 204.6 16.4 December 31, 2016 144.4 129.0 15.4 Long-term inflows 42.6 42.5 0.1 Long-term net flows 38.1 (36.9) (1.2) Long-term net flows 3.0 0.1 2.9 Net flows in non-management fee earning AUM 3.0 0.1 2.9 <t< td=""><td>December 31, 2019</td><td>297.0</td><td>275.8</td><td>21.2</td></t<>	December 31, 2019	297.0	275.8	21.2
Long-term inflows 70.4 70.4 - Long-term outflows (72.4) (72.4) - Long-term net flows (2.0) (2.0) - Net flows in institutional money market funds - - - Net flows in institutional money market funds - - - Total net flows 0.5 0.7 (0.2) Reinvested distributions - - - Market gains and losses (14.9) (14.5) (0.4) Acquisitions ⁽⁴⁾ 37.1 37.1 37.1 - Foreign currency translation (0.5) (0.6) 0.1 December 31, 2018 221.0 204.6 16.4 December 31, 2016 144.4 129.0 15.4 Long-term inflows 42.6 42.5 0.1 Long-term net flows 38.1 (36.9) (1.2) Long-term net flows 3.0 0.1 2.9 Net flows in non-management fee earning AUM 3.0 0.1 2.9 <t< td=""><td></td><td></td><td></td><td></td></t<>				
Long-term inflows 70.4 70.4 - Long-term outflows (72.4) (72.4) - Long-term net flows (2.0) (2.0) - Net flows in institutional money market funds - - - Net flows in institutional money market funds - - - Total net flows 0.5 0.7 (0.2) Reinvested distributions - - - Market gains and losses (14.9) (14.5) (0.4) Acquisitions ⁽⁴⁾ 37.1 37.1 37.1 - Foreign currency translation (0.5) (0.6) 0.1 December 31, 2018 221.0 204.6 16.4 December 31, 2016 144.4 129.0 15.4 Long-term inflows 42.6 42.5 0.1 Long-term net flows 38.1 (36.9) (1.2) Long-term net flows 3.5 5.6 (1.1) Net flows in non-management fee earning AUM 3.0 0.1 2.9	December 31, 2017	198.8	181.9	16.9
Long-term outflows (72.4) (72.4) — Long-term net flows (2.0) (2.0) — Net flows in non-management fee earning AUM 2.5 2.7 (0.2) Net flows in institutional money market funds — — — Total net flows 0.5 0.7 (0.2) Reinvested distributions — — — Market gains and losses (14.9) (14.5) (0.4) Acquisitions ⁴⁴ 37.1 37.1 — Foreign currency translation (0.5) (0.6) 0.1 December 31, 2016 14.4 129.0 15.4 Long-term inflows 42.6 42.5 0.1 Long-term outflows 45. 5.6 (1.1) Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds — — — Total net flows 7.5 5.7 1.8 Reinvested distributions — — — Total n				
Cong-term net flows Cong Cong Cong Cong Net flows in non-management fee earning AUM Cong Cong Net flows in institutional money market funds Cong Cong Total net flows Cong Cong Reinvested distributions Cong Cong Market gains and losses Cong Cong Acquisitions ⁽⁴⁾ Cong Cong Acquisitions Cong C		(72.4)	(72.4)	_
Net flows in non-management fee earning AUM 2.5 2.7 (0.2) Net flows in institutional money market funds — — — Total net flows 0.5 0.7 (0.2) Reinvested distributions — — — Market gains and losses (14.9) (14.5) (0.4) Acquisitions(4) 37.1 37.1 — Foreign currency translation (0.5) (0.6) 0.1 December 31, 2018 221.0 204.6 16.4 Long-term inflows 42.6 42.5 0.1 Long-term outflows (38.1) (36.9) (1.2) Long-term net flows 4.5 5.6 (1.1) Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds — — — Total net flows 7.5 5.7 1.8 Reinvested distributions — — — Market gains and losses 20.7 21.1 (0.4)		(2.0)	(2.0)	_
Net flows in institutional money market funds — </td <td></td> <td></td> <td></td> <td>(0.2)</td>				(0.2)
Total net flows 0.5 0.7 (0.2) Reinvested distributions — — — Market gains and losses (14.9) (14.5) (0.4) Acquisitions(4) 37.1 37.1 — Foreign currency translation (0.5) (0.6) 0.1 December 31, 2018 221.0 204.6 16.4 December 31, 2016 144.4 129.0 15.4 Long-term inflows 42.6 42.5 0.1 Long-term outflows (38.1) (36.9) (1.2) Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds — — — Total net flows 7.5 5.7 1.8 Reinvested distributions — — — Market gains and losses 20.7 21.1 (0.4) Acquisitions(4) 26.0 26.0 — Foreign currency translation 0.2 0.1 0.1		_	_	
Reinvested distributions — <td></td> <td>0.5</td> <td>0.7</td> <td>(0.2)</td>		0.5	0.7	(0.2)
Acquisitions ⁽⁴⁾ 37.1 37.1 - Foreign currency translation (0.5) (0.6) 0.1 December 31, 2018 221.0 204.6 16.4 December 31, 2016 144.4 129.0 15.4 Long-term inflows 42.6 42.5 0.1 Long-term outflows (38.1) (36.9) (1.2) Long-term net flows 4.5 5.6 (1.1) Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds - - - Total net flows 7.5 5.7 1.8 Reinvested distributions - - - Market gains and losses 20.7 21.1 (0.4) Acquisitions ⁽⁴⁾ 26.0 26.0 - Foreign currency translation 0.2 0.1 0.1		_		
Acquisitions ⁽⁴⁾ 37.1 37.1 - Foreign currency translation (0.5) (0.6) 0.1 December 31, 2018 221.0 204.6 16.4 December 31, 2016 144.4 129.0 15.4 Long-term inflows 42.6 42.5 0.1 Long-term outflows (38.1) (36.9) (1.2) Long-term net flows 4.5 5.6 (1.1) Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds - - - Total net flows 7.5 5.7 1.8 Reinvested distributions - - - Market gains and losses 20.7 21.1 (0.4) Acquisitions ⁽⁴⁾ 26.0 26.0 - Foreign currency translation 0.2 0.1 0.1	Market gains and losses	(14.9)	(14.5)	(0.4)
Foreign currency translation (0.5) (0.6) 0.1 December 31, 2018 221.0 204.6 16.4 December 31, 2016 144.4 129.0 15.4 Long-term inflows 42.6 42.5 0.1 Long-term outflows (38.1) (36.9) (1.2) Long-term net flows 4.5 5.6 (1.1) Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds — — — Total net flows 7.5 5.7 1.8 Reinvested distributions — — — Market gains and losses 20.7 21.1 (0.4) Acquisitions(4) 26.0 26.0 — Foreign currency translation 0.2 0.1 0.1				
December 31, 2016 144.4 129.0 15.4 Long-term inflows 42.6 42.5 0.1 Long-term outflows (38.1) (36.9) (1.2) Long-term net flows 4.5 5.6 (1.1) Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds — — — Total net flows 7.5 5.7 1.8 Reinvested distributions — — — Market gains and losses 20.7 21.1 (0.4) Acquisitions(4) 26.0 26.0 — Foreign currency translation 0.2 0.1 0.1	Foreign currency translation	(0.5)	(0.6)	0.1
December 31, 2016 144.4 129.0 15.4 Long-term inflows 42.6 42.5 0.1 Long-term outflows (38.1) (36.9) (1.2) Long-term net flows 4.5 5.6 (1.1) Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds — — — Total net flows 7.5 5.7 1.8 Reinvested distributions — — — Market gains and losses 20.7 21.1 (0.4) Acquisitions(4) 26.0 26.0 — Foreign currency translation 0.2 0.1 0.1				16.4
Long-term inflows 42.6 42.5 0.1 Long-term outflows (38.1) (36.9) (1.2) Long-term net flows 4.5 5.6 (1.1) Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds — — — Total net flows 7.5 5.7 1.8 Reinvested distributions — — — Market gains and losses 20.7 21.1 (0.4) Acquisitions ⁽⁴⁾ 26.0 26.0 — Foreign currency translation 0.2 0.1 0.1	,	 -		
Long-term inflows 42.6 42.5 0.1 Long-term outflows (38.1) (36.9) (1.2) Long-term net flows 4.5 5.6 (1.1) Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds — — — Total net flows 7.5 5.7 1.8 Reinvested distributions — — — Market gains and losses 20.7 21.1 (0.4) Acquisitions ⁽⁴⁾ 26.0 26.0 — Foreign currency translation 0.2 0.1 0.1	December 31 2016	144 4	129.0	15.4
Long-term outflows (38.1) (36.9) (1.2) Long-term net flows 4.5 5.6 (1.1) Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds — — — Total net flows 7.5 5.7 1.8 Reinvested distributions — — — Market gains and losses 20.7 21.1 (0.4) Acquisitions ⁽⁴⁾ 26.0 26.0 — Foreign currency translation 0.2 0.1 0.1				
Long-term net flows 4.5 5.6 (1.1) Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds — — — Total net flows 7.5 5.7 1.8 Reinvested distributions — — — Market gains and losses 20.7 21.1 (0.4) Acquisitions(4) 26.0 26.0 — Foreign currency translation 0.2 0.1 0.1				
Net flows in non-management fee earning AUM 3.0 0.1 2.9 Net flows in institutional money market funds — — — Total net flows 7.5 5.7 1.8 Reinvested distributions — — — Market gains and losses 20.7 21.1 (0.4) Acquisitions ⁽⁴⁾ 26.0 26.0 — Foreign currency translation 0.2 0.1 0.1				
Net flows in institutional money market funds 3.0 0.1 2.9 Total net flows — — — Reinvested distributions — — — Market gains and losses 20.7 21.1 (0.4) Acquisitions ⁽⁴⁾ 26.0 26.0 — Foreign currency translation 0.2 0.1 0.1		1.5	3.0	(1.1)
Total net flows 7.5 5.7 1.8 Reinvested distributions — — — Market gains and losses 20.7 21.1 (0.4) Acquisitions ⁽⁴⁾ 26.0 26.0 — Foreign currency translation 0.2 0.1 0.1	The House in India management for carming From	3.0	0.1	2.9
Reinvested distributions — — — Market gains and losses 20.7 21.1 (0.4) Acquisitions ⁽⁴⁾ 26.0 26.0 — Foreign currency translation 0.2 0.1 0.1	Net flows in institutional money market funds	_	_	_
Market gains and losses 20.7 21.1 (0.4) Acquisitions ⁽⁴⁾ 26.0 $-$ Foreign currency translation 0.2 0.1 0.1	Total net flows	7.5	5.7	1.8
Acquisitions $^{(4)}$ 26.026.0—Foreign currency translation0.20.10.1	Reinvested distributions	_	_	_
Acquisitions $^{(4)}$ 26.026.0—Foreign currency translation0.20.10.1		20.7	21.1	(0.4)
Foreign currency translation 0.2 0.1 0.1	5			_
	-			0.1
	December 31, 2017	198.8	181.9	16.9

See accompanying notes immediately following these AUM tables.

Total AUM by Asset Class⁽²⁾

\$ in billions	Total	Equity	Fixed Income	Balanced	Money Market	Alternatives
December 31, 2018	888.2	369.1	208.6	55.4	89.9	165.2
Long-term inflows	227.5	100.9	68.0	18.8	0.2	39.6
Long-term outflows	(261.9)	(132.4)	(53.9)	(20.4)	(0.1)	(55.1)
Long-term net flows	(34.4)	(31.5)	14.1	(1.6)	0.1	(15.5)
Net flows in non-management fee earning AUM	9.2	2.9	6.3	_	_	_
Net flows in institutional money market funds	(2.0)	_	_	_	(2.0)	_
Total net flows	(27.2)	(28.6)	20.4	(1.6)	(1.9)	(15.5)
Reinvested distributions	17.9	12.9	1.6	1.9	_	1.5
Market gains and losses	120.4	94.0	9.9	7.6	_	8.9
Acquisitions ⁽⁴⁾	224.4	149.7	42.5	3.7	3.7	24.8
Foreign currency translation	2.5	1.7	0.5	0.3	(0.3)	0.3
December 31, 2019	1,226.2	598.8	283.5	67.3	91.4	185.2
Average AUM	1,094.4	503.9	253.8	62.1	95.4	179.2
% of total average AUM	100.0%	46.0%	23.2%	5.7%	8.7%	16.4%
December 31, 2017	937.6	412.6	204.3	62.3	78.6	179.8
Long-term inflows	209.8	96.8	51.4	13.1	6.9	41.6
Long-term outflows	(248.8)	(126.0)	(53.6)	(15.1)	(5.4)	(48.7)
Long-term net flows	(39.0)	(29.2)	(2.2)	(2.0)	1.5	(7.1)
Net flows in non-management fee earning AUM						
	2.5	3.1	(0.6)			
Net flows in institutional money market funds	7.6				7.6	_
Total net flows	(28.9)	(26.1)	(2.8)	(2.0)	9.1	(7.1)
Reinvested distributions	11.4	8.4	1.0	1.4	_	0.6
Market gains and losses	(67.0)	(49.5)	(3.8)	(7.0)	0.6	(7.3)
Acquisitions ⁽⁴⁾	47.6	29.5	11.5	3.1	2.2	1.3
Foreign currency translation	(12.5)	(5.8)	(1.6)	(2.4)	(0.6)	(2.1)
December 31, 2018	888.2	369.1	208.6	55.4	89.9	165.2
Average AUM	958.7	422.8	209.9	62.1	85.6	178.3
% of total average AUM	100.0%	44.1%	21.9%	6.5%	8.9%	18.6%
December 31, 2016	812.9	344.6	179.8	51.6	81.3	155.6
Long-term inflows	183.3	79.4	41.8	15.0	4.2	42.9
Long-term outflows	(178.8)	(93.2)	(35.9)	(12.3)	(4.0)	(33.4)
Long-term net flows	4.5	(13.8)	5.9	2.7	0.2	9.5
Net flows in non-management fee earning AUM	3.0	0.5	2.5	_	_	_
Net flows in institutional money market funds	(3.2)	_	_	_	(3.2)	_
Total net flows	4.3	(13.3)	8.4	2.7	(3.0)	9.5
Reinvested distributions	7.0	5.1	0.4	0.9	_	0.6
Market gains and losses	66.0	55.3	4.8	3.7	_	2.2
Acquisitions ⁽⁴⁾	26.0	11.5	7.8	_	_	6.7
Foreign currency translation	21.4	9.4	3.1	3.4	0.3	5.2
December 31, 2017	937.6	412.6	204.3	62.3	78.6	179.8
Average AUM	875.0	379.5	191.8	56.8	78.5	168.4
% of total average AUM	100.0%		21.9%	6.5%	9.0%	19.2%
% of total average AUM	100.0%	43.4%	21.9%	6.5%	9.0%	19

 $\overline{\mbox{See}}$ accompanying notes immediately following these AUM tables.

Passive AUM by Asset Class (2)

\$ in billions	Total	Equity	Fixed Income	Balanced	Money Market	Alternatives
December 31, 2018	221.0	155.3	47.2	0.7	-	17.8
Long-term inflows	80.7	57.9	10.9	0.1	_	11.8
Long-term outflows	(65.4)	(48.2)	(6.0)			(11.2)
Long-term net flows	15.3	9.7	4.9	0.1	_	0.6
Net flows in non-management fee earning AUM	9.3	3.0	6.3	_	_	_
Net flows in institutional money market funds						
Total net flows	24.6	12.7	11.2	0.1	_	0.6
Reinvested distributions	_	_		_	_	_
Market gains and losses	46.9	44.7	0.4	0.1	_	1.7
Acquisitions ⁽⁴⁾	4.5	4.5		_	_	_
Foreign currency translation		(0.1)	0.1			_
December 31, 2019	297.0	217.1	58.9	0.9	_	20.1
Average AUM	264.3	189.2	55.7	0.8		18.6
% of total average AUM	100.0%	71.6%	21.1%	0.3%	%	7.0%
December 31, 2017	198.8	134.7	42.4	0.8		20.9
Long-term inflows	70.4	49.3	10.8	_	_	10.3
Long-term outflows	(72.4)	(47.4)	(12.0)	_	_	(13.0)
Long-term net flows	(2.0)	1.9	(1.2)	_	_	(2.7)
Net flows in non-management fee earning AUM			(0.6)			
	2.5	3.1	(0.6)	_	_	<u> </u>
Net flows in institutional money market funds						<u> </u>
Total net flows	0.5	5.0	(1.8)			(2.7)
Reinvested distributions	-	_	-	-	_	-
Market gains and losses	(14.9)	(11.1)	(1.9)	(0.1)	_	(1.8)
Acquisitions ⁽⁴⁾	37.1	27.1	8.7	_	_	1.3
Foreign currency translation	(0.5)	(0.4)	(0.2)			0.1
December 31, 2018	221.0	155.3	47.2	0.7		17.8
Average AUM	232.1	162.2	47.4	0.8	_	21.7
% of total average AUM	100.0%	69.9%	20.4%	0.3%	<u> </u>	9.3%
December 31, 2016	144.4	98.4	28.9	0.8	_	16.3
Long-term inflows	42.6	28.5	8.7	0.1	_	5.3
Long-term outflows	(38.1)	(25.6)	(5.3)	(0.1)	_	(7.1)
Long-term net flows	4.5	2.9	3.4	_	_	(1.8)
Net flows in non-management fee earning AUM	3.0	0.5	2.5	_	_	_
Net flows in institutional money market funds	_	_	_	_	_	_
Total net flows	7.5	3.4	5.9			(1.8)
Reinvested distributions	_	_	_	_	_	_
Market gains and losses	20.7	21.4	(0.3)	_	_	(0.4)
Acquisitions ⁽⁴⁾	26.0	11.5	7.8	_	_	6.7
Foreign currency translation	0.2	_	0.1	_	_	0.1
December 31, 2017	198.8	134.7	42.4	0.8		20.9
Average AUM	169.4	115.8	34.9	0.8		17.9
% of total average AUM	100.0%	68.4%	20.6%	0.5%	<u> </u> %	10.6%

See accompanying notes immediately following these AUM tables.

Total AUM by Client Domicile (3)

Long-term inflows 227.5 124.6 9.1 51.7 42.1 Long-term outflows (2619) (158.2) (202) (49.7) (33.8) Long-term outflows (34.0) (33.6) (11.1) 2.0 8.3 Net flows in non-management fee earning AUM 9.2 6.3 0.2 2.4 0.3 Net flows in institutional money market funds (20) (3.9) — (2.3) 4.2 Total net flows (27.2) (31.2) (10.9) 2.1 12.8 Reinvested distributions 17.9 17.5 0.4 — — Market gains and losses 120.4 88.1 5.5 15.3 11.5 Transfers — (1.3) (0.3) 1.6 — Acquisitions 224.4 223.7 0.7 — — December 31, 2019 1,226.2 879.5 74.4 143.7 128.6 December 31, 2017 37.6 610.4 93.6 144.5 89.1 Long-term int flows (248.8) (139.3) (18.6) (5.5) (25.2) Long-term net flows (248.8) (139.3) (18.6) (65.7) (25.2) Long-term int flows (26.9) (30.0) (5.0) (7.4) 4.4 Net flows in institutional money market funds 7.6 (2.1) — 0.9 8.8 Total net flows (28.9) (30.4) (5.1) (6.7) 13.3 Reinvested distributions 11.4 10.8 0.6 — — Market gains and losses (67.0) (44.7) (7.3) (8.6) (6.4) Acquisitions (3.8) (3.8) (3.8) (3.8) (3.8) (3.8) Foreign currency translation (12.5) (2.2) (4.8) (4.4) (1.1) Constitutions (3.8) (3.8) (3.8) (3.8) (3.8) (3.8) Constitutions (3.8) (3.8) (3.8) (3.8) (3.8) (3.8) (3.8) Constitutional money market funds (3.8) (3	\$ in billions	Total	Americas	UK	EMEA ex UK	Asia
Long-term outflows (261.9) (158.2) (20.2) (49.7) (33.8) (31.6) (31.7) (30.8) (31.7) (30.8) (31.7) (30.8) (31.7) (30.8) (31.7) (30.8) (31.7) (30.8) (31.7) (30.8) (31.7) (30.8) (31.7) (30.8) (31.7) (30.8) (31.7) (30.8) (31.7) (30.8) (31.7) (30.8) (31.7) (30.8) (31.7) (30.8) (31.7	December 31, 2018	888.2	581.6	76.6	125.5	104.5
Description of the seminary AUM	Long-term inflows	227.5	124.6	9.1	51.7	42.1
Net flows in non-management fee earning AUM 9.2	Long-term outflows	(261.9)	(158.2)	(20.2)	(49.7)	(33.8)
Per	Long-term net flows	(34.4)	(33.6)	(11.1)	2.0	8.3
Net flows in institutional money market funds	Net flows in non-management fee earning AUM					
Total net flows				0.2		
Reinvested distributions 17.9 17.5 0.4 — —						
Market gains and losses 1204 88.1 5.5 15.3 11.5 Transfers -					2.1	12.8
Transfers — (1.3) (0.3) 1.6 — Acquisitions ⁶¹ 2244 223.7 0.7 — 7 —					_	
Acquisitions ⁽¹⁾ 2244 223.7 0.7	_	120.4				11.5
Process of translation 2.5 1.1 2.4 0.8 0.2 December 31, 2019 1,226.2 879.5 74.4 143.7 128.6 December 31, 2017 937.6 610.4 93.6 144.5 89.1 Long-term inflows 209.8 108.3 13.6 58.3 29.6 Long-term inflows 248.8 (139.3) (18.6) (65.7) (25.2) Long-term outflows 248.8 (139.3) (18.6) (65.7) (25.2) Long-term net flows 25.5 2.7 0.1 0.2 0.1 Net flows in non-management fee earning AUM 2.5 2.7 0.1 0.2 0.1 Net flows in institutional money market funds 7.6 (2.1) - 0.9 8.8 Total net flows 11.4 10.8 0.6 - Market gains and losses (67.0) (44.7) (7.3) (8.6) (6.4) Transfer 2.6 (67.0) (44.7) (7.3) (8.6) (6.4) Transfer 4.7 (0.4) (0.4) (0.7) (0.1) Acquisitions ⁶¹ 47.6 38.1 - 9.5 Foreign currency translation (12.5) (2.2) (4.8) (4.4) (1.1) December 31, 2018 888.2 581.6 76.6 125.5 104.5 December 31, 2016 812.9 558.7 80.4 92.0 81.8 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term flows 183.3 92.4 17.0 50.4 23.5 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term flows 183.3 92.4 17.0 50.4 23.5 Long-term flows 183.3 92.4 17.0 50.4 23.5 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term inflo		_			1.6	_
December 31, 2019 1,226.2 879.5 74.4 143.7 128.6	•				_	
December 31, 2017 937.6 610.4 93.6 144.5 89.1 Long-term inflows 209.8 108.3 13.6 58.3 29.6 Long-term net flows (248.8) (139.3) (18.6) (65.7) (25.2) Long-term net flows (39.0) (31.0) (5.0) (7.4) 4.4 Net flows in non-management fee earning AUM 2.5 2.7 (0.1) (0.2) 0.1 Net flows in institutional money market funds 7.6 (2.1) — 0.9 8.8 Total net flows (28.9) (30.4) (5.1) (6.7) 13.3 Reinvested distributions 11.4 10.8 0.6 — — — Market gains and losses (67.0) (44.7) (7.3) (8.6) (6.4) Transfer — (0.4) (0.4) 0.7 0.1 Acquisitions ⁽⁴⁾ 47.6 38.1 — — — 9.5 Foreign currency translation (12.5) (2.2) (4.8) (4.4) (1.1) December 31, 2016 812.9 558.7 80.4 92.0 81.8 Long-term inflows 812.9 558.7 80.4 92.0 81.8 Long-term inflows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term inflows 4.5 (7.8) 1.5 9.8 1.0 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 — — — Market gains and losses 66.0 46.5 4.4 10.9 4.2 Acquisitions ⁽⁴⁾ 26.0 — — 26.0 — Eroeign currency translation 21.4 1.9 7.2 9.1 3.2			1.1		(0.8)	
Long-term inflows 209.8 108.3 13.6 58.3 29.6 Long-term outflows (248.8) (139.3) (18.6) (65.7) (25.2) Long-term net flows (39.0) (31.0) (5.0) (7.4) 4.4 Net flows in non-management fee carning AUM 2.5 2.7 (0.1) (0.2) 0.1 Net flows in institutional money market funds 7.6 (2.1) — 0.9 8.8 Total net flows (28.9) (30.4) (5.1) (6.7) 13.3 Reinvested distributions 11.4 10.8 0.6 — — — Market gains and losses (67.0) (44.7) (7.3) (8.6) (6.4) Transfer — (0.4) (0.4) 0.7 0.1 Acquisitions(4) 47.6 38.1 — — 9.5 Foreign currency translation (12.5) (2.2) (4.8) (4.4) (1.1) December 31, 2018 888.2 581.6 76.6 125.5 104.5 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term outflows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term net flows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term net flows 3.3 3.5 0.1 (0.7) 0.1 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 — — — — — — — — — — — — — — — — — —	December 31, 2019	1,226.2	879.5	74.4	143.7	128.6
Long-term inflows 209.8 108.3 13.6 58.3 29.6 Long-term outflows (248.8) (139.3) (18.6) (65.7) (25.2) Long-term net flows (39.0) (31.0) (5.0) (7.4) 4.4 Net flows in non-management fee carning AUM 2.5 2.7 (0.1) (0.2) 0.1 Net flows in institutional money market funds 7.6 (2.1) — 0.9 8.8 Total net flows (28.9) (30.4) (5.1) (6.7) 13.3 Reinvested distributions 11.4 10.8 0.6 — — — Market gains and losses (67.0) (44.7) (7.3) (8.6) (6.4) Transfer — (0.4) (0.4) 0.7 0.1 Acquisitions(4) 47.6 38.1 — — 9.5 Foreign currency translation (12.5) (2.2) (4.8) (4.4) (1.1) December 31, 2018 888.2 581.6 76.6 125.5 104.5 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term outflows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term net flows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term net flows 3.3 3.5 0.1 (0.7) 0.1 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 — — — — — — — — — — — — — — — — — —						
Cong-term outflows C248.8 C139.3 C18.6 C65.7 C25.2 Long-term net flows C39.0 C31.0 C5.0 C7.4 C4.4 Net flows in non-management fee earning AUM C2.5 C2.7 C0.1 C0.2 C1.1 Net flows in institutional money market funds C28.9 C30.4 C5.1 C6.7 C3.3 Reinvested distributions C28.9 C30.4 C5.1 C6.7 C3.3 Reinvested distributions C38.9 C38.9 C38.9 C38.9 C38.9 Requisitions C38.9 C38.9 C38.9 C38.9 C38.9 Requisitions C38.9 C38.9 C38.9 C38.9 C38.9 Requisitions C38.9 C38.9 C38.9 C38.9 C38.9 Recember 31, 2016 C38.9 C38.9 C38.9 C38.9 Long-term inflows C38.9 C38.9 C38.9 C38.9 Long-term inflows C38.9 C38.9 C38.9 C38.9 Long-term inflows C38.9 C38.9 C38.9 C38.9 Ret flows in non-management fee earning AUM C38.9 C38.9 C38.9 C38.9 Net flows in institutional money market funds C38.9 C38.9 C38.9 C38.9 C38.9 Ret flows in institutional money market funds C38.9 C38.						
Cong-term net flows Congress				13.6		
Net flows in non-management fee earning AUM 2.5 2.7 (0.1) (0.2) 0.1 Net flows in institutional money market funds 7.6 (2.1) - 0.9 8.8 Total net flows (28.9) (30.4) (5.1) (6.7) 13.3 Reinvested distributions 11.4 10.8 0.6 Market gains and losses (67.0) (44.7) (7.3) (8.6) (6.4) Transfer - 0.04 (0.4) (0.7) (0.1) Acquisitions ⁽⁴⁾ 47.6 38.1 9.5 Foreign currency translation (12.5) (2.2) (4.8) (4.4) (1.1) December 31, 2018 888.2 581.6 76.6 125.5 104.5 December 31, 2016 812.9 558.7 80.4 92.0 81.8 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term outflows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term tet flows 4.5 (7.8) 1.5 9.8 1.0 Net flows in non-management fee earning AUM 3.0 3.5 (0.1) (0.7) (0.1) Net flows in institutional money market funds (3.2) 0.6 - (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 - - - Market gains and losses 66.0 46.5 4.4 10.9 4.2 Acquisitions ⁽⁴⁾ 26.0 - - 26.0 - Foreign currency translation 21.4 1.9 7.2 9.1 3.2		(248.8)	(139.3)	(18.6)	(65.7)	(25.2)
Net flows in institutional money market funds 7.6 (2.1) 0.9 8.8 Total net flows (28.9) (30.4) (5.1) (6.7) 13.3 Reinvested distributions 11.4 10.8 0.6 Market gains and losses (67.0) (44.7) (7.3) (8.6) (6.4) Transfer (0.4) (0.4) 0.7 0.1 Acquisitions ⁽⁴⁾ 47.6 38.1 9.5 Foreign currency translation (12.5) (2.2) (4.8) (4.4) (1.1) December 31, 2018 888.2 581.6 76.6 125.5 104.5 December 31, 2016 812.9 558.7 80.4 92.0 81.8 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term outflows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term net flows 4.5 (7.8) 1.5 9.8 1.0 Net flows in non-management fee earning AUM (3.2) 0.6 (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 Market gains and losses 66.0 46.5 4.4 10.9 4.2 Acquisitions ⁽⁴⁾ 26.0 26.0 Foreign currency translation 21.4 1.9 7.2 9.1 3.2		(39.0)	(31.0)	(5.0)	(7.4)	4.4
Net flows in institutional money market funds 7.6 (2.1) — 0.9 8.8 Total net flows (28.9) (30.4) (5.1) (6.7) 13.3 Reinvested distributions 11.4 10.8 0.6 — — Market gains and losses (67.0) (44.7) (7.3) (8.6) (6.4) Transfer — (0.4) (0.4) 0.7 0.1 Acquisitions(4) 47.6 38.1 — — 9.5 Foreign currency translation (12.5) (2.2) (4.8) (4.4) (1.1) December 31, 2016 888.2 581.6 76.6 125.5 104.5 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term outflows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term net flows 4.5 (7.8) 1.5 9.8 1.0 Net flows in institutional money market funds 3.0 3.5 0.1 (0.7) 0.1 <td>Net flows in non-management fee earning AUM</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Net flows in non-management fee earning AUM					
Total net flows (28.9) (30.4) (5.1) (6.7) 13.3 Reinvested distributions 11.4 10.8 0.6 — — Market gains and losses (67.0) (44.7) (7.3) (8.6) (6.4) Transfer — (0.4) (0.4) 0.7 0.1 Acquisitions(4) 47.6 38.1 — — 9.5 Foreign currency translation (12.5) (2.2) (4.8) (4.4) (1.1) December 31, 2018 888.2 581.6 76.6 125.5 104.5 December 31, 2016 812.9 558.7 80.4 92.0 81.8 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term outflows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term net flows 4.5 (7.8) 1.5 9.8 1.0 Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2)						
Reinvested distributions 11.4 10.8 0.6 — — Market gains and losses (67.0) (44.7) (7.3) (8.6) (6.4) Transfer — (0.4) (0.4) 0.7 0.1 Acquisitions ⁽⁴⁾ 47.6 38.1 — — 9.5 Foreign currency translation (12.5) (2.2) (4.8) (4.4) (1.1) December 31, 2018 888.2 581.6 76.6 125.5 104.5 December 31, 2016 812.9 558.7 80.4 92.0 81.8 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term outflows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term net flows 4.5 (7.8) 1.5 9.8 1.0 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Market gains and losses (67.0) (44.7) (7.3) (8.6) (6.4) Transfer — (0.4) (0.4) 0.7 0.1 Acquisitions(4) 47.6 38.1 — — 9.5 Foreign currency translation (12.5) (2.2) (4.8) (4.4) (1.1) December 31, 2018 888.2 581.6 76.6 125.5 104.5 December 31, 2016 812.9 558.7 80.4 92.0 81.8 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term outflows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term net flows 4.5 (7.8) 1.5 9.8 1.0 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1)					(6.7)	13.3
Transfer — (0.4) (0.4) 0.7 0.1 Acquisitions ⁽⁴⁾ 47.6 38.1 — — 9.5 Foreign currency translation (12.5) (2.2) (4.8) (4.4) (1.1) December 31, 2018 888.2 581.6 76.6 125.5 104.5 December 31, 2016 812.9 558.7 80.4 92.0 81.8 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term outflows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term net flows 4.5 (7.8) 1.5 9.8 1.0 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 — — —					_	_
Acquisitions(4) 47.6 38.1 — — 9.5 Foreign currency translation (12.5) (2.2) (4.8) (4.4) (1.1) December 31, 2018 888.2 581.6 76.6 125.5 104.5 December 31, 2016 812.9 558.7 80.4 92.0 81.8 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term outflows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term net flows 4.5 (7.8) 1.5 9.8 1.0 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 — — — Market gains and losses 66.0 46.5 4.4 10.9 4.2 Acquisitions(4) 26.0 — — 26.0 — <	_	(67.0)				
Foreign currency translation (12.5) (2.2) (4.8) (4.4) (1.1)		_		(0.4)	0.7	
December 31, 2018 888.2 581.6 76.6 125.5 104.5 December 31, 2016 812.9 558.7 80.4 92.0 81.8 Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term outflows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term net flows 4.5 (7.8) 1.5 9.8 1.0 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 — — — Market gains and losses 66.0 46.5 4.4 10.9 4.2 Acquisitions ⁽⁴⁾ 26.0 — — 26.0 — Foreign currency translation 21.4 1.9 7.2 9.1 3.2	•					
December 31, 2016 812.9 558.7 80.4 92.0 81.8	Foreign currency translation			(4.8)		
Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term outflows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term net flows 4.5 (7.8) 1.5 9.8 1.0 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 — — — Market gains and losses 66.0 46.5 4.4 10.9 4.2 Acquisitions ⁽⁴⁾ 26.0 — — — 26.0 — Foreign currency translation 21.4 1.9 7.2 9.1 3.2	December 31, 2018	888.2	581.6	76.6	125.5	104.5
Long-term inflows 183.3 92.4 17.0 50.4 23.5 Long-term outflows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term net flows 4.5 (7.8) 1.5 9.8 1.0 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 — — — Market gains and losses 66.0 46.5 4.4 10.9 4.2 Acquisitions ⁽⁴⁾ 26.0 — — — 26.0 — Foreign currency translation 21.4 1.9 7.2 9.1 3.2						
Long-term outflows (178.8) (100.2) (15.5) (40.6) (22.5) Long-term net flows 4.5 (7.8) 1.5 9.8 1.0 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 — — — Market gains and losses 66.0 46.5 4.4 10.9 4.2 Acquisitions ⁽⁴⁾ 26.0 — — 26.0 — Foreign currency translation 21.4 1.9 7.2 9.1 3.2						
Long-term net flows 4.5 (7.8) 1.5 9.8 1.0 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 — — — Market gains and losses 66.0 46.5 4.4 10.9 4.2 Acquisitions ⁽⁴⁾ 26.0 — — 26.0 — Foreign currency translation 21.4 1.9 7.2 9.1 3.2						
Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 — — — Market gains and losses 66.0 46.5 4.4 10.9 4.2 Acquisitions ⁽⁴⁾ 26.0 — — 26.0 — Foreign currency translation 21.4 1.9 7.2 9.1 3.2	-	(178.8)	(100.2)			
3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 — — — Market gains and losses 66.0 46.5 4.4 10.9 4.2 Acquisitions ⁽⁴⁾ 26.0 — — 26.0 — Foreign currency translation 21.4 1.9 7.2 9.1 3.2		4.5	(7.8)	1.5	9.8	1.0
Net flows in institutional money market funds (3.2) 0.6 — (2.6) (1.2) Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 — — — Market gains and losses 66.0 46.5 4.4 10.9 4.2 Acquisitions ⁽⁴⁾ 26.0 — — 26.0 — Foreign currency translation 21.4 1.9 7.2 9.1 3.2	Net flows in non-management fee earning AUM	2.0	2.5	0.1	(0.7)	0.1
Total net flows 4.3 (3.7) 1.6 6.5 (0.1) Reinvested distributions 7.0 7.0 — — — Market gains and losses 66.0 46.5 4.4 10.9 4.2 Acquisitions ⁽⁴⁾ 26.0 — — — 26.0 — Foreign currency translation 21.4 1.9 7.2 9.1 3.2	Not flower in institutional manay monket funds					
Reinvested distributions 7.0 7.0 — — — Market gains and losses 66.0 46.5 4.4 10.9 4.2 Acquisitions ⁽⁴⁾ 26.0 — — 26.0 — Foreign currency translation 21.4 1.9 7.2 9.1 3.2						
Market gains and losses 66.0 46.5 4.4 10.9 4.2 Acquisitions ⁽⁴⁾ 26.0 — — — 26.0 — Foreign currency translation 21.4 1.9 7.2 9.1 3.2				1.6	6.5	(0.1)
Acquisitions ⁽⁴⁾ 26.0 — — 26.0 — Foreign currency translation 21.4 1.9 7.2 9.1 3.2					10.0	
Foreign currency translation 21.4 1.9 7.2 9.1 3.2	-		46.5			4.2
	-		_			
December 31, 2017 937.6 610.4 93.6 144.5 89.1	-					
	December 31, 2017	937.6	610.4	93.6	144.5	89.1

See accompanying notes immediately following these AUM tables.

Passive AUM by Client Domicile (4)

Long-term inflows	\$ in billions	Total	Americas	UK	EMEA ex UK	Asia
Long-term outflows (65.4) (42.6) (0.4) (20.3) (2.1) Long-term net flows 15.3	December 31, 2018	221.0	184.0	0.7	32.6	3.7
Long-term net flows 15.3 6.0 0.1 9.4 (0.2 0.1 Net flows in non-management fee earning AUM 9.3 6.4 0.2 2.4 0.3 0.4 0.2 0.4 0.3 0.4 0.2 0.4 0.3 0.4 0.5	Long-term inflows	80.7	48.6	0.5	29.7	1.9
Net flows in non-management fee earning AUM	Long-term outflows	(65.4)	(42.6)	(0.4)	(20.3)	(2.1)
Net flows in institutional money market funds	Long-term net flows	15.3	6.0	0.1	9.4	(0.2)
Net flows in institutional money market funds	Net flows in non-management fee earning AUM					
Total net flows 24.6 12.4 0.3 11.8 0.1 Reinvested distributions		9.3	6.4	0.2	2.4	0.3
Reinvested distributions						
Market gains and losses 46.9 39.1 (0.3) 7.0 1.1 Acquisitions ⁶⁴ 4.5 4.5 — — — — December 31, 2019 297.0 240.0 0.7 51.4 4.9 December 31, 2017 198.8 160.1 0.8 34.7 3.2 Long-term inflows 70.4 40.1 0.4 28.4 1.5 Long-term outflows (2.0) (2.4) (0.1) 0.1 0.4 Net flows in inon-management fee earning AUM 2.5 2.7 (0.1) (0.2) 0.1 Net flows in institutional money market funds — — — — — — Net flows in institutional money market funds —		24.6	12.4	0.3	11.8	0.1
Acquisitions ⁽⁴⁾ 4.5 4.5 — — — — — — — — — — — — — — — — — — —		_	_	_	_	_
December 31, 2017 198.8 160.1 0.8 34.7 3.2				(0.3)	7.0	1.1
December 31, 2019 297.0 240.0 0.7 51.4 4.9		4.5	4.5	_		_
December 31, 2017 198.8 160.1 0.8 34.7 3.2	Foreign currency translation					_
Long-term inflows	December 31, 2019	297.0	240.0	0.7	51.4	4.9
Long-term inflows	December 21, 2017	100.0	160.1	0.8	24.7	2.2
Long-term outflows (72.4) (42.5) (0.5) (28.3) (1.1) Long-term net flows (2.0) (2.4) (0.1) (0.1) (0.4) Net flows in non-management fee earning AUM (2.5) (2.7) (0.1) (0.2) (0.1) Net flows in institutional money market funds (2.5) (2.7) (0.1) (0.2) (0.1) Net flows in institutional money market funds (2.5) (3.3) (0.2) (0.1) (0.5) Reinvested distributions (1.49) (13.3) (0.2) (0.1) (0.5) Reinvested distributions (1.49) (13.3) (0.1) (1.6) (0.1) Acquisitions(4) (37.1) (3.6) (-1) (0.1) Acquisitions(4) (37.1) (3.6) (-1) (0.1) December 31, 2018 (21.0) (14.4) (133.1) (0.7) (3.2.6) (3.7) December 31, 2016 (14.4) (133.1) (0.7) (3.2.6) (3.7) December 31, 2016 (14.4) (133.1) (2.7) (3.6) (1.4) (3.7) Long-term inflows (42.6) (27.4) (3.6) (14.0) (3.8) (2.2.3) (3.5) (3.3) (2.0) Long-term outflows (3.8.1) (2.2.3) (3.5) (3.3) (2.0) Long-term net flows (3.8.1) (2.2.3) (3.5) (3.3) (2.0) Long-term net flows in non-management fee earning AUM (3.0) (3.5) (3.5) (3.1) (0.7) (3.4) Net flows in institutional money market funds (3.6) (3.5						
Long-term net flows (2.0) (2.4) (0.1) 0.1 0.4 Net flows in non-management fee earning AUM 2.5 2.7 (0.1) (0.2) 0.1 Net flows in institutional money market funds	-					
Net flows in non-management fee earning AUM						
Net flows in institutional money market funds	-	(2.0)	(2.4)	(0.1)	0.1	0.4
Net flows in institutional money market funds	Net flows in non-management fee earning AUM	2.5	2.7	(0.1)	(0.2)	0.1
Total net flows 0.5 0.3 (0.2) (0.1) 0.5 Reinvested distributions — — — — — — Market gains and losses (14.9) (13.3) 0.1 (1.6) (0.1 Acquisitions ⁽⁴⁾ 37.1 36.9 — — 0.2 Foreign currency translation (0.5) — — (0.4) (0.1 December 31, 2018 221.0 184.0 0.7 32.6 3.7 December 31, 2016 144.4 133.1 0.7 6.2 4.4 Long-term inflows 42.6 27.4 0.6 14.0 0.6 Long-term outflows (38.1) (22.3) (0.5) (13.3) (2.0 Long-term net flows 4.5 5.1 0.1 0.7 (1.4 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds — — — — — <t< td=""><td>Net flows in institutional money market funds</td><td></td><td></td><td>(0.1)</td><td>(0.2) —</td><td>—</td></t<>	Net flows in institutional money market funds			(0.1)	(0.2) —	—
Reinvested distributions — 0.0 (0.1 (0.5) — — — 0.2 9.2 — — — 0.2 3.7 December 31, 2018 221.0 184.0 0.7 32.6 3.7 December 31, 2016 144.4 133.1 0.7 6.2 4.4 Long-term inflows 42.6 27.4 0.6 14.0 0.6 Long-term outflows (38.1) (22.3) (0.5) (13.3) (2.0 Long-term net flows 4.5 5.1 0.1 0.7 (1.4 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds — — — — — — — — — — — — <t< td=""><td></td><td>0.5</td><td>0.3</td><td>(0.2)</td><td>(0.1)</td><td>0.5</td></t<>		0.5	0.3	(0.2)	(0.1)	0.5
Market gains and losses (14.9) (13.3) 0.1 (1.6) (0.1 Acquisitions ⁽⁴⁾ 37.1 36.9 — — 0.2 Foreign currency translation (0.5) — — (0.4) (0.1 December 31, 2018 221.0 184.0 0.7 32.6 3.7 December 31, 2016 144.4 133.1 0.7 6.2 4.4 Long-term inflows 42.6 27.4 0.6 14.0 0.6 Long-term outflows (38.1) (22.3) (0.5) (13.3) (2.0 Long-term net flows 4.5 5.1 0.1 0.7 (1.4 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds — — — — Total net flows 7.5 8.6 0.2 — (1.3 Reinvested distributions — — — — — Market gains and losses 20.7 18.4 (0.1) 2.4 — Acquisitions ⁽⁴⁾ <td></td> <td></td> <td>_</td> <td></td> <td>_</td> <td></td>			_		_	
Acquisitions(4) 37.1 36.9 — — 0.2 Foreign currency translation (0.5) — — (0.4) (0.1 December 31, 2018 221.0 184.0 0.7 32.6 3.7 December 31, 2016 144.4 133.1 0.7 6.2 4.4 Long-term inflows 42.6 27.4 0.6 14.0 0.6 Long-term outflows (38.1) (22.3) (0.5) (13.3) (2.0 Long-term net flows 4.5 5.1 0.1 0.7 (1.4 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds — — — — — — Total net flows 7.5 8.6 0.2 — — — Reinvested distributions — — — — — — Market gains and losses 20.7 18.4 (0.1) 2.4 — Foreign currency translation 0.2 — — 0.1 0.1		(14 9)	(13.3)	0.1	(1.6)	
Foreign currency translation (0.5)				_	_	
December 31, 2018 221.0 184.0 0.7 32.6 3.7	•		_	<u> </u>	(0.4)	(0.1)
December 31, 2016			184.0			3.7
Long-term inflows 42.6 27.4 0.6 14.0 0.6 Long-term outflows (38.1) (22.3) (0.5) (13.3) (2.0) Long-term net flows 4.5 5.1 0.1 0.7 (1.4 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds — — — — — Total net flows 7.5 8.6 0.2 — (1.3) Reinvested distributions — — — — — Market gains and losses 20.7 18.4 (0.1) 2.4 — Acquisitions(4) 26.0 — — 26.0 — Foreign currency translation 0.2 — — 0.1 0.1	2.000.000.000.000	<u></u>				
Long-term outflows (38.1) (22.3) (0.5) (13.3) (2.0) Long-term net flows 4.5 5.1 0.1 0.7 (1.4) Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds — — — — — Total net flows 7.5 8.6 0.2 — (1.3) Reinvested distributions — — — — — Market gains and losses 20.7 18.4 (0.1) 2.4 — Acquisitions ⁽⁴⁾ 26.0 — — 26.0 — Foreign currency translation 0.2 — — 0.1 0.1	December 31, 2016	144.4	133.1	0.7	6.2	4.4
Long-term net flows 4.5 5.1 0.1 0.7 (1.4 Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds — — — — — — Total net flows 7.5 8.6 0.2 — (1.3 Reinvested distributions — — — — — Market gains and losses 20.7 18.4 (0.1) 2.4 — Acquisitions ⁽⁴⁾ 26.0 — — 26.0 — Foreign currency translation 0.2 — — 0.1 0.1	Long-term inflows	42.6	27.4	0.6	14.0	0.6
Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds — — — — — — Total net flows 7.5 8.6 0.2 — (1.3 Reinvested distributions — — — — — Market gains and losses 20.7 18.4 (0.1) 2.4 — Acquisitions ⁽⁴⁾ 26.0 — — 26.0 — Foreign currency translation 0.2 — — 0.1 0.1	Long-term outflows	(38.1)	(22.3)	(0.5)	(13.3)	(2.0)
Net flows in non-management fee earning AUM 3.0 3.5 0.1 (0.7) 0.1 Net flows in institutional money market funds — — — — — — Total net flows 7.5 8.6 0.2 — (1.3 Reinvested distributions — — — — — Market gains and losses 20.7 18.4 (0.1) 2.4 — Acquisitions ⁽⁴⁾ 26.0 — — 26.0 — Foreign currency translation 0.2 — — 0.1 0.1	Long-term net flows	4.5	5.1	0.1	0.7	(1.4)
Net flows in institutional money market funds 3.0 3.5 0.1 (0.7) 0.1 Total net flows - <td>Net flows in non-management fee earning AUM</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Net flows in non-management fee earning AUM					
Total net flows 7.5 8.6 0.2 — (1.3 Reinvested distributions — — — — — — Market gains and losses 20.7 18.4 (0.1) 2.4 — Acquisitions ⁽⁴⁾ 26.0 — — 26.0 — Foreign currency translation 0.2 — — 0.1 0.1		3.0	3.5	0.1	(0.7)	0.1
Reinvested distributions — — — — — Market gains and losses 20.7 18.4 (0.1) 2.4 — Acquisitions ⁽⁴⁾ 26.0 — — — 26.0 — Foreign currency translation 0.2 — — 0.1 0.1	Net flows in institutional money market funds		_			
Market gains and losses 20.7 18.4 (0.1) 2.4 — Acquisitions ⁽⁴⁾ 26.0 — — — 26.0 — Foreign currency translation 0.2 — — 0.1 0.1	Total net flows	7.5	8.6	0.2	_	(1.3)
Acquisitions ⁽⁴⁾ 26.0 — — 26.0 — Foreign currency translation 0.2 — — 0.1 0.1	Reinvested distributions	_		_		_
Foreign currency translation 0.2 — — 0.1 0.1	Market gains and losses	20.7	18.4	(0.1)	2.4	_
	Acquisitions ⁽⁴⁾	26.0	_		26.0	_
December 31, 2017 198.8 160.1 0.8 34.7 3.2	Foreign currency translation	0.2			0.1	0.1
	December 31, 2017	198.8	160.1	0.8	34.7	3.2

⁽¹⁾ Channel refers to the internal distribution channel from which the AUM originated. Retail AUM represents AUM distributed by the company's retail sales team. Institutional AUM represents AUM distributed by our institutional sales team. This aggregation is viewed as a proxy for presenting AUM in the retail and institutional markets in which the company operates.

During 2018, \$29.8 billion of AUM were transferred from retail into institutional to better reflect the activities of institutional sales teams and the clients they support. The AUM presented in 2018 and 2017 has been adjusted to depict the AUM as though it were historically classified as institutional.

⁽²⁾ Asset classes are descriptive groupings of AUM by common type of underlying investments.

⁽³⁾ Client domicile disclosure groups AUM by the domicile of the underlying clients.

⁽⁴⁾ The acquisition of OppenheimerFunds business on May 24, 2019 added \$224.4 billion in AUM at that date. The acquisition of Guggenheim Investments' ETF business on

began including 100% of Invesco Great Wall, which added \$9.5 billion in AUM during the third quarter. The acquisition of the European ETF business added \$26.0 billion in AUM in 2017.

Results of Operations for the Years Ended December 31, 2019 compared to December 31, 2018

The discussion below includes the use of non-GAAP financial measures. See "Schedule of Non-GAAP Information" for additional details and reconciliations of the most directly comparable U.S. GAAP measures to the non-GAAP measures. The company has changed its presentation of the reconciliation between operating revenues and net revenues. All periods have been conformed to the new presentation. Neither operating revenue nor net revenue totals have changed for any historic periods.

The results of the OppenheimerFunds acquisition are included from May 24, 2019 (date of acquisition), the results of Guggenheim Investments' ETF business are included from April 6, 2018 (date of acquisition), and the results of Intelliflo are included from June 4, 2018 (date of acquisition).

Operating Revenues and Net Revenues

The main categories of revenues, and the dollar and percentage change between the periods, are as follows:

				Variance				
	Year	Years ended December 31,			vs 2018	2018 vs 2017		
\$ in millions	2019	2018	2017	\$ Change	% Change	\$ Change	% Change	
Investment management fees	4,506.3	4,082.3	4,126.6	424.0	10.4 %	(44.3)	(1.1)%	
Service and distribution fees	1,276.5	968.5	852.8	308.0	31.8 %	115.7	13.6 %	
Performance fees	102.2	56.9	113.3	45.3	79.6 %	(56.4)	(49.8)%	
Other	232.4	206.4	67.6	26.0	12.6 %	138.8	205.3 %	
Total operating revenues	6,117.4	5,314.1	5,160.3	803.3	15.1 %	153.8	3.0 %	
Invesco Great Wall	157.2	83.6	48.7	73.6	88.0 %	34.9	71.7 %	
Revenue Adjustments:								
Investment management fees	(814.4)	(817.9)	(914.2)	3.5	(0.4)%	96.3	(10.5)%	
Service and distribution fees	(886.3)	(629.7)	(551.2)	(256.6)	40.7 %	(78.5)	14.2 %	
Other	(192.3)	(160.6)	(21.1)	(31.7)	19.7 %	(139.5)	661.1 %	
Total Revenue Adjustments(1)	(1,893.0)	(1,608.2)	(1,486.5)	(284.8)	17.7 %	(121.7)	8.2 %	
CIP	33.5	28.6	32.4	4.9	17.1 %	(3.8)	(11.7)%	
Net revenues ⁽²⁾	4,415.1	3,818.1	3,754.9	597.0	15.6 %	63.2	1.7 %	

⁽¹⁾ Total revenue adjustments includes passed through investment management, service and distribution, and other revenues and equal the same amount as the third party distribution, service and advisory expenses.

The impact of foreign exchange rate movements decreased operating revenues by \$63.9 million, equivalent to 1.0% of total operating revenues, during the year ended December 31, 2019 when compared to the year ended December 31, 2018 (\$45.7 million increase in 2018 or 0.9% of 2018 total operating revenues).

Additionally, our revenues are directly influenced by the level and composition of our AUM. Therefore, movements in global capital market levels, net business inflows (or outflows) and changes in the mix of investment products between asset classes and geographies may materially affect our revenues from period to period. As discussed in the Executive Overview, financial global markets were strong, and returns from capital markets were up in the year ended December 31, 2019.

⁽²⁾ Net revenues are operating revenues less revenue adjustments, plus net revenues from Invesco Great Wall, plus management and performance fees earned from CIP. See "Schedule of Non-GAAP Information" for additional important disclosures regarding the use of net revenues.

Investment Management Fees

Investment management fees increased by \$424.0 million (10.4%) in the year ended December 31, 2019, to \$4,506.3 million (year ended December 31, 2018: \$4,082.3 million). This compares to a 14.2% increase in average AUM. The impact of foreign exchange rate movements decreased investment management fees by \$60.2 million during the year ended December 31, 2019 as compared to the year ended December 31, 2018. After allowing for foreign exchange movements, investment management fees increased by \$484.2 million (11.9%). The increase is primarily a result of revenues earned from the acquired OppenheimerFunds business (acquired May 24, 2019). The acquisition added \$219.9 billion in active AUM at acquisition date.

See the company's disclosures regarding the changes in AUM and revenue yields during the years ended December 31, 2019 and December 31, 2018 in the "Assets Under Management" section above for additional information regarding the impact of changes in AUM on management fee yields.

Service and Distribution Fees

In the year ended December 31, 2019, service and distribution fees increased by \$308.0 million (31.8%) to \$1,276.5 million (year ended December 31, 2018: \$968.5 million). The total increase is made up of higher distribution fees of \$180.3 million, transfer agency fees of \$111.0 million, and administrative fees of \$7.1 million. The increase is primarily a result of revenues earned from the acquired OppenheimerFunds business (acquired May 24, 2019).

Performance Fees

Of our \$1,226.2 billion in AUM at December 31, 2019, approximately \$48.5 billion or 4.0%, could potentially earn performance fees, including carried interests and performance fees related to partnership investments and separate accounts. Of our \$888.2 billion in AUM at December 31, 2018, approximately \$46.0 billion or 5.2%, could potentially earn performance fees, including carried interests and performance fees related to partnership investments and separate accounts.

In the year ended December 31, 2019, performance fees increased by \$45.3 million (79.6%) to \$102.2 million (year ended December 31, 2018: \$56.9 million). Performance fees in 2019 were primarily generated by \$59.2 million from real estate, \$20.1 million from fixed income, \$11.4 million from private equity funds, \$7.1 million from UK closed end funds, and \$4.4 million from institutional funds. Performance fees in 2018 were primarily generated by \$38.7 million from real estate, \$6.5 million from private equity partnerships, \$5.7 million from UK close end funds and \$1.2 million bank loan products.

Other Revenues

In the year ended December 31, 2019, other revenues increased by \$26.0 million (12.6%) to \$232.4 million (year ended December 31, 2018: \$206.4 million). The increase in other revenues was primarily driven by an increase in commissions of \$35.5 million as a result of the acquired OppenheimerFunds business (acquired May 24, 2019), partially offset by decreases in UIT revenues of \$7.1 million and real estate transaction fees of \$4.3 million.

Invesco Great Wall

The company's most significant joint venture arrangement is our 49% investment in Invesco Great Wall Fund Management Company Limited (the "Invesco Great Wall" joint venture). Management believes that the net revenues from Invesco Great Wall should be added to total operating revenues to arrive at net revenues, as it is important to evaluate the contribution to the business that Invesco Great Wall is making. See "Schedule of Non-GAAP Information" for additional disclosures regarding the use of net revenues.

Prior to the third quarter 2018, management reflected its interests in Invesco Great Wall on a proportional consolidation basis, which was consistent with the presentation of our share of the AUM from Invesco Great Wall. Given the company's influence on the Invesco Great Wall joint venture, a change in regulation allowing increased foreign ownership, and reaching agreement in principle to obtain a majority stake of the joint venture, the company began reporting 100% of the flows and AUM for Invesco Great Wall beginning in the third quarter 2018. As a result of this change, the company's non-GAAP operating results reflect the economics of these holdings on a basis consistent with the underlying AUM and flows. Adjusted net income is reduced by the amount of earnings attributable to non-controlling interests.

Net revenues from Invesco Great Wall were \$157.2 million and average AUM was \$35.6 billion for the year ended December 31, 2019, reflecting 100% of the flows and AUM for the year. The AUM increases are a result of significant growth in the China Money Market funds and therefore resulted in higher revenues.

Net revenues from Invesco Great Wall were \$83.6 million and average AUM was \$16.2 billion, for the year ended December 31, 2018, reflecting 100% of the flows and AUM for the six months ended December 31, 2018 and 49% of the flows and AUM for the six months ended June 30, 2018.

Management, performance and other fees earned from CIP

Management believes that the consolidation of investment products may impact a reader's analysis of our underlying results of operations and could result in investor confusion or the production of information about the company by analysts or external credit rating agencies that is not reflective of the underlying results of operations and financial condition of the company. Accordingly, management believes that it is appropriate to adjust operating revenues for the impact of CIP in calculating net revenues. As management and performance fees earned by Invesco from the consolidated products are eliminated upon consolidation of the investment products, management believes that it is appropriate to add these operating revenues back in the calculation of net revenues. See "Schedule of Non-GAAP Information" for additional disclosures regarding the use of net revenues.

The elimination of management and performance fees earned from CIP increased by \$4.9 million to \$33.5 million in the year ended December 31, 2019 (year ended December 31, 2018: \$28.6 million). The increase is primarily due to the increase in management fees earned from CLOs.

Operating Expenses

The main categories of operating expenses, and the dollar and percentage changes between periods, are as follows:

				Variance				
	Years ended December 31,			2019	vs 2018	2018 vs 2017		
\$ in millions	2019	2018	2017	\$ Change	% Change	\$ Change	% Change	
Third-party distribution, service and advisory	1,893.0	1,608.2	1,486.5	284.8	17.7%	121.7	8.2 %	
Employee compensation	1,709.3	1,494.4	1,499.6	214.9	14.4%	(5.2)	(0.3)%	
Marketing	135.6	134.8	121.8	0.8	0.6%	13.0	10.7 %	
Property, office and technology	494.1	410.5	364.6	83.6	20.4%	45.9	12.6 %	
General and administrative	404.2	324.4	306.9	79.8	24.6%	17.5	5.7 %	
Transaction, integration and restructuring	673.0	136.9	101.8	536.1	391.6%	35.1	34.5 %	
Total operating expenses	5,309.2	4,109.2	3,881.2	1,200.0	29.2%	228.0	5.9 %	

The table below sets forth these expense categories as a percentage of total operating expenses and operating revenues, which we believe provides useful information as to the relative significance of each type of expense.

\$ in millions	2019	% of Total Operating Expenses	% of Operating Revenues	2018	% of Total Operating Expenses	% of Operating Revenues	2017	% of Total Operating Expenses	% of Operating Revenues
Third-party distribution, service and advisory	1,893.0	35.7%	30.9%	1,608.2	39.1%	30.3%	1,486.5	38.3%	28.8%
Employee compensation	1,709.3	32.2%	27.9%	1,494.4	36.4%	28.1%	1,499.6	38.6%	29.1%
Marketing	135.6	2.6%	2.2%	134.8	3.3%	2.5%	121.8	3.1%	2.4%
Property, office and technology	494.1	9.3%	8.1%	410.5	10.0%	7.7%	364.6	9.4%	7.1%
General and administrative	404.2	7.6%	6.6%	324.4	7.9%	6.1%	306.9	8.0%	5.9%
Transaction, integration and restructuring	673.0	12.7%	11.0%	136.9	3.3%	2.6%	101.8	2.6%	2.0%
Total operating expenses	5,309.2	100.0%	86.8%	4,109.2	100.0%	77.3%	3,881.2	100.0%	75.2%

During the year ended December 31, 2019, operating expenses increased by \$1,200 million (29.2%) to \$5,309.2 million (year ended December 31, 2018: \$4,109.2 million). The impact of foreign exchange rate movements decreased operating expenses by \$48.9 million, or 0.9% of total operating expenses, during the year ended December 31, 2019 as compared to the year ended December 31, 2018. For the period ending December 31, 2019, the acquisition of OppenheimerFunds had a significant impact on operating expenses, including a significant increase in transaction, integration, and restructuring expense during the period. The remaining variances are from the activities of the business and are addressed below on a line-item basis.

Third-Party Distribution, Service and Advisory

Third-party distribution, service and advisory expenses include periodic "renewal" commissions paid to brokers and independent financial advisors for the continuing oversight of their clients' assets over the time they are invested and are payments for the servicing of client accounts. Renewal commissions are calculated based upon a percentage of the AUM value and apply to much of the company's non-U.S. retail operations. As discussed above, the revenues from the company's U.S. retail operations include 12b-1 distribution fees, which are largely passed through to brokers who sell the funds as third-party distribution expenses along with additional marketing support distribution costs. Both the revenues and the costs are dependent on the underlying AUM of the brokers' clients. Third-party distribution expenses also include the amortization of upfront commissions paid to broker-dealers for sales of fund shares with a contingent deferred sales charge (a charge levied to the investor for client redemption of AUM within a certain contracted period of time). The upfront distribution commissions are amortized over the redemption period. Also included in third-party distribution, service and advisory expenses are sub-transfer agency fees that are paid to third parties for processing client common share purchases and redemptions, call center support and client reporting. These costs are reimbursed by the related funds.

Third party distribution service and advisory expenses increased by \$284.8 million (17.7%) in the year ended December 31, 2019 to \$1,893.0 million (year ended December 31, 2018: \$1,608.2 million). The impact of foreign exchange rate movements decreased third party costs by \$9.0 million during the year ended December 31, 2019 as compared to the year ended December 31, 2018. After allowing for foreign exchange rate changes, the increase in costs was \$293.8 million. Included is an increase of \$231.5 million in service fees (primarily 12b-1 fees), \$39.7 million in asset and sales based fees, \$28.4 million in transaction fees, \$26.7 million in fund expenses, partially offset by a decrease of \$41.7 million in renewal commissions and \$7.0 million in unitary fees. The increase is primarily a result of costs from the acquired OppenheimerFunds business (acquired May 24, 2019). See "Schedule of Non-GAAP Information" for additional disclosures.

Employee Compensation

Employee compensation includes salary, cash bonuses and common share-based payment plans designed to attract and retain the highest caliber employees. Employee staff benefit plan costs and payroll taxes are also included in employee compensation.

Employee compensation increased \$214.9 million (14.4%) to \$1,709.3 million in the year ended December 31, 2019 (year ended December 31, 2018: \$1,494.4 million). The impact of foreign exchange rate movements decreased employee compensation by \$23.5 million during the year ended December 31, 2019 as compared to the year ended December 31, 2018. After allowing for foreign exchange rate changes, the increase in employee compensation was \$238.4 million.

Compensation in 2019 increased \$238.4 million due to increases in base salaries of \$95.3 million, share-based compensation of \$69.4 million, \$51.3 million of commissions and bonuses, and \$13.6 million in staff benefits. These increases were driven by increased headcount as a result of the OppenheimerFunds acquisition (acquired May 24, 2019).

Headcount at December 31, 2019 was 8,821 (December 31, 2018; 7,459).

Marketing

Marketing expenses include the cost of direct advertising of our products through trade publications, television and other media, and public relations costs, such as the marketing of the company's products through conferences or other sponsorships, and the cost of marketing-related employee travel.

Marketing expenses increased by \$0.8 million (0.6%) in the year ended December 31, 2019 to \$135.6 million (year ended December 31, 2018: \$134.8 million). The impact of foreign exchange rate movements decreased marketing expenses by \$2.2 million. After allowing for foreign exchange rate movements, marketing expenses increased \$3.0 million during the year ended December 31, 2019 as compared to the year ended December 31, 2018.

Property, Office and Technology

Property, office and technology expenses include rent and utilities for our various leased facilities, depreciation of company-owned property, capitalized software and computer equipment costs, minor non-capitalized computer equipment and software purchases and related maintenance payments, and costs related to externally provided operations, technology, middle office, and back office management services.

Property, office and technology expenses increased by \$83.6 million (20.4%) to \$494.1 million in the year ended December 31, 2019 (year ended December 31, 2018: \$410.5 million). The impact of foreign exchange rate movements decreased property, office and technology expenses by \$5.8 million during the year ended December 31, 2019 as compared to the year ended December 31, 2018. After allowing for foreign exchange rate movements, expenses increased \$89.4 million. This increase was comprised of lease expenses of \$23.7 million, software maintenance of \$23.3 million, outsourced administration costs of \$20.1 million and depreciation of \$16.5 million. The increase is primarily a result of the acquired OppenheimerFunds business (acquired May 24, 2019).

General and Administrative

General and administrative expenses include professional services costs, such as information service subscriptions, irrecoverable taxes, non-marketing related employee travel expenditures, consulting fees, audit, tax and legal fees, professional insurance costs and recruitment and training costs.

General and administrative expenses increased by \$79.8 million (24.6%) to \$404.2 million in the year ended December 31, 2019 (year ended December 31, 2018: \$324.4 million). The impact of foreign exchange rate movements decreased general and administrative expenses by \$8.4 million during the year ended December 31, 2019 as compared to the year ended December 31, 2018. After allowing for foreign exchange rate movements, the increase was \$88.2 million.

General and administrative expenses for the year ended December 31, 2019 included increases of \$27.9 million in market data services costs, \$16.7 million in professional services and regulatory costs, \$15.0 million in operational costs incurred by CIP and \$10.3 million on foreign currency revaluation costs. 2019 reflects a net increase of \$19.4 million in VAT, as 2018 included a credit of \$26.7 million related to a one-time VAT recovery related to additional regulatory guidance.

Transaction, Integration, and Restructuring

The transaction, integration and restructuring charges reflect legal, regulatory, advisory, valuation and other professional services or consulting fees, and travel costs related to a business combination transaction or restructuring initiatives related to changes in business strategy. Also included in these charges are severance-related expenses and any contract termination costs associated with these efforts. Additionally, these charges reflect the costs of temporary staff involved in executing the

transaction or initiative, and the post-closing costs of amortizing acquired intangible assets and integrating an acquired business into the company's existing operations, including incremental costs associated with achieving expense savings following a business combination or restructuring initiative.

Transaction, integration, and restructuring charges were \$673.0 million in the year ended December 31, 2019 (year ended December 31, 2018: \$136.9 million). Within the transaction, integration, and restructuring related costs, \$625.0 million resulted from the OppenheimerFunds acquisition, which included severance and other personnel-related charges of \$319.4 million, share-based compensation expenses of \$33.0 million, legal, consulting and other professional fees of \$205.7 million, property and equipment expenses of \$21.5 million, marketing expenses of \$22.5 million, and amortization of intangible assets of \$22.9 million. Transaction, integration, and restructuring costs from other acquisitions included amortization of management contracts and other intangible assets of \$24.7 million.

Operating Income, Adjusted Operating Income, Operating Margin and Adjusted Operating Margin

Operating income decreased by \$396.7 million (32.9%) to \$808.2 million in the year ended December 31, 2019 (year ended December 31, 2018: \$1,204.9 million). Operating margin (operating income divided by operating revenues), decreased to 13.2% in the year ended December 31, 2019 from 22.7% in the year ended December 31, 2018. Adjusted operating income, increase by \$264.1 million (19.0%) to \$1,655.8 million in the year ended December 31, 2019 from \$1,391.7 million in the year ended December 31, 2018. Adjusted operating margin increased to 37.5% in the year ended December 31, 2019 from 36.5% in the year ended December 31, 2018. See "Schedule of Non-GAAP Information" for a reconciliation of operating revenues to net revenues, a reconciliation of operating income to adjusted operating income and additional important disclosures regarding net revenues, adjusted operating income and adjusted operating margin.

Other Income and Expenses

The main categories of other income and expenses, and the dollar and percentage changes between periods are as follows:

				Variance					
	Years ended December 31,			2019 v	rs 2018	2018 vs 2017			
\$ in millions	2019	2018	2017	\$ Change	% Change	\$ Change	% Change		
Equity in earnings of unconsolidated affiliates	56.4	33.8	44.7	22.6	66.9 %	(10.9)	(24.4)%		
Interest and dividend income	28.5	21.3	13.4	7.2	33.8 %	7.9	59.0 %		
Interest expense	(135.7)	(111.5)	(94.8)	(24.2)	21.7 %	(16.7)	17.6 %		
Other gains and losses, net	65.7	(40.0)	49.5	105.7	N/A	(89.5)	(180.8)%		
Other income/(expense) of CIP, net	149.8	29.6	137.3	120.2	406.1 %	(107.7)	(78.4)%		
Total other income and expenses	164.7	(66.8)	150.1	231.5	(346.6)%	(216.9)	(144.5)%		

Equity in earnings of unconsolidated affiliates

Equity in earnings of unconsolidated affiliates increased by \$22.6 million (66.9%) to \$56.4 million in the year ended December 31, 2019 (year ended December 31, 2018: \$33.8 million). The increase in is primarily driven by our joint venture investments in China, real estate and other investments.

Interest expense

Interest expense increased by \$24.2 million (21.7%) to \$135.7 million in the year ended December 31, 2019 (year ended December 31, 2018: \$111.5 million) The increase is primarily driven by the interest on the forward contracts which amounted to \$27.2 million in interest.

Other gains and losses, net

Other gains and losses, net were a net gain of \$65.7 million in the year ended December 31, 2019 as compared to a net loss of \$40.0 million in the year ended December 31, 2018. Included in the gain were \$47.5 million of net gains related to the mark-to-market on seed money investments, \$35.0 million of gains on the appreciation of investments and instruments held for our deferred compensation plans, and \$5.2 million of gains related to our defined benefit pension plans. These gains were partially offset by losses during the period of \$8.9 million of net foreign exchange losses on intercompany loans, \$7.8 million of contingent consideration liability and \$4.8 million related to market valuation adjustments on foreign put option contracts. See Item 8, Financial Statements and Supplementary Data, - Note 15, "Other Gains and Losses, Net" for additional information.

Other income/(expense) of CIP

In the year ended December 31, 2019, interest and dividend income of CIP increased by \$70.0 million (25.4%) to \$345.4 million (year ended December 31, 2018: \$275.4 million). Interest expense of CIP increased by \$37.8 million (19.8%) to \$228.5 million (year ended December 31, 2018: \$190.7 million).

The increase in interest income and interest expense of CIP in 2019 is primarily due to the impact of newly consolidated CLOs and other funds during 2019, partially offset by the impact of funds deconsolidated during the year.

Included in other gains/(losses) of CIP, net, are realized and unrealized gains and losses on the underlying investments and debt of CIP. In the year ended December 31, 2019, other gains and losses of CIP were a net gain of \$32.9 million, as compared to a net loss of \$55.1 million in the year ended December 31, 2018. The net gain during 2019 were attributable to market-driven gains of investments held by consolidated funds.

Net impact of CIP and related noncontrolling interests in consolidated entities

The net impact to net income attributable to Invesco Ltd. in each period primarily represents the changes in the value of the company's holding in its consolidated CLOs, which is reclassified into other gains/(losses) from accumulated other comprehensive income upon consolidation. The consolidation of investment products during the year ended December 31, 2019 resulted in a net decrease to net income attributable to Invesco Ltd. of \$1.6 million (year ended December 31, 2018: \$8.8 million net increase).

Noncontrolling interests in consolidated entities represent the profit or loss amounts attributed to third party investors in CIP. The impact of any gains or losses resulting from valuation changes in the investments of non-CLO CIP attributable to the interests of third parties are offset by resulting changes in gains and losses attributable to noncontrolling interests in consolidated entities and therefore do not have a material effect on the financial condition, operating results (including earnings per common share), liquidity or capital resources of the company's common shareholders. Similarly, any gains or losses resulting from valuation changes in the investments of CLOs attributable to the interests of third parties are offset by the calculated value of the notes issued by the CLOs (offsetting in other gains/(losses) of CIP) and therefore also do not have a material effect on the financial condition, operating results (including earnings per common share), liquidity or capital resources of the company's common shareholders.

Additionally, CIP represent less than 1% of the company's AUM. Therefore, the net gains or losses of CIP are not indicative of the performance of the company's aggregate AUM.

Income Before Taxes

Total income before taxes includes income/losses of CIP; however, the company's operating revenues earned from CIP are not included in operating revenues under U.S. GAAP, as such operating revenues are eliminated upon consolidation. Therefore, total U.S. and Foreign income before taxes in Item 8. Financial Statements and Supplementary Data, Note 16, "Taxation,", which includes income/losses from CIP, and U.S. and Foreign operating revenues in Item 8. Financial Statements and Supplementary Data, Note 18, "Geographic Information," in which CIP has been eliminated, may not correlate. The table included in the taxation footnote is formatted such that the income of CIP is separately stated so that the impact of CIP is evident.

Total U.S. income before taxes increased \$19.3 million during the year ended December 31, 2019 to \$511.1 million from \$491.8 million for the year ended December 31, 2018 and includes U.S. income of CIP of \$24.2 million (December 31, 2018: \$18.9 million). U.S. income from CIP increased \$5.3 million (28.0%) from 2018 primarily due to the impact of gains on

consolidated retail products. Excluding CIP, U.S. income before taxes in 2019 increased \$14.0 million (3.0%) from December 31, 2018 due to a larger increase in U.S. operating revenues than operating expenses.

Total Foreign income before taxes decreased \$184.5 million during the year ended December 31, 2019 to \$461.8 million from \$646.3 million during the year ended December 31, 2018 and includes foreign income of CIP of \$23.7 million (December 31, 2018: foreign loss of CIP of \$9.8 million). Foreign income from CIP increased \$33.5 million due primarily to the impact of gains on consolidated retail products. Excluding CIP, foreign income decreased by \$218.0 million (33.2%) from 2018 due to a larger decrease in foreign operating revenues and other income than operating expenses.

Income Tax Expense

Our effective tax rate for the year ended December 31, 2019 increased to 24.2% (year ended December 31, 2018: 22.4%). 2019 includes a 1.1% rate increase related to vestings of our annual common share-based compensation awards, a net 1.5% rate increase from business acquisitions including the impact from non-tax deductible transaction, integration, and restructuring costs partially offset by a 0.7% rate decrease related to the favorable resolution of a state tax audit. The inclusion of income from non-controlling interests decreased our rate period-over-period by 1.3% (1.3% decrease to the effective tax rate in 2019 and no change to the effective tax rate in 2018). The remainder of the rate movement for 2019 was primarily due to changes in the mix of pre-tax income.

Schedule of Non-GAAP Information

We utilize the following non-GAAP performance measures: net revenue (and by calculation, net revenue yield on AUM), adjusted operating income, adjusted operating margin, adjusted net income attributable to Invesco Ltd. and adjusted diluted earnings per common share (EPS). The company believes the adjusted measures provide valuable insight into the company's ongoing operational performance and assist in comparisons to its competitors. These measures also assist the company's management with the establishment of operational budgets and forecasts and assist the Board of Directors and management of the company in determining incentive compensation decisions. The most directly comparable U.S. GAAP measures are operating revenues (and by calculation, gross revenue yield on AUM), operating income, operating margin, net income attributable to Invesco Ltd. and diluted EPS. Each of these measures is discussed more fully below.

The following are reconciliations of operating revenues, operating income (and by calculation, operating margin), and net income attributable to Invesco Ltd. (and by calculation, diluted EPS) on a U.S. GAAP basis to a non-GAAP basis of net revenues, adjusted operating income (and by calculation, adjusted operating margin), and adjusted net income attributable to Invesco Ltd. (and by calculation, adjusted diluted EPS). These non-GAAP measures should not be considered as substitutes for any U.S. GAAP measures and may not be comparable to other similarly titled measures of other companies. Additional reconciling items may be added in the future to these non-GAAP measures if deemed appropriate. The tax effects related to the reconciling items have been calculated based on the tax rate attributable to the jurisdiction to which the transaction relates. Notes to the reconciliations follow the tables.

Reconciliation of Operating revenues to Net revenues:

\$ in millions	2019	2018	2017	2016	2015
Operating revenues, U.S. GAAP basis	6,117.4	5,314.1	5,160.3	4,734.4	5,122.9
Invesco Great Wall (1)	157.2	83.6	48.7	43.7	61.0
Revenue Adjustments: ⁽²⁾					
Investment management fees	(814.4)	(817.9)	(914.2)	(840.1)	(990.4)
Service and distribution fees	(886.3)	(629.7)	(551.2)	(547.6)	(562.0)
Other	(192.3)	(160.6)	(21.1)	(19.5)	(27.5)
Total Revenue Adjustments	(1,893.0)	(1,608.2)	(1,486.5)	(1,407.2)	(1,579.9)
CIP (4)	33.5	28.6	32.4	22.3	39.2
Net revenues	4,415.1	3,818.1	3,754.9	3,393.2	3,643.2

Reconciliation of Operating income to Adjusted operating income:

\$ in millions	2019	2018	2017	2016	2015
Operating income, U.S. GAAP basis	808.2	1,204.9	1,279.1	1,152.4	1,344.7
Invesco Great Wall (1)	76.5	31.1	18.4	15.9	27.4
CIP (3)	61.6	44.8	42.9	51.0	63.2
Transaction, integration, and restructuring (4)	673.0	136.9	101.8	69.0	22.6
Compensation expense related to market valuation changes in deferred					
compensation plans (5)	36.5	(3.2)	20.3	8.1	4.3
Other reconciling items (6)	_	(22.8)	19.7	1.0	17.8
Adjusted operating income	1,655.8	1,391.7	1,482.2	1,297.4	1,480.0
Operating margin*	13.2%	22.7%	24.8%	24.3%	26.2%
Adjusted operating margin**	37.5%	36.5%	39.5%	38.2%	40.6%

Reconciliation of Net income attributable to Invesco Ltd. to Adjusted net income attributable to Invesco Ltd.:

\$ in millions, except per common share data	2019	2018	2017	2016	2015
Net income attributable to Invesco Ltd., U.S. GAAP basis	564.7	882.8	1,127.3	854.2	968.1
CIP (3)	1.6	(8.8)	(2.3)	(3.0)	40.4
Transaction, integration and restructuring, net of tax (4)	558.1	138.6	91.9	68.3	36.8
Deferred compensation plan market valuation changes and dividend income less compensation expense, net of tax (5)	(7.9)	15.4	(4.6)	(2.5)	5.9
Other reconciling items, net of tax (6)	7.5	(25.3)	(106.4)	7.1	(2.5)
Adjusted net income attributable to Invesco Ltd.	1,124.0	1,002.7	1,105.9	924.1	1,048.7
Average common shares outstanding - diluted	440.5	412.5	409.9	415.0	429.3
Diluted EPS	\$1.28	\$2.14	\$2.75	\$2.06	\$2.26
Adjusted diluted EPS***	\$2.55	\$2.43	\$2.70	\$2.23	\$2.44

^{*} Operating margin is equal to operating income divided by operating revenues.

(1) Invesco Great Wall

Prior to the third quarter 2018, management reflected its interests in Invesco Great Wall on a proportional consolidation basis, which was consistent with the presentation of our share of the AUM from these investments. Given the company's influence on Invesco Great Wall, a change in regulation allowing increased foreign ownership, and reaching oral agreement in principle in the third quarter of 2018 to obtain a majority stake of the joint venture, the company began reporting 100% of the flows and AUM for Invesco Great Wall. Also beginning in the third quarter of 2018, the company's non-GAAP operating results reflect the economics of these holdings on a basis consistent with the underlying AUM and flows. Adjusted net income is reduced by the amount of earnings attributable to non-controlling interests.

^{**} Adjusted operating margin is equal to adjusted operating income divided by net revenues.

^{***} Adjusted diluted EPS is equal to adjusted net income attributable to Invesco Ltd. divided by the weighted average number of common and restricted common shares outstanding. There is no difference between the calculated earnings per common share amounts presented above and the calculated earnings per common share amounts under the two class method.

(2) Revenue Adjustments

The company has changed its presentation of the reconciliation between operating revenues and net revenues. All periods have been conformed to the new presentation. Neither operating revenues nor net revenues have changed for any historic periods.

Management believes that adjustments to investment management fees, service and distribution fees and other revenues from operating revenues appropriately reflect these revenues as being passed through to external parties who perform functions on behalf of, and distribute, the company's managed funds. Further, these adjustments vary extensively by geography due to the differences in distribution channels. The net revenue presentation assists in identifying the revenue contribution generated by the business, removing distortions caused by the differing distribution channel fees and allowing for a fair comparison with U.S. peer investment managers and within Invesco's own investment units. Additionally, management evaluates net revenue yield on AUM, which is equal to net revenues divided by average AUM during the reporting period. This financial measure is an indicator of the basis point net revenues we receive for each dollar of AUM we manage and is useful when evaluating the company's performance relative to industry competitors and within the company for capital allocation purposes.

Investment management fees are adjusted by renewal commissions and certain administrative fees. Service and distribution fees are primarily adjusted by distribution fees passed through to broker dealers for certain share classes and pass through fund-related costs. Other is primarily adjusted by transaction fees passed through to third parties. While the terms used for these types of adjustments vary by geography, they are all costs that are closely linked to the value of AUM and the revenue earned by Invesco from AUM. Since the company has been deemed to be the principal in the third-party arrangements, the company must reflect these revenues and expenses gross under U.S. GAAP on the consolidated statements of income.

(3) *CIP*

See Item 8, Financial Statements and Supplementary Data, Note 20 - "Consolidated Investment Products" for a detailed analysis of the impact to the company's Consolidated Financial Statements from the consolidation of CIP. The reconciling items add back the management and performance fees earned by Invesco from the consolidated products and remove the revenues and expenses recorded by the consolidated products that have been included in the U.S. GAAP Consolidated Statements of Income.

Management believes that the consolidation of investment products may impact a reader's analysis of our underlying results of operations and could result in investor confusion or the production of information about the company by analysts or external credit rating agencies that is not reflective of the underlying results of operations and financial condition of the company. Accordingly, management believes that it is appropriate to adjust operating revenues, operating income and net income for the impact of CIP in calculating the respective net revenues, adjusted operating income and adjusted net income.

CIP Revenue:

	Year ended December 31,					
\$ in millions, except per common share data	2019	2018	2017	2016	2015	
Management fees earned from CIP, eliminated upon consolidation	33.5	28.6	25.5	20.8	30.7	
Performance fees earned from CIP, eliminated upon consolidation		_	6.9	1.5	8.5	
CIP related adjustments in arriving at net revenues	33.5	28.6	32.4	22.3	39.2	

(4) Transaction, integration and restructuring related adjustments

The transaction, integration and restructuring charges reflect legal, regulatory, advisory, valuation and other professional services or consulting fees, and travel costs related to a business combination transaction or restructuring initiatives related to changes in business strategy. Also included in these charges are severance-related expenses and any contract termination costs associated with these efforts. Additionally, these charges reflect the costs of temporary staff involved in executing the transaction or initiative, and the post-closing costs of amortizing acquired intangible assets and integrating an acquired business into the company's existing operations, including incremental costs associated with achieving synergy savings following a business combination or restructuring initiative.

Management believes it is useful to investors and other users of our Consolidated Financial Statements to adjust for the transaction, integration and restructuring charges in arriving at adjusted operating income, adjusted operating margin and adjusted diluted EPS, as this will aid comparability of our results period to period, and aid comparability with peer companies that may not have similar acquisition and restructuring related charges. See "Results of Operations for the Years Ended December 31, 2019 compared to December 31, 2018 -- Transaction, Integration and Restructuring" for additional details.

(5) Market movement on deferred compensation plan liabilities

Certain deferred compensation plan awards are linked to the appreciation (depreciation) of specified investments, typically managed by the company. Invesco hedges economically the exposure to market movements by holding these investments on its balance sheet and through total return swap financial instruments. U.S. GAAP requires the appreciation (depreciation) in the compensation liability to be expensed over the award vesting period in proportion to the vested amount of the award as part of compensation expense. The full value of the investment and financial instrument appreciation (depreciation) are immediately recorded below operating income in other gains and losses. This creates a timing difference between the recognition of the compensation expense and the investment gain or loss impacting net income attributable to Invesco Ltd. and diluted EPS which will reverse over the life of the award and net to zero at the end of the multi-year vesting period. During periods of high market volatility these timing differences impact compensation expense, operating income and operating margin in a manner which, over the life of the award, will ultimately be offset by gains and losses recorded below operating income on the Consolidated Statements of Income. The non-GAAP measures exclude the mismatch created by differing U.S. GAAP treatments of the market movement on the liability and the investments.

Since these plans are hedged economically, management believes it is useful to reflect the offset ultimately achieved from hedging the investment market exposure in the calculation of adjusted operating income (and by calculation, adjusted operating margin) and adjusted net income (and by calculation, adjusted diluted EPS), to produce results that will be more comparable period to period. The related fund shares or swaps will have been purchased on or around the date of grant, eliminating any ultimate cash impact from market movements that occur over the vesting period.

Additionally, dividend income from investments held to hedge economically deferred compensation plans is recorded as dividend income and as compensation expense on the company's Consolidated Statements of Income on the record dates. This dividend income is passed through to the employee participants in the plan and is not retained by the company. The non-GAAP measures exclude this dividend income and related compensation expense.

See below for a reconciliation of deferred compensation related items:

\$ in millions	2019	2018	2017	2016	2015
Market movement on deferred compensation plan liabilities:					
Compensation expense related to market valuation changes in deferred compensation liability	36.5	(3.2)	20.3	8.1	4.3
Adjustments to operating income	36.5	(3.2)	20.3	8.1	4.3
Market valuation changes and dividend income from investments and instruments held related to deferred compensation plans in other income/(expense)	(46.8)	23.1	(27.6)	(12.1)	4.8
Taxation:					
Taxation on deferred compensation plan market valuation changes and dividend income less compensation expense	2.4	(4.5)	2.7	1.5	(3.2)
Adjustments to net income attributable to Invesco Ltd.	(7.9)	15.4	(4.6)	(2.5)	5.9

(6) Other reconciling items

Each of these other reconciling items has been adjusted from U.S. GAAP to arrive at the company's non-GAAP financial measures for the reasons either outlined in the paragraphs above, due to the unique character and magnitude of the reconciling item, or because the item represents a continuation of a reconciling item adjusted from U.S. GAAP in a prior period.

\$ in millions	2019	2018	2017	2016	2015
Other non-GAAP adjustments:					
Regulatory charge (a)	_	_	_	1.0	13.1
Prior period impact of multi-year VAT tax recovery (b)	_	(22.8)		_	
Senior executive retirement and related costs (c)	_	_	19.7	_	_
Fund reimbursement expense (d)				_	4.7
Adjustments to operating income	_	(22.8)	19.7	1.0	17.8
Foreign exchange hedge (e)	0.9	(8.2)	20.6	(14.2)	1.0
Employee benefit plan termination (f)	_	_	_	(8.6)	_
Change in contingent consideration estimates (g)	7.8	(0.9)	(7.6)	7.4	(27.1)
Foreign exchange gain related to business acquisitions (h)	_	_	(12.1)	_	_
Other-than-temporary impairment (i)				17.8	_
Taxation:					
Taxation on regulatory-related charges (a)	_	_		(1.8)	(2.7)
Taxation on prior period impact of multi-year VAT tax recovery (b)	_	4.3	_	_	_
Taxation on senior executive retirement and related costs (c)	_	_	(5.9)	_	_
Taxation on fund reimbursement expense (d)	_	_	_	_	(1.8)
Taxation on foreign exchange hedge amortization (e)	(0.2)	2.1	(7.8)	5.0	_
Taxation on employee benefit plan termination (f)	_	_	_	3.3	_
Taxation on change in consideration estimates (g)	(1.0)	0.2	2.9	(2.8)	10.3
Taxation on foreign exchange gain related to business acquisitions (i)	_	_	2.3	_	_
Retroactive state tax adjustment (j)	_	_	12.2	_	_
Tax impact of regulation changes ^(j)	_	_	(130.7)	_	_
Adjustments to net income attributable to Invesco Ltd.	7.5	(25.3)	(106.4)	7.1	(2.5)

⁽a) General and administrative expenses for 2015 include a provision of \$12.6 million pertaining to regulatory actions and related legal fees of \$0.5 million (2016: \$1.0 million).

⁽b) As a result of an increase in our recoverable VAT from applying additional regulatory guidance, a credit was recorded in the third quarter of 2018.

The portion of the cumulative adjustment representing 2015 through 2017 has been removed for non-GAAP purposes.

⁽c) Operating expenses for 2017 reflect the cost of multiple senior executive retirements. The costs incurred in one quarter was unprecedented and the company deemed it appropriate to adjust these costs from the U.S. GAAP total compensation in an effort to isolate and evaluate our level of compensation going forward. The result of this adjustment was \$19.7 million related to accelerated vesting of deferred compensation and other separation costs.

⁽d) General and administrative expenses for 2015 include charges of \$4.7 million in respect of a multi-year fund reimbursement expense associated with historical private equity management fees. The charge resulted primarily from using a more appropriate methodology regarding the calculation of offsets to management fees.

⁽e) Included within other gains and losses, net is the mark-to-market of foreign exchange put option contracts intended to provide protection against the impact of a significant decline in the Pound Sterling/U.S. Dollar and the Euro/U.S.

- Dollar foreign exchange rates. The Pound Sterling contracts provide coverage through June 30, 2020 and the Euro contracts provided coverage through December 27, 2017. The adjustment from U.S. GAAP to non-GAAP earnings removes the impact of market volatility; therefore, the company's non-GAAP results include only the amortization of the cost of the contracts during the contract period.
- (f) Employee benefit plan termination: Operating expenses for 2016 include an incremental credit of \$8.6 million related to an employee benefit plan termination.
- (g) During 2015, the company acquired investment management contracts from Deutsche Bank and the purchase price was solely comprised of contingent consideration payable in future periods. Adjustment represents the change in the fair value of contingent consideration liability.
- (h) Other gains and losses for 2017 includes a realized gain of \$12.1 million related to revaluation of Euros held in the UK in anticipation of payment for the European ETF business acquisition.
- Other-than-temporary impairment includes an impairment charge of \$17.8 million in 2016 that is related to the acquisition of Invesco Asset Management (India) Private Limited.
- (j) The income tax provision for 2017 includes a retroactive state tax expense of \$12.2 million related to 2016 and prior open tax years caused by changes in state tax regulations. 2017 also included a \$130.7 million tax benefit as a result of the revaluation of deferred tax assets and liabilities following the 2017 Tax Act enacted in the United States.

Balance Sheet Discussion(1)

The following table represents a reconciliation of the balance sheet information presented on a U.S. GAAP basis to the balance sheet information excluding the impact of CIP and policyholder balances for the reasons outlined in footnote 1 to the table:

	As of December 31, 2019			As of December 31, 2018				
Balance sheet information \$ in millions	U.S. GAAP	Impact of CIP	Impact of Policyholders	As Adjusted	U.S. GAAP	Impact of CIP	Impact of Policyholders	As Adjusted
ASSETS								
Cash and cash equivalents	1,049.0	_	_	1,049.0	1,147.7	_	_	1,147.7
Unsettled fund receivables	162.7	_	_	162.7	191.3	_	_	191.3
Investments	829.5	(640.2)	_	1,469.7	613.5	(610.9)	_	1,224.4
Assets of CIP:				_				_
Investments and other assets of CIP	7,980.9	7,980.9	_	_	6,324.3	6,324.3	_	_
Cash and cash equivalents of CIP	652.2	652.2	_	_	657.7	657.7	_	_
Assets held for policyholders	10,835.6	_	10,835.6	_	11,384.8	_	11,384.8	_
Goodwill and intangible assets, net	15,867.7	_	_	15,867.7	9,333.2	_	_	9,333.2
Other assets (2)	2,042.7	(5.6)	_	2,048.3	1,325.9	(5.0)	_	1,330.9
Total assets	39,420.3	7,987.3	10,835.6	20,597.4	30,978.4	6,366.1	11,384.8	13,227.5
LIABILITIES								
Liabilities of CIP:								_
Debt of CIP	6,234.6	6,234.6	_	_	5,226.0	5,226.0	_	_
Other liabilities of CIP	949.6	949.6	_	_	387.6	387.6	_	_
Policyholder payables	10,835.6	_	10,835.6	_	11,384.8	_	11,384.8	_
Unsettled fund payables	154.2	_	_	154.2	178.7	_	_	178.7
Long-term debt	2,080.3	_	_	2,080.3	2,408.8	_	_	2,408.8
Other liabilities (3)	4,464.2	(35.2)		4,499.4	2,060.1			2,060.1
Total liabilities	24,718.5	7,149.0	10,835.6	6,733.9	21,646.0	5,613.6	11,384.8	4,647.6
EQUITY								
Total equity attributable to Invesco Ltd.	13,862.5	(0.1)	_	13,862.6	8,578.8	(0.1)	_	8,578.9
Noncontrolling interests (4)	839.3	838.4	_	0.9	753.6	752.6	_	1.0
Total equity	14,701.8	838.3	_	13,863.5	9,332.4	752.5	_	8,579.9
Total liabilities and equity	39,420.3	7,987.3	10,835.6	20,597.4	30,978.4	6,366.1	11,384.8	13,227.5

⁽¹⁾ These tables include non-GAAP presentations. Assets of CIP are not available for use by Invesco. Additionally, there is no recourse to Invesco for CIP debt. Policyholder assets and liabilities are equal and offsetting and have no impact on Invesco's shareholder's equity.

⁽²⁾ Amounts include accounts receivable, prepaid assets, property, equipment and software, right-of-use assets and other assets.

⁽³⁾ Amounts include accrued compensation and benefits, accounts payable and accrued expenses, lease liability and deferred tax liabilities.

⁽⁴⁾ Amounts include redeemable noncontrolling interests in consolidated entities and equity attributable to nonredeemable noncontrolling interests in consolidated entities.

Cash and cash equivalents

Cash and cash equivalents decreased by \$98.7 million from \$1,147.7 million at December 31, 2018 to \$1,049.0 million at December 31, 2019. See "Cash Flows Discussion" in the following section within this Management's Discussion and Analysis for additional discussion regarding the movements in cash flows during the periods. See Item 8, Financial Statements and Supplementary Data - Note 1, "Accounting Policies - Cash and Cash Equivalents," regarding requirements to retain liquid resources in certain jurisdictions.

Investments

As of December 31, 2019 we had \$829.5 million in investments (December 31, 2018: \$613.5 million). Included in investments are \$235.5 million of seed money investments in affiliated funds used to seed funds as we launch new products, and \$192.4 million of investments related to assets held for deferred compensation plans, which are also held primarily in affiliated funds. Seed investments increased by \$32.7 million during the year ended December 31, 2019. The increase in the period reflects purchases of \$72.6 million, a non-cash increase of \$10.7 million due to the OppenheimerFunds acquisition, a non-cash increase of \$45.5 million due to the deconsolidation of certain CIP in the period (restoring the company's formerly eliminated investment balances), and \$38.6 million driven by market valuation changes and foreign exchange movements. The increases in the period were partially offset by redemptions of \$134.7 million. Investments related to deferred compensation awards increased by a net \$113.8 million during the period due to the OppenheimerFunds acquisition of \$165.9 million, net purchases of \$25.0 million and \$18.4 million driven by market valuation changes and foreign exchange movements. These increases were partially offset by dispositions of \$95.5 million.

Included in investments are \$350.8 million in equity method investments in Invesco Great Wall and in certain of the company's private equity partnerships, real estate partnerships and other co-investments (December 31, 2018: \$296.3 million). The increase of \$54.5 million in equity method investments was driven by an increase from partnership contributions of \$92.7 million and \$56.3 million in current period earnings. This increase was partially offset by a decrease of \$94.6 million due to distributions from partnership investments. Also included in investments are foreign time deposits of \$32.0 million, an increase of \$3.9 million from the December 31, 2018 balance of \$28.1 million.

Assets held for policyholders and policyholder payables

One of our subsidiaries, Invesco Pensions Limited, is an insurance company that was established to facilitate retirement savings plans in the UK. The entity holds assets that are managed for its clients on its balance sheet with an equal and offsetting liability. The decrease in the balance of these accounts from \$11,384.8 million at December 31, 2018, to \$10,835.6 million at December 31, 2019, was the result of negative market movements of \$572.7 million and net business outflows of \$356.3 million, partially offset by positive foreign exchange rate movements of \$379.8 million.

Intangible assets, net

Intangible assets reflect a net increase of \$5,182.2 million from \$2,176.1 million at December 31, 2018 to \$7,358.3 million at December 31, 2019. The increase includes an additional \$5,189.0 million primarily related to the preliminary purchase price allocation to intangible assets from the OppenheimerFunds acquisition, offset by amortization of \$52.7 million. See Item 8, Financial Statements and Supplementary Data - Note 6, "Intangible Assets," for an analysis of the change in intangible balances between periods. The 2019 and 2018 annual impairment reviews of indefinite-lived intangible assets determined that no impairment existed at the respective review dates.

Goodwill

Goodwill increased from \$7,157.1 million at December 31, 2018 to \$8,509.4 million at December 31, 2019. The increase includes \$1,229.1 million primarily related to the preliminary purchase price allocation to goodwill from the OppenheimerFunds acquisition and foreign exchange movements of \$123.2 million. See Item 8, Financial Statements and Supplementary Data - Note 7, "Goodwill," for an analysis of the change in goodwill balances between periods. The company's annual goodwill impairment review is performed as of October 1 of each year. As a result of that analysis, the company determined that no impairment existed at that date. See "Critical Accounting Policies - Goodwill" for additional details of the company's goodwill impairment analysis process.

See Item 8, Notes to the Consolidated Financial Statements - Note 2, "Business Combinations" for additional information regarding Intangible Assets, net and Goodwill.

Other assets

Other assets increased from \$1,325.9 million at December 31, 2018 to \$2,042.7 million at December 31, 2019. The increase includes the right-of-use asset of \$325.0 million, which resulted from the adoption of the accounting lease standard in the current year. The accounting lease standard requires the company to recognize all leases with a lease term greater than 12 months on the balance sheet as a right-of-use asset. See Item 8, Notes to the Consolidated Financial Statements - Note 14, "Operating Leases" for additional information regarding the increase due to the right of use asset. Additional increases include an increase of \$251.6 million in Accounts receivable and \$114.8 million in Property, equipment and software which has resulted primarily from the Oppenheimer acquisition.

Long-term debt

Long-term debt decreased from \$2,408.8 million at December 31, 2018, to \$2,080.3 million at December 31, 2019, a decrease of \$328.5 million. As of December 31, 2019, there was no balance outstanding on the credit facility (at December 31, 2018: \$330.8 million).

Other liabilities

Other liabilities increased from \$2,060.1 million at December 31, 2018 to \$4,464.2 million at December 31, 2019. The increase includes \$1,181.2 million resulting from the preliminary purchase price allocation to deferred tax liabilities from the OppenheimerFunds acquisition. See Item 8, Notes to the Consolidated Financial Statements - Note 2, "Business Combinations" for additional information regarding the deferred tax liabilities.

The increase also includes the lease liability of \$364.8 million, which resulted from the adoption of the accounting lease standard in the current year. The accounting lease standard requires the company to recognize all leases with a lease term greater than 12 months on the balance sheet as a lease liability. See Item 8, Notes to the Consolidated Financial Statements - Note 14, "Operating Leases" for additional information regarding the increase due to the lease liability.

Accrued bonus and deferred compensation increased by \$292.3 million primarily as a result of increases in our deferred compensation liability, severance accruals and retention awards in connection with the OppenheimerFunds acquisition and the overall bonus accrual driven by the larger headcount post-acquisition. Additional increases resulted from forward contracts that the company entered into to purchase its common shares. During the year ended December 31, 2019, the company entered into three new forward contracts and settled one forward contract. The net effect resulted in an increase in Other liabilities of \$199.4 million. See Item 8, Notes to the Consolidated Financial Statements - Note 10, "Share Capital" for additional information regarding the forward contracts.

Liquidity and Capital Resources

Our capital structure, together with available cash balances, cash flows generated from operations, existing capacity under our credit facility and further capital market activities, if necessary, should provide us with sufficient resources to meet present and future cash needs, including operating, debt and other obligations as they come due and anticipated future capital requirements. Material changes in the company's capital structure over the last two years include:

2019: As discussed in Note 2, "Business Combinations," the company completed its acquisition of OppenheimerFunds on May 24, 2019. Consideration for the acquisition included 81.9 million shares, which were composed of 75.7 million newly issued common shares and 6.2 million employee restricted common stock awards. The company also issued \$4.0 billion in perpetual, non-cumulative preferred shares with a 21-year non-call period and a fixed rate of 5.9%.

The preferred stock dividend is payable quarterly on a non-cumulative basis when, if and as declared by our board of directors. However, if we have not declared and paid or set aside for payment full quarterly dividends on the preferred stock for a particular dividend period, we may not declare or pay dividends on, or redeem, purchase or acquire, our common stock or other junior securities in the next succeeding dividend period. Shares of preferred stock cannot be redeemed prior to the 21st anniversary of their original issue date. The preferred stock has no put feature to accelerate redemption and will not be convertible into any other class of capital stock of the company.

See "Dividends" section below for a discussion of the preferred and common dividends.

The company repurchased 5.6 million common shares in open market transactions utilizing \$110.8 million in cash and entered into three forward contracts during 2019, whereby the counterparty purchased \$500.0 million (25.8 million shares) of the company's common shares. See Note 10, "Share Capital" for details of these forward contracts and the related treasury shares recorded as of December 31, 2019. Additionally, during the year, 3.3 million common shares were withheld on vesting events in the amount of \$59.0 million relating to purchases of common shares from employees to satisfy tax withholding requirements at the time of common share vesting. Since the common stock buyback program announcement in 2018, the company has purchased \$973 million of its common shares.

The forward contract completed in the fourth quarter of 2018 for \$300 million of common shares settled on July 1, 2019.

During 2019, the company paid \$330.8 million towards the outstanding balance on the credit facility. As of December 31, 2019 the remaining balance on the credit facility was zero.

2018: On October 18, 2018, the company announced a common stock buyback program of \$1.2 billion to be completed by the first quarter of 2021, which will be financed through the strong operating cash flows of the combined Invesco and OppenheimerFunds organization. For the purpose of repurchasing its common shares, the company entered into a forward contract during the fourth quarter of 2018. Under this contract, the counterparty purchased \$300 million (14.4 million shares) of the company's common shares in the fourth quarter. The common shares were included as treasury shares in the company's balance sheet and reduced outstanding common shares as of December 3, 2018.

On April 6, 2018, the company completed the acquisition of Guggenheim Investments' ETF business for a purchase price of \$1.2 billion. To fund the purchase, the company borrowed approximately \$835 million on its credit facility in early April 2018. In addition, the company also borrowed on the credit facility to fund part of the Intelliflo acquisition. As of December 31, 2018, the remaining balance on the credit facility was \$330.8 million.

Our capital management priorities have evolved with the growth and success of our business and include:

- reinvestment in the business;
- moderate annual growth of dividends (as further discussed in the "Dividends" section below);
- share repurchase; and
- target an approximate \$1 billion cash buffer in excess of European regulatory and liquidity requirements.

These priorities are executed in a manner consistent with our desire to maintain a strong, investment-grade credit rating. As of the filing of this Report, Invesco held credit ratings of A2/Stable, BBB+/Stable and A-/Positive from Moody's, S&P, and Fitch Ratings, respectively. Our ability to continue to access the capital markets in a timely manner depends on a number of factors, including our credit ratings, the condition of the global economy, investors' willingness to purchase our securities, interest rates, credit spreads and the valuation levels of equity markets. If we are unable to access capital markets in a timely manner, our business could be adversely impacted. See also Item 1A - "Risk Factors," for more detailed discussion on reliance on credit ratings.

Certain of our subsidiaries are required to maintain minimum levels of capital. Such requirements may change from time-to-time as additional guidance is released based on a variety of factors, including balance sheet composition, assessment of risk exposures and governance, and review from regulators. These and other similar provisions of applicable laws and regulations may have the effect of limiting withdrawals of capital, repayment of intercompany loans and payment of dividends by such entities. All of our regulated EU and UK subsidiaries are subject to consolidated capital requirements under applicable EU and UK requirements, including those arising from the EU's Capital Requirements Directive and the UK's Internal Capital Adequacy Assessment Process (ICAAP), and capital is maintained within this European sub-group to satisfy these regulations. We meet these requirements in part by holding cash and cash equivalents. This retained cash can be used for general business purposes in the European sub-group in the countries where it is located. Due to the capital restrictions, the ability to transfer cash between certain jurisdictions may be limited. In addition, transfers of cash between international jurisdictions may have adverse tax consequences. We are in compliance with all regulatory minimum net capital requirements. As of December 31, 2019, the company's minimum regulatory capital requirement was \$753.6 million (December 31, 2018: \$720.2 million); the increase was primarily driven by the strengthening of the Pound Sterling against the U.S. Dollar. The total amount of non-U.S. cash and cash equivalents was \$847.0 million at December 31, 2019 (December 31, 2018: \$996.7 million).

The consolidation of \$8,633.1 million and \$6,234.6 million of total assets and long-term debt of CIP as of December 31, 2019, respectively, did not impact the company's liquidity and capital resources. The majority of CIP balances related to consolidated CLOs. The collateral assets of the CLOs are held solely to satisfy the obligations of the CLOs. The company has no right to the benefits from, nor does it bear the risks associated with, the collateral assets held by the CLOs, beyond the company's direct investments in, and management and performance fees generated from, these products, which are eliminated upon consolidation. If the company were to liquidate, the collateral assets would not be available to the general creditors of the company, and as a result, the company does not consider them to be company assets. Likewise, if the CLOs were to liquidate, their investors would have no recourse to the general credit of the company. The company therefore does not consider this debt to be an obligation of the company. See Item 8, Financial Statements and Supplementary Data - Note 20, "Consolidated Investment Products," for additional details.

Cash Flow Discussion

The ability to consistently generate cash flow from operations in excess of dividend payments, common share repurchases, capital expenditures, and ongoing operating expenses is one of our company's fundamental financial strengths. Operations continue to be financed from current earnings and borrowings. Our principal uses of cash, other than for operating expenses, include dividend payments, capital expenditures, acquisitions, purchase of our common shares in the open market and investments in certain new investment products.

The following table represents a reconciliation of the cash flow information presented on a U.S. GAAP basis to the cash flow information, excluding the impact of the cash flows of Consolidated Investment Products for the reasons outlined in footnote 1 to the table:

Cash Flow Information ⁽¹⁾	Year ended December 31, 2019			Year end	Year ended December 31, 2018			Year ended December 31, 2017		
\$ in millions	U.S. GAAP	Impact of CIP	Excluding CIP	U.S. GAAP	Impact of CIP	Excluding CIP	U.S. GAAP	Impact of CIP	Excluding CIP	
Cash and cash equivalents, beginning of the period	1,805.4	657.7	1,147.7	2,517.7	511.3	2,006.4	2,070.2	742.2	1,328.0	
Cash flows from operating activities (1)	1,116.6	(158.3)	1,274.9	828.8	(234.2)	1,063.0	1,157.8	(294.2)	1,452.0	
Cash flows from investing activities	(1,425.4)	(1,507.4)	82.0	(2,898.7)	(1,248.0)	(1,650.7)	(974.4)	(678.3)	(296.1)	
Cash flows from financing activities	201.3	1,674.6	(1,473.3)	1,540.0	1,767.2	(227.2)	169.0	746.3	(577.3)	
Increase/(decrease) in cash and cash equivalents	(107.5)	8.9	(116.4)	(529.9)	285.0	(814.9)	352.4	(226.2)	578.6	
Foreign exchange movement on cash and cash equivalents	10.7	(7.0)	17.7	(44.8)	(1.0)	(43.8)	104.1	4.3	99.8	
Net cash inflows (outflows) upon consolidation/deconsolidation of CIP	(7.4)	(7.4)	_	(137.6)	(137.6)	_	(9.0)	(9.0)	_	
Cash and cash equivalents, end of the period	1,701.2	652.2	1,049.0	1,805.4	657.7	1,147.7	2,517.7	511.3	2,006.4	
Cash and cash equivalents	1,049.0	_	1,049.0	1,147.7	_	1,147.7	2,006.4	_	2,006.4	
Cash and cash equivalents of CIP	652.2	652.2		657.7	657.7		511.3	511.3		
Total cash and cash equivalents per consolidated statement of cash flows	1,701.2	652.2	1,049.0	1,805.4	657.7	1,147.7	2,517.7	511.3	2,006.4	

⁽¹⁾ These tables include non-GAAP presentations. Cash held by CIP is not available for use by Invesco. Additionally, there is no recourse to Invesco for CIP debt. The cash flows of CIP do not form part of the company's cash flow management processes, nor do they form part of the company's significant liquidity evaluations and decisions.

As discussed in Note 2, "Business Combination," the OppenheimerFunds acquisition purchase price was allocated to the assets acquired and liabilities assumed based upon their estimated fair values as of the date of the transaction. The issuance of common stock and preferred stock consideration represents a non-cash financing activity related to the statement of cash flows.

Operating Activities

Operating cash flows include the receipt of investment management and other fees generated from AUM, offset by operating expenses and changes in operating assets and liabilities. Although some receipts and payments are seasonal, particularly bonus payments which are paid out during the first quarter, in general, after allowing for the change in cash held by CIP, and investment activities, our operating cash flows move in the same direction as our operating income.

During 2019, cash provided by operating activities was \$1,116.6 million compared to \$828.8 million provided during 2018 (an increase of \$287.8 million). As shown in the tables above, the impact of CIP to operating activities was \$158.3 million of cash used during 2019 compared to \$234.2 million of cash used during 2018. Excluding the impact of CIP, cash provided by operations was \$1,274.9 million during 2019 compared to \$1,063.0 million of cash provided by operations during 2018. Cash inflows for the year ended December 31, 2019, excluding the impact of CIP, included net investment redemptions of \$156.4

million, including seed money and deferred compensation investments (year ended December 31, 2018: net purchases \$144.2 million) as well as net inflows from the changes in payables and receivables due to the timing of payments and receipts, primarily related to the growth in business that resulted from OppenheimerFunds acquisition in 2019 compared to net outflows in the year ended December 31, 2018. Inflows were partially offset by lower net income in the year ended December 31, 2019 compared to year ended December 31, 2018 driven by transaction and integration expenses of \$673.0 million compared to \$136.9 million in the prior period due to the acquisition in 2019.

Investing Activities

Net cash used in investing activities totaled \$1,425.4 million for the year ended December 31, 2019 (2018: net cash used in \$2,898.7 million). As shown in the tables above, the impact of CIP on investing activities, including investment purchases, sales and returns of capital, was \$1,507.4 million used (2018: \$1,248 million used). Excluding the impact of CIP cash flows, net cash provided by investing activities was \$82.0 million (2018: net cash used of \$1,650.7 million).

Cash inflows for the year ended December 31, 2019, excluding the impact of CIP, included net cash acquired of \$290.5 million primarily related to the OppenheimerFunds acquisition (year ended December 31, 2018: outflows of \$1,469.3 million). See Note 2, "Business Combination," for additional information regarding cash acquired as a result of the acquisition. Also included in cash inflows for the year ended December 31, 2019, were net collateral received of \$26.0 million on the forward contracts (year ended December 31, 2018: net collateral paid of \$63.8 million) and collected proceeds of \$215.5 million from sales and returns of capital of investments (year ended December 31, 2018: \$197.9 million). These inflows were partially offset by purchases of investments of \$325.7 million (year ended December 31, 2018: \$213.0 million).

During the year ended December 31, 2019, the company had capital expenditures of \$124.3 million (2018: \$102.5 million). Our capital expenditures related principally in each period to technology initiatives, including enhancements to platforms from which we maintain our portfolio management systems and fund accounting systems, improvements in computer hardware and software desktop products for employees, new telecommunications products to enhance our internal information flow, and back-up disaster recovery systems. Also, in each period, a portion of these costs related to leasehold improvements made to the various buildings and workspaces used in our offices. These projects have been funded with proceeds from our operating cash flows. In 2019, our capital expenditures also included technology integrations related to the OppenheimerFunds acquisition.

Financing Activities

Net cash provided by financing activities totaled \$201.3 million for the year ended December 31, 2019 (2018: cash provided of \$1,540.0 million). As shown in the tables above, the impact of CIP on financing activities provided cash of \$1,674.6 million during the year (2018: cash provided of \$1,767.2 million). Excluding the impact of CIP, financing activities used cash of \$1,473.3 million in the year ended December 31, 2019 (2018: cash used of \$227.2 million).

Financing cash outflows during the year ended December 31, 2019 included \$529.1 million of dividend payments for the dividends declared in January, April, July and November 2019 (year ended December 31, 2018: dividends paid of \$490.6 million), \$123.6 million of preferred dividend payments for dividends declared in the in July and November 2019 (year ended December 31, 2018: none), net repayment on the credit facility of \$330.8 million (year ended December 31, 2018: none), purchase of common shares through open market transactions totaling \$110.8 million (year ended December 31, 2018: none), the payment of \$59.0 million to meet employees' withholding tax obligations on common share vestings (year ended December 31, 2018: \$51.8 million), and a payment of \$20.0 million of contingent consideration (year ended December 31, 2018: \$15.6 million).

Dividends

When declared, Invesco pays dividends on a quarterly basis in arrears. Holders of our preferred shares are eligible to receive dividends at an annual rate of 5.9% of the liquidation preference of \$1,000 per share, or \$59 per share per annum. The preferred stock dividend is payable quarterly on a non-cumulative basis when, if and as declared by our board of directors. However, if we have not declared and paid or set aside for payment full quarterly dividends on the preferred stock for a particular dividend period, we may not declare or pay dividends on, or redeem, purchase or acquire, our common stock or other junior securities in the next succeeding dividend period. In addition, if we have not declared and paid or set aside for payment quarterly dividends on the preferred stock for six quarterly periods, whether or not consecutive, the number of directors of the company will be increased by two and the holders of the preferred shares shall have the right to elect such two additional members of the Board of Directors.

On January 29, 2020, the company announced a preferred dividend of \$14.75 per preferred share to the holders of preferred shares, representing the period from December 1, 2019 through February 29, 2020, payable on March 2, 2020, to shareholders of record at the close of business on February 14, 2020.

On January 29, 2020, the company declared a fourth quarter 2019 dividend of \$0.31 per common share, payable on March 2, 2020, to shareholders of record at the close of business on February 13, 2020 with an ex-dividend date of February 12, 2020.

The declaration, payment and amount of any future dividends will be declared by our Board of Directors and will depend upon, among other factors, our earnings, financial condition and capital requirements at the time such declaration and payment are considered. The Board has a policy of managing dividends in a prudent fashion, with due consideration given to profit levels, overall debt levels, and historical dividend payouts.

Common Share Repurchase Plan

During the year ended December 31, 2019, the company repurchased 5.6 million common shares in the open market at a cost of \$110.8 million (December 31, 2018: none) Separately, an aggregate of 3.3 million common shares were withheld on vesting events during the year ended December 31, 2019 to meet employees' withholding tax obligations (December 31, 2018: 1.6 million). The fair value of these shares withheld at the respective withholding dates was \$59.0 million (December 31, 2018: \$48.9 million).

Additionally, during the year ended December 31, 2019, the company entered into three forward contracts to repurchase \$500.0 million of shares as part of its announced \$1.2 billion common stock buyback program. Under these contracts, the counterparty purchased 25.8 million shares during the year ended December 31, 2019 (December 31, 2018: \$300.0 million; 14.4 million shares). See Note 10, "Share Capital" for details of these forward contracts and the related treasury shares recorded as of December 31, 2019. At December 31, 2019, approximately \$732.2 million remained authorized under the company's common share repurchase authorization approved by the Board on July 22, 2016 (December 31, 2018: \$1,343.0 million).

The forward contract completed in the fourth quarter of 2018 for \$300 million of common shares settled on July 1, 2019.

Long-term debt

The carrying value of our long-term debt at December 31, 2019 was \$2,080.3 million (December 31, 2018: \$2,408.8 million) and was comprised of the following:

\$ in millions	December 31, 2019	December 31, 2018
\$1.5 billion floating rate credit facility expiring August 11, 2022	_	330.8
Unsecured Senior Notes:		
\$600 million 3.125% - due November 30, 2022	598.1	597.5
\$600 million 4.000% - due January 30, 2024	595.8	594.9
\$500 million 3.750% due January 15, 2026	496.1	495.6
\$400 million 5.375% - due November 30, 2043	390.3	390.0
Long-term debt	2,080.3	2,408.8

For the year ended December 31, 2019, the company's weighted average cost of debt was 3.93% (year ended December 31, 2018: 3.83%).

Financial covenants under the credit agreement include: (i) the quarterly maintenance of a debt/EBITDA leverage ratio, as defined in the credit agreement, of not greater than 3.25:1.00, (ii) an interest coverage ratio (EBITDA, as defined in the credit agreement/interest payable for the four consecutive fiscal quarters ended before the date of determination) of not less than 4.00:1.00. As of December 31, 2019, we were in compliance with our financial covenants. At December 31, 2019, our leverage ratio was 1.31:1.00 (December 31, 2018: 1.51:1.00), and our interest coverage ratio was 11.76:1.00 (December 31, 2018: 14.37:1.00).

The December 31, 2019 and 2018 coverage ratio calculations are as follows:

	Last four quarters ended			
\$ millions	December 31, 2019	December 31, 2018		
Net income attributable to Invesco Ltd.	564.7	882.8		
Dividends on preferred shares	123.6	_		
Impact of CIP on net income attributable to Invesco Ltd.	1.6	(8.8)		
Tax expense	235.1	255.0		
Amortization/depreciation	177.6	142.1		
Interest expense	135.7	111.5		
Common share-based compensation expense	207.5	172.4		
Unrealized (gains)/losses from investments, net(1)	(37.1)	46.7		
Pre-acquisition EBITDA of acquired business	186.6	_		
EBITDA ⁽²⁾	1,595.3	1,601.7		
Adjusted debt ⁽²⁾	\$2,091.5	\$2,419.2		
Leverage ratio (Debt/EBITDA - maximum 3.25:1.00)	1.31	1.51		
Interest coverage (EBITDA/Interest Expense - minimum 4.00:1.00)	11.76	14.37		

- (1) Adjustments for unrealized gains and losses from investments, as defined in our credit facility, may also include non-cash gains and losses on investments to the extent that they do not represent anticipated future cash receipts or expenditures.
- (2) EBITDA and Adjusted debt are non-GAAP financial measures; however management does not use these measures for anything other than these debt covenant calculations. The calculation of EBITDA above (a reconciliation from net income attributable to Invesco Ltd.) is defined by our credit agreement, and therefore net income attributable to Invesco Ltd. is the most appropriate GAAP measure from which to reconcile to EBITDA. The calculation of Adjusted debt is defined in our credit facility and equals total debt of \$2,080.3 million plus \$11.2 million in letters of credit.

The discussion that follows identifies risks associated with the company's liquidity and capital resources. The Item 1. Business -- Risk Management section contains a broader discussion of the company's overall approach to risk management.

Credit and Liquidity Risk

Capital management involves the management of the company's liquidity and cash flows. The company manages its capital by reviewing annual and projected cash flow forecasts and by monitoring credit, liquidity and market risks, such as interest rate and foreign currency risks (as discussed in Item 7A, "Quantitative and Qualitative Disclosures About Market Risk"), through measurement and analysis. The company is primarily exposed to credit risk through its cash and cash equivalent deposits, which are held by external firms. The company invests its cash balances in its own institutional money market products, as well as with external high credit-quality financial institutions. These arrangements create exposure to concentrations of credit risk.

Credit Risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to meet an obligation. All cash and cash equivalent balances are subject to credit risk, as they represent deposits made by the company with external banks and other institutions. As of December 31, 2019, our maximum exposure to credit risk related to our cash and cash equivalent balances is \$1,049.0 million. See Item 8, Financial Statements and Supplementary Data - Note 21, "Related Parties," for information regarding cash and cash equivalents invested in affiliated money market funds.

The company does not utilize credit derivatives or similar instruments to mitigate the maximum exposure to credit risk. The company does not expect any counterparties to its financial instruments to fail to meet their obligations.

Liquidity Risk

Liquidity risk is the risk that the company will encounter difficulty in meeting obligations associated with its financial liabilities as the same become due. The company is exposed to liquidity risk through its \$2,080.3 million in total debt. The company actively manages liquidity risk by preparing cash flow forecasts for future periods, reviewing them regularly with senior management, maintaining a committed credit facility, scheduling significant gaps between major debt maturities and engaging external financing sources in regular dialogue.

Effects of Inflation

Inflation can impact our organization primarily in two ways. First, inflationary pressures can result in increases in our cost structure, especially to the extent that large expense components such as compensation are impacted. To the degree that these expense increases are not recoverable or cannot be counterbalanced through pricing increases due to the competitive environment, our profitability could be negatively impacted. Secondly, the value of the assets that we manage may be negatively impacted when inflationary expectations result in a rising interest rate environment. Declines in the values of these AUM could lead to reduced revenues as management fees are generally calculated based upon the size of AUM.

Off Balance Sheet Commitments

See Item 8, Financial Statements and Supplementary Data - Note 19, "Commitments and Contingencies - Off Balance Sheet Commitments," for more information regarding undrawn capital commitments.

Contractual Obligations

We have various financial obligations that require future cash payments. The following table outlines the timing of payment requirements related to our commitments as of December 31, 2019:

\$ in millions	Total (4,5,6)	Within 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Long-term debt (1)	2,080.3	_	598.1	595.8	886.4
Estimated interest payments on long-term debt (1)	802.1	83.0	166.0	116.5	436.6
Operating leases (2)	640.2	77.6	139.6	136.4	286.6
Purchase obligations (3)	948.2	237.7	642.1	68.4	_
Total	4,470.8	398.3	1,545.8	917.1	1,609.6

- (1) Long-term debt includes \$2,080.3 million of fixed rate debt. Fixed interest payments are reflected in the table above in the periods they are due, and include any issuance discounts. The table above includes the company's debt; debt of CIP is excluded from the table above, as the company is not obligated for these amounts. See Item 8, Financial Statements and Supplementary Data Note 20, "Consolidated Investment Products," for additional information.
- (2) Operating leases reflect obligations for leased building space and other assets.

Included in the table above is an additional operating lease the company entered into during the third quarter of 2019, but has not yet commenced. The expected lease obligations are approximately \$232.5 million which will be paid over an expected lease term of 15 years. This operating lease will commence in fiscal year 2022. See Item 8, Financial Statements and Supplementary Data - Note 14, "Operating Leases" for sublease information.

(3) In the ordinary course of business, Invesco enters into contracts or purchase obligations with third parties whereby the third parties provide services to or on behalf of Invesco. Purchase obligations included in the contractual obligations table above represent fixed-price contracts, which are either non-cancelable or cancelable with a penalty. At December 31, 2019, the company's obligations primarily reflect standard service contracts for portfolio, market data, office-related services and third-party marketing and promotional services. In addition, the company is a party to certain variable-price contractual arrangements (e.g. contingent future payments based on AUM levels, number of accounts, transaction volume, etc.) for which the company is reimbursed by affiliated funds and as such are not included in the table above. Purchase obligations are recorded as liabilities in the company's Consolidated Financial Statements when services are provided. Purchase obligations also include contingent consideration liabilities.

During the year ended December 31, 2019, the company entered into three forward contracts to repurchase \$500.0 million of shares as part of its announced \$1.2 billion common stock buyback program. At December 31, 2019 the payable was \$496.5 million and is included in other liabilities. See Item 8, Financial Statements and Supplementary Data - Note 10, "Share Capital" for additional details.

- (4) The company has capital commitments into co-invested funds that are to be drawn down over the life of the partnership as investment opportunities are identified. At December 31, 2019, the company's undrawn capital and purchase commitments were \$357.0 million. These are not included in the above table. See Item 8, Financial Statements and Supplementary Data Note 19, "Commitments and Contingencies" for additional details.
- (5) Due to the uncertainty with respect to the timing of future cash flows associated with unrecognized tax benefits at December 31, 2019, the company is unable to make reasonably reliable estimates of the period of cash settlement with the respective taxing authorities. Therefore, \$69.9 million of gross unrecognized tax benefits have been excluded from the contractual obligations table above. See Item 8, Financial Statements and Supplementary Data, Note 16 "Taxation" for a discussion regarding income taxes.
- (6) In addition to the contractual obligations in the table above, we periodically make contributions to defined benefit pension plans. For the years ended December 31, 2019 and 2018 we contributed \$24.0 million and \$21.2 million, respectively, to these plans. In 2020, we expect to contribute \$24.9 million to our defined benefit pension plans. See Item 8, Financial Statements and Supplementary Data Note 13, "Retirement Benefit Plans" for detailed benefit pension plan information. The company has various other compensation and benefit obligations, including bonuses, commissions and incentive payments payable, defined contribution plan matching contribution obligations, and deferred compensation arrangements, that are excluded from the table above.
- (7) In addition to the contractual obligations in the table above, and pursuant to an agreement entered into at the consummation of the acquisition of OppenheimerFunds, MassMutual, as the holder of seed capital investments in certain funds and accounts included in the acquisition, has the right to redeem its seed capital investments in accordance with an agreed upon schedule. In the event MassMutual exercises its redemption rights and the applicable fund or account is unable to meet such redemption (for example, due to illiquid investments or the need to maintain a level of investment in the fund), the company would be required to fund such redemption to MassMutual and seek reimbursement from the applicable fund or account at a later time when the fund or account is able to fulfill a redemption request. At December 31, 2019, the total amount of seed capital subject to this agreement is approximately \$625 million. Since December 31, 2019, MassMutual exercised its redemption rights and redeemed a portion of the seed capital per the agreed upon schedule. As of the date of this report, the company was not required to fund these redemptions nor does the company anticipate having to fund any of the seed capital subject to this agreement.

Critical Accounting Policies and Estimates

Our significant accounting policies are disclosed in Item 8, Financial Statements and Supplementary Data - Note 1, "Accounting Policies." The accounting policies and estimates that we believe are the most critical to an understanding of our results of operations and financial condition are those that require complex management judgment regarding matters that are highly uncertain at the time policies were applied and estimates were made. These accounting policies and estimates are discussed below; however, the additional accounting policy detail in the footnote previously referenced is important to the discussion of each of the topics. Different estimates reasonably could have been used in the current period that would have had a material effect on these Consolidated Financial Statements, and changes in these estimates are likely to occur from period-to-period in the future.

Goodwill

Our goodwill impairment testing conducted during 2019 and 2018 indicated that the fair value of the reporting unit more likely than not exceeded its carrying value. During 2019, the optional qualitative approach indicated that a quantitative assessment of the goodwill impairment test was not necessary; whereas, during 2018 management elected to proceed directly to a quantitative goodwill impairment test. The company cannot predict the occurrence of future events that might adversely affect the reported value of goodwill that totaled \$8,509.4 million and \$7,157.1 million at December 31, 2019 and December 31, 2018, respectively. Such events include, but are not limited to, strategic decisions made in response to economic and competitive conditions, the impact of the economic environment on the company's AUM, or any other material negative change in AUM and related effective fee rates.

When management utilizes the option to first assess goodwill impairment on a qualitative basis, the totality of certain events and circumstances are assessed to determine if it is not more likely than not that the fair value of the reporting unit is less than its carrying amount. Such events and circumstances include macroeconomic conditions, industry and market considerations, overall financial performance of the company, and or significant changes in share price. If the qualitative assessment indicates that an impairment may be likely or management elected to not perform the qualitative assessment, management performs a quantitative test to determine the fair value of the reporting unit. The fair value of the reporting unit is generally determined using an income approach where estimated future cash flows are discounted to arrive at a single present value amount. The income approach includes inputs that require significant management judgment, including AUM growth rates, projected effective fee rates, pre-tax profit margins, effective tax rates and discount rates.

The quantitative test includes assumptions updated for current market conditions, including the company's updated forecasts for changes in AUM due to market gains or losses and long-term net flows and the corresponding changes in revenue and expenses. Market gains are based upon historical returns of the S&P 500 index, treasury bond returns and treasury bill returns, as applicable to the company's AUM mix on the testing date. The most sensitive of these assumptions are the estimated cash flows and the use of a weighted average cost of capital as the discount rate to determine present value. The discount rates used are estimates of the weighted average cost of capital for the investment management sector reflecting the overall industry risks associated with future cash flows and have been calculated consistently from period to period. While the company believes all assumptions utilized in our assessment are reasonable and appropriate, changes in these estimates could produce different fair value amounts and therefore different goodwill impairment assessments.

Intangible Assets

Where evidence exists that the underlying arrangements have a high likelihood of continued renewal at little or no cost to the company, the intangible asset is assigned an indefinite life and reviewed for impairment on an annual basis. Similar to Goodwill, management has the option to first assess indefinite-lived intangible assets for qualitative factors to determine whether it is necessary to perform a quantitative impairment test. Definite-lived intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable (i.e. the carrying amount exceeds the fair value of the intangible asset). In addition, management's judgment is required to estimate the period over which definite-lived intangible assets will contribute to the company's cash flows and the pattern in which these assets will be consumed. A change in the remaining useful life of any of these assets, or the reclassification of an indefinite-lived intangible asset to a definite-lived intangible asset, could have a significant impact on the company's amortization expense, which was \$52.7 million, \$29.7 million and \$17.4 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Intangible assets not subject to amortization are tested for impairment annually as of October 1 or more frequently if events or changes in circumstances indicate that the asset might be impaired. If a quantitative assessment is required, the impairment test consists of a comparison of the fair value of an intangible asset with its carrying amount. If the carrying amount of the intangible asset exceeds its fair value, an impairment loss is recognized in an amount equal to that excess. If required, fair value is generally determined using an income approach where estimated future cash flows are discounted to arrive at a single present value amount. The income approach includes inputs that require significant management judgment, including AUM growth rates, product mix, projected effective fee rates, pretax profit margins, effective tax rates and discount rates. The most relevant of these assumptions to the determination of the estimated fair value are the AUM growth rate and discount rate, which is a weighted average cost of capital including consideration of company size premiums. Changes in these estimates could produce different fair value amounts and therefore different impairment conclusions. During 2019 and 2018, our annual impairment reviews of indefinite-lived intangible assets determined that no impairment existed at the respective review dates, the classifications of indefinite-lived and definite-lived remain appropriate, and no changes to the expected lives of the definite-lived intangible assets were required.

In May 2019, the company acquired MassMutual's asset management affiliate, OppenheimerFunds, for total consideration of approximately \$5.6 billion comprised of cash and stock. The resulting synergy further enhances the company's ability to meet client needs through its comprehensive range of high-conviction active, passive and alternative capabilities.

Management applied a significant amount of judgment when developing the fair value measurement of the management fee contracts intangible assets. Fair value was determined using an income approach where estimated future cash flows were discounted to arrive at present value amounts. See Note 1, "Accounting Policies" and Note 2, "Business Combination" to the consolidated financial statements for further information surrounding the estimates of identified assets acquired, liabilities assumed, and consideration transferred. Also see Note 1 to the consolidated financial statements for the company's Acquisition policy.

The income approach includes inputs that require significant management judgment including, but not limited to, (i) the future AUM growth rates for different product categories and their related net flows and market appreciation; (ii) projected effective fee rates; (iii) pre-tax profit margins; (iv) the useful lives of finite-lived intangible assets; and (v) discount rate.

CIP

Assessing if an entity is a variable interest entity (VIE) or voting interest entity (VOE) involves judgment and analysis on a structure-by-structure basis. Factors included in this assessment include the legal organization of the entity, the company's contractual involvement with the entity and any related party or de facto agent implications of the company's involvement with the entity. A VIE, in the context of the company and its managed funds, is a fund that does not have sufficient equity to finance its operations without additional subordinated financial support, or a fund for which the risks and rewards of ownership are not directly linked to voting interests. If the company is deemed to have the power to direct the activities of the fund that most significantly impact the fund's economic performance, and the obligation to absorb losses/right to receive benefits from the fund that could potentially be significant to the fund, then the company is deemed to be the fund's primary beneficiary and is required to consolidate the fund.

Determining if the company is the primary beneficiary of a VIE also requires significant judgment involved to assess if the company has the power to direct the activities that most significantly affect the fund's economic results and to assess if the company's interests could be deemed significant. If current financial statements are not available for consolidated VIEs or VOEs, estimation of investment valuation is required, which includes assessing available quantitative and qualitative data. Significant changes in these estimates could impact the reported value of the investments held by CIP and the related offsetting equity attributable to noncontrolling interests in consolidated entities on the Consolidated Balance Sheets and the other gains and losses of CIP, net, and related offsetting gains and losses attributable to noncontrolling interests in consolidated entities, net, amounts on the Consolidated Statements of Income.

As of December 31, 2019, the company consolidated CIP that held investments of \$7,808.0 million (December 31, 2018: \$6,213.5 million).

Contingencies

Contingencies arise when we have a present obligation as a result of a past event that is both probable and reasonably estimable. We must from time to time make material estimates with respect to legal and other contingencies. The nature of our business requires compliance with various laws and regulations, as well as various contractual obligations, and exposes us to a variety of legal proceedings and matters in the ordinary course of business. While the outcomes of matters such as these are inherently uncertain and difficult to predict, we maintain reserves reflected in accounts payable and accrued expenses, as appropriate, for identified losses that are, in our judgment, probable and reasonably estimable. We expense any related legal fees as they are incurred. Management's judgment is based on the advice of legal counsel, ruling on various motions by the applicable court, review of the outcome of similar matters, if applicable, and review of guidance from governmental and other regulatory authorities, if applicable. Contingent consideration payable in relation to a business acquisition is recorded as of the acquisition date as part of the fair value transferred in exchange for the acquired business.

Recent Accounting Standards

See Item 8, Financial Statements and Supplementary Data - Note 1, "Accounting Policies - Accounting Pronouncements Recently Adopted and Pending Accounting Pronouncements."

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

In the normal course of its business, the company is primarily exposed to market risk in the form of AUM market price risk, securities market risk, interest rate risk, and foreign exchange rate risk.

AUM Market Price Risk

The company's investment management revenues are comprised of fees based on the value of AUM. Declines in the market prices of equity and fixed income securities, commodities and derivatives, or other similar financial instruments held in client portfolios could cause revenues to decline because of lower investment management fees by:

- Causing the value of AUM to decrease.
- Causing the returns realized on AUM to decrease (impacting performance fees).
- Causing clients to withdraw funds in favor of investments in markets that they perceive to offer greater opportunity and that the company does not serve
- Causing clients to rebalance assets away from investments that the company manages into investments that the company does not manage.

Causing clients to reallocate assets away from products that earn higher revenues into products that earn lower revenues.

Underperformance of client accounts relative to competing products could exacerbate these factors.

Assuming the revenue yield on AUM for the year remains unchanged, a 10% decline in the average AUM for the year would result in a corresponding decline in revenue. Certain expenses, including distribution and compensation expenses, may not vary in proportion with the changes in the market value of AUM. As such, the impact on operating margin or net income of a decline in the market values of AUM may be greater or less than the percentage decline in the market value of AUM.

Securities Market Risk

The company's exposure to market risk from financial instruments measured at fair value arises from its investments and also from its contingent consideration liability. The following table summarizes the impact of a 10% increase or decrease in the fair values or the market inputs contributing to the fair value of these financial instruments:

	December 31, 2019		
\$ in millions	Fair Value	Fair Value assuming 10% increase	Fair Value assuming 10% decrease
Equity investments (a)	432.5	475.8	389.3
Total assets measured at fair value exposed to market risk	432.5	475.8	389.3
Direct investments in CIP (b)	610.6	671.7	549.5
Contingent consideration liability (c)	(60.2)	(66.2)	(54.2)

- (a) If such a 10% increase or decrease in fair values were to occur, the change attributable to \$432.5 million of these equity investments would result in a corresponding increase or decrease in our pre-tax earnings. At December 31, 2019, \$192.4 million of these equity investments are held to hedge economically certain deferred compensation plans in which the company participates. In addition to holding equity investments, in 2017, the company purchased a total return swap to economically hedge certain deferred compensation plans. The notional value of the total return swap at December 1, 2019 was \$177.0 million. The company recognizes as compensation expense the appreciation or depreciation of the compensation liability over the award's vesting period in proportion to the vested amount of the award. The company immediately recognizes the appreciation or depreciation of these investments, which is included in other gains and losses. This creates a timing difference between the recognition of the compensation expense and the investment gain or loss impacting net income, which will reverse and will offset to zero over the life of the award at the end of the multi-year vesting period.
- (b) These represent Invesco's direct investments in investment products that are consolidated. Upon consolidation, these direct investments are eliminated, and the assets and liabilities of the CIP are consolidated in the Consolidated Balance Sheet, together with a noncontrolling interest balance representing the portion of the CIP owned by third parties. In addition, in 2018, the company entered into total return swap agreements with respect to certain ETFs. Through the total return swap agreements, the company holds an indirect interest in the ETFs. At December 31, 2019, the aggregate notional value of the total return swaps was \$145.9 million. If a 10% increase or decrease in the fair values of Invesco's direct investments in CIP and total return swap instruments were to occur, it would result in a corresponding increase or decrease in our net income attributable to Invesco Ltd.
- (c) During 2015, the company acquired investment management contracts from Deutsche Bank. This liability represents the purchase price, which was comprised solely of contingent consideration payable in future periods and is linked to future revenues generated from the contracts. In connection with the OppenheimerFunds acquisition (see Note 2, "Business Combinations"), Invesco acquired a contingent consideration liability related to historical OppenheimerFunds transactions. The liability is contingent upon the attainment of certain revenue growth objectives during 2019 and 2020. Additionally, the company made other digital wealth acquisitions during 2019, which resulted in a contingent consideration liability linked to sales targets during 2020, 2021 and 2022. The contingent consideration liabilities referenced above were recorded at fair value at each respective acquisition date and subsequent changes in the fair value are recorded in Other gains and

losses, net in the Consolidated Statements of Income. If a 10% increase or decrease in the fair value of the contingent consideration liability were to occur, it would result in a corresponding increase or decrease in our net income attributable to Invesco Ltd.

Cash balances invested in money market funds of \$620.9 million have been excluded from the table above. These are valued under the market approach at the net asset value of the underlying funds, which is maintained at \$1. Assets held for policyholders of \$10,835.6 million have also been excluded from the table above. The entity holds assets that are managed for its clients on its balance sheet with an equal and offsetting liability to the policyholders, which is linked to the value of the investments. The investments and the policyholder payables held by this business are carried in the Consolidated Balance Sheets as separate account assets and liabilities at fair value in accordance with ASC Topic 944, "Financial Services - Insurance." Changes in fair value are recorded and offset to zero in the Consolidated Statements of Income in other operating revenues. Increases or decreases in the fair value of these investments will therefore have no impact to our pre-tax earnings.

Interest Rate Risk

Interest rate risk relates to the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The company is exposed to interest rate risk primarily through its external debt and cash and cash equivalent investments. On December 31, 2019, the interest rates on 100.0% of the company's borrowings were fixed for a weighted average period of 7.9 years, and the company had a balance of zero on its floating rate credit facility.

The interest rate profile of the financial liabilities of the company on December 31 was:

\$ in millions	December 31, 2019	December 31, 2018
Long-term debt		
Fixed rate	2,080.3	2,078.0
Floating rate	_	330.8
Total	2,080.3	2,408.8
Weighted average interest rate percentage	3.9%	3.8%
Weighted average period for which rate is fixed in years	7.9	8.9

See Item 8, Financial Statements and Supplementary Data, Note 9, "Long-Term Debt" for additional disclosures relating to the U.S. Dollar floating and fixed rate obligations.

The company's fixed interest financial assets at December 31, 2019, include foreign time deposit investments of \$32.0 million (2018: \$28.1 million). The weighted average interest rate on these investments is 0.46% (2018: 0.46%) and the weighted average time for which the rate is fixed is 0.2 years (2018: 0.2 years).

Foreign Exchange Rate Risk

The company has transactional currency exposures that occur when any of the company's subsidiaries receive or pay cash in a currency different from its functional currency. Such exposure arises from sales or purchases by operating subsidiaries in currencies other than the subsidiaries' functional currencies. These exposures are not actively managed.

The company also has certain investments in foreign operations, whose net assets and results of operations are exposed to foreign currency translation risk when translated into U.S. Dollars upon consolidation into Invesco Ltd. A strengthening U.S. Dollar has a negative impact on the company's foreign currency denominated earnings when presented in U.S. Dollars. The company's most significant foreign exchange rate risk exposure relates to the translation of Pound Sterling-denominated transactions into the U.S. Dollar reporting currency. Item 8, Financial Statements and Supplementary Data, Note 18, "Geographic Information," contains disclosure of revenue from external customers by geography. The disclosure of revenues from external customers earned in the U.K. is an indicator of the company's exposure to the Pound Sterling; however, expenses incurred in the U.K. provide a natural offset to the company's exposure to the Pound Sterling.

Given this exposure, the company continued to hedge this risk through out-of-the money put option contracts to hedge economically the foreign currency risk on the translation of its Pound Sterling-denominated earnings into U.S. Dollars through June 30, 2020. These programs may serve to reduce, but not fully eliminate the impact of Pound Sterling foreign currency risk and the impact on our Consolidated Income Statements. The Pound Sterling/U.S. Dollar contracts have a strike price set at \$1.25 based on the average daily foreign exchange rates for the applicable time period. Other than the fair value of the put

option contracts, there is no additional loss exposure to the company, only the potential for a gain should the average exchange rates fall below the strike levels during the hedged periods. At December 31, 2019, a 10% decline in the annual average Pound Sterling to U.S. Dollar exchange rate would result in a positive cash flow from the Pound Sterling/U.S. Dollar contracts of \$4.3 million.

The company is exposed to foreign exchange revaluation into the Consolidated Statements of Income on monetary assets and liabilities that are held by subsidiaries in different functional currencies than the subsidiaries' functional currencies. Net foreign exchange revaluation losses were \$13.6 million in 2019 (2018: \$4.2 million of gains), and are included in general and administrative expenses and other gains and losses, net on the Consolidated Statements of Income. We continue to monitor our exposure to foreign exchange revaluation and have put in place net investment hedge structures discussed in Part II, Item 8, Financial Statements, Note 11--"Other Comprehensive Income/(Loss)."

Supplementary Quarterly Financial Data

The following is selected unaudited consolidated data for Invesco Ltd. for the quarters indicated:

	2019							
\$ in millions, except per common share data	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Operating revenues:								
Investment management fees	1,254.2	1,257.1	1,071.3	923.7	949.2	1,038.9	1,050.5	1,043.7
Service and distribution fees	378.0	385.1	294.1	219.3	231.5	248.0	242.9	246.1
Performance fees	49.8	14.9	15.7	21.8	28.3	7.9	11.6	9.1
Other	60.8	63.5	58.3	49.8	46.9	47.0	55.6	56.9
Total operating revenues	1,742.8	1,720.6	1,439.4	1,214.6	1,255.9	1,341.8	1,360.6	1,355.8
Operating expenses:								
Third-party distribution, service and advisory	528.1	545.1	451.8	368.0	372.2	408.0	408.9	419.1
Employee compensation	460.1	446.0	421.9	381.3	349.3	380.7	379.2	385.2
Marketing	41.0	33.2	33.4	28.0	41.3	33.4	32.1	28.0
Property, office and technology	140.8	131.2	114.9	107.2	108.0	103.7	98.6	100.2
General and administrative	121.7	104.5	94.2	83.8	92.9	60.8	87.0	83.7
Transaction, integration and restructuring	136.5	185.5	304.9	46.1	61.8	33.1	23.5	18.5
Total operating expenses	1,428.2	1,445.5	1,421.1	1,014.4	1,025.5	1,019.7	1,029.3	1,034.7
Operating income	314.6	275.1	18.3	200.2	230.4	322.1	331.3	321.1
Other income/(expense):								
Equity in earnings of unconsolidated affiliates	9.5	19.8	12.1	15.0	5.0	11.8	7.3	9.7
Interest and dividend income	14.0	5.9	3.9	4.7	10.3	4.0	2.8	4.2
Interest expense	(34.6)	(35.0)	(33.0)	(33.1)	(29.2)	(29.6)	(29.5)	(23.2)
Other gains and losses, net	(3.3)	13.8	24.1	31.1	(41.9)	5.9	1.4	(5.4)
Other income/(expense) of CIP, net	22.8	37.0	51.1	38.9	(26.6)	28.1	0.9	27.2
Income before income taxes	323.0	316.6	76.5	256.8	148.0	342.3	314.2	333.6
Income tax (provision)/benefits	(80.4)	(74.0)	(14.5)	(66.2)	(53.2)	(61.1)	(72.3)	(68.4)
Net income	242.6	242.6	62.0	190.6	94.8	281.2	241.9	265.2
Net (income)/loss attributable to noncontrolling interests in consolidated entities	(3.6)	(11.1)	(21.9)	(12.9)	19.4	(11.6)	3.2	(11.3)
Less: Dividends declared on preferred shares	(59.2)	(64.4)	_	_	_	_	_	_
Net income attributable to Invesco Ltd.	179.8	167.1	40.1	177.7	114.2	269.6	245.1	253.9
Earnings per common share ⁽¹⁾ :								
Basic	\$0.40	\$0.36	\$0.09	\$0.44	\$0.28	\$0.65	\$0.59	\$0.62
Diluted	\$0.39	\$0.36	\$0.09	\$0.44	\$0.28	\$0.65	\$0.59	\$0.62
Average common shares outstanding(1):								
Basic	454.1	462.8	431.6	401.6	410.0	414.3	413.9	411.3
Diluted	457.9	466.9	433.8	401.9	410.1	414.4	414.1	411.8
Dividends declared per common share:	\$0.31	\$0.31	\$0.31	\$0.30	\$0.30	\$0.30	\$0.30	\$0.29

⁽¹⁾ The sum of the quarterly earnings per common share amounts may differ from the annual earnings per common share amounts due to the required method of computing the weighted average number of common shares in interim periods.

Item 8. Financial Statements and Supplementary Data

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Annual Report of Management on Internal Control over Financial Reporting

Management of the company is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in the Securities Exchange Act of 1934 Rules 13a-15(f) and 15d-15(f). The company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision, and with the participation of the chief executive officer and chief financial officer, management assessed the effectiveness of the company's internal control over financial reporting as of December 31, 2019. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control - Integrated Framework (2013). Consistent with guidance issued by the Securities and Exchange Commission that an assessment of a recently acquired business may be omitted from management's report on internal control over financial reporting in the year of acquisition, management excluded an assessment of the effectiveness of the company's internal control over financial reporting related to certain OppenheimerFunds revenue processes. Accordingly, a portion of the acquired revenue was excluded from evaluation, which represented approximately 17% of the company's total revenue for the year ended December 31, 2019. Based on this assessment, management concluded that the company's internal control over financial reporting was effective as of December 31, 2019.

The company's independent registered public accounting firm, PricewaterhouseCoopers LLP, have issued a report on the effectiveness of our internal control over financial reporting, which is included herein.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Invesco Ltd.

Opinions on the Financial Statements and Internal Control over Financial Reporting

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

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

Basis for Opinions

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

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

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

As described in the Annual Report of Management on Internal Control over Financial Reporting, management has excluded certain OppenheimerFunds revenue processes from its assessment of internal control over financial reporting as of December 31, 2019 because it was acquired by the Company in a purchase business combination during 2019. Subsequent to the acquisition, other elements of OppenheimerFunds internal control over financial reporting and related processes were integrated into the Company's existing systems and internal control over financial reporting. Certain OppenheimerFunds revenue processes that were not integrated have been excluded from management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2019. We have also excluded certain OppenheimerFunds revenue processes from our audit of internal control over financial reporting. OppenheimerFunds is a wholly-owned subsidiary whose total revenues excluded from management's assessment and our audit of internal control over financial reporting represent 17% of the related consolidated financial statement amount for the year ended December 31, 2019.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

Critical Audit Matters

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

Acquisition of OppenheimerFunds - Fair Value of Management Fee Contract Intangible Assets

As described in Note 2 to the consolidated financial statements, during 2019, the Company acquired Massachusetts Mutual Life Insurance Company's (MassMutual) asset management affiliate, OppenheimerFunds for total consideration of \$5,595.9 million, which resulted in recording \$4,907.0 million of indefinite-lived intangible assets, consisting primarily of contracts related to mutual funds, and \$255.0 million of finite-lived intangible assets. As disclosed by management, fair value of the management contracts is determined using an income approach where estimated future cash flows are discounted to arrive at a single present value amount. The income approach includes inputs that require significant management judgment, which for both indefinite-lived and finite-lived intangible assets included asset under management growth rates, projected effective fee rates, pre-tax profit margins, and discount rate. In addition, for finite-lived intangibles, the inputs that require significant judgment also included the useful lives of finite-lived intangible assets.

The principal considerations for our determination that performing procedures relating to the fair value of management fee contract intangible assets in the acquisition of OppenheimerFunds is a critical audit matter are the significant judgment by management when determining the fair value of the management contracts, which in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating audit evidence related to the significant assumptions, specifically, projected effective fee rates, the pre-tax profit margins, and discount rate. In addition, the audit effort involved the use of professionals with specialized skill and knowledge to assist in performing these procedures and evaluating the audit evidence obtained from these procedures.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the fair value of management fee contract intangible assets in the acquisition of OppenheimerFunds, including controls over development of the assumptions related to the valuation of the intangible assets, specifically, projected effective fee rates, the pre-tax profit margins, and discount rate. These procedures also included, among others, (i) reading the purchase agreement; (ii) testing management's process for estimating the fair value of intangible assets; (iii) evaluating the appropriateness of the valuation method; (iv) testing the completeness, accuracy and relevance of underlying data used in the estimate; and (v) evaluating the reasonableness of the aforementioned significant assumptions used by management, using professionals with specialized skill and knowledge to assist in doing so. Evaluating the reasonableness of the projected effective fee rates and the pre-tax profit margin involved considering (i) the past performance of the acquired business, (ii) the consistency with external market and industry data, and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Evaluating the reasonableness of the discount rate involved evaluating the cost of capital of the Company and comparable businesses and other industry factors.

Intangible Impairment Assessment - Indefinite-lived Management Contracts

As described in Notes 1 and 6 to the consolidated financial statements, the Company's intangible asset balance was \$7,358.3 million as of December 31, 2019, of which indefinite-lived management contracts totaled \$6,969.1 million. Management conducts an annual impairment test as of October 1 of each year, or more frequently if events or circumstances indicate that the carrying value of the intangible assets may be impaired. If a quantitative assessment is required, the impairment test consists of a comparison of the fair value of the intangible assets with their carrying values. Fair value is determined using an income approach where estimated future cash flows are discounted to arrive at a single present value amount. The income approach includes inputs that require significant management judgment, including asset under management growth rates, projected effective fee rates, pre-tax profit margins, and discount rates.

The principal considerations for our determination that performing procedures relating to the impairment assessment for indefinite-lived management contracts is a critical audit matter are the significant judgment by management when determining the fair value estimate, which in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures and evaluating audit evidence relating to management's significant assumptions, specifically the assets under management growth rates, effective fee rates, pre-tax profit margins, and discount rates.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to management's indefinite-lived management contracts impairment assessment, including controls over management's valuation of the Company's intangible assets and controls over development of the assumptions related to the valuation of the intangible assets, specifically, assets under management growth rates, projected effective fee rates, pre-tax profit margins, and discount rates. For indefinite-lived management contract intangible assets where a quantitative assessment was performed, these procedures also included, among others, (i) testing management's process for developing the fair value estimate; (ii) evaluating the appropriateness of the discounted cash flow model; (iii) testing the completeness, accuracy, and relevance of underlying data used in the model; and (iv) evaluating the reasonableness of the aforementioned significant assumptions used by management. Evaluating the reasonableness of the assets under management growth rates, projected effective fee rates, and the pre-tax profit margins involved considering (i) the current and past performance of the intangible assets, (ii) the consistency with external market and industry data, and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Evaluating the reasonableness of the discount rates involved evaluating the cost of capital of the Company and comparable businesses and other industry factors.

/s/ PricewaterhouseCoopers LLP Atlanta, Georgia March 2, 2020

We have served as the Company's auditor since 2013.

Invesco Ltd. Consolidated Balance Sheets

	As	of
\$ in millions, except per share data	December 31, 2019	December 31, 2018
ASSETS		
Cash and cash equivalents	1,049.0	1,147.7
Unsettled fund receivables	162.7	191.3
Accounts receivable	855.6	604.0
Investments	829.5	613.5
Assets of consolidated investment products (CIP):		
Cash and cash equivalents of CIP	652.2	657.7
Accounts receivable and other assets of CIP	172.9	110.8
Investments of CIP	7,808.0	6,213.5
Assets held for policyholders	10,835.6	11,384.8
Prepaid assets	144.0	127.1
Other assets	459.6	126.1
Property, equipment and software, net	583.5	468.7
Intangible assets, net	7,358.3	2,176.1
Goodwill	8,509.4	7,157.1
Total assets	39,420.3	30,978.4
LIABILITIES		
Accrued compensation and benefits	1,030.7	646.5
Accounts payable and accrued expenses	1,904.0	1,087.2
Liabilities of CIP:	,	,,,,,
Debt of CIP	6,234.6	5,226.0
Other liabilities of CIP	949.6	387.6
Policyholder payables	10,835.6	11,384.8
Unsettled fund payables	154.2	178.7
Long-term debt	2,080.3	2,408.8
Deferred tax liabilities, net	1,529.5	326.4
Total liabilities	24,718.5	21,646.0
Commitments and contingencies (See Note 19)	24,710.5	21,040.0
TEMPORARY EQUITY		
Redeemable noncontrolling interests in consolidated entities	383.5	396.2
PERMANENT EQUITY	363.5	370.2
Equity attributable to Invesco Ltd.:		
Preferred shares (\$0.20 par value; \$1,000 liquidation preference; 4.0 million authorized, issued and outstanding as of		
December 31, 2019 and zero as of December 31, 2018)	4,010.5	_
Common shares (\$0.20 par value; 1,050.0 million authorized; 566.1 million and 490.4 million shares issued as of December 31, 2019 and 2018, respectively)	113.2	98.1
Additional paid-in-capital	7,860.8	6,334.8
Treasury shares	(3,452.5)	(3,003.6
Retained earnings	5,917.8	5,884.5
Accumulated other comprehensive income/(loss), net of tax	(597.2)	(725.0
Total aguity attributable to Invesco I to	(587.3)	(735.0
Total equity attributable to Invesco Ltd.	13,862.5	8,578.8 357.4
Equity attributable to nonredeemable noncontrolling interests in consolidated entities Total permanent equity	455.8	
Total permanent equity	14,318.3	8,936.2
Total liabilities, temporary and permanent equity	39,420.3	30,978.4

Invesco Ltd. Consolidated Statements of Income

	Years	ended December 31	l ,
\$ in millions, except per common share data	2019	2018	2017
Operating revenues:			
Investment management fees	4,506.3	4,082.3	4,126.6
Service and distribution fees	1,276.5	968.5	852.8
Performance fees	102.2	56.9	113.3
Other	232.4	206.4	67.6
Total operating revenues	6,117.4	5,314.1	5,160.3
Operating expenses:			
Third-party distribution, service and advisory	1,893.0	1,608.2	1,486.5
Employee compensation	1,709.3	1,494.4	1,499.6
Marketing	135.6	134.8	121.8
Property, office and technology	494.1	410.5	364.6
General and administrative	404.2	324.4	306.9
Transaction, integration and restructuring	673.0	136.9	101.8
Total operating expenses	5,309.2	4,109.2	3,881.2
Operating income	808.2	1,204.9	1,279.1
Other income/(expense):			
Equity in earnings of unconsolidated affiliates	56.4	33.8	44.7
Interest and dividend income	28.5	21.3	13.4
Interest expense	(135.7)	(111.5)	(94.8)
Other gains and losses, net	65.7	(40.0)	49.5
Other income/(expense) of CIP, net	149.8	29.6	137.3
Income before income taxes	972.9	1,138.1	1,429.2
Income tax provision	(235.1)	(255.0)	(268.2)
Net income	737.8	883.1	1,161.0
Net (income)/loss attributable to noncontrolling interests in consolidated entities	(49.5)	(0.3)	(33.7)
Dividends on preferred shares	(123.6)	_	_
Net income attributable to Invesco Ltd.	564.7	882.8	1,127.3
Earnings per common share:			
-basic	\$1.29	\$2.14	\$2.75
-diluted	\$1.28	\$2.14	\$2.75
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Invesco Ltd. Consolidated Statements of Comprehensive Income

	Years	ended December	31,
\$ in millions	2019	2018	2017
Net income	737.8	883.1	1,161.0
Other comprehensive income/(loss), net of tax:			
Currency translation differences on investments in foreign subsidiaries	155.6	(327.1)	389.4
Actuarial gain/(loss) related to employee benefit plans	(10.8)	(13.0)	21.1
Other comprehensive income/(loss), net of tax	2.9	(0.5)	7.6
Other comprehensive income/(loss)	147.7	(340.6)	418.1
Total comprehensive income/(loss)	885.5	542.5	1,579.1
Comprehensive (income)/loss attributable to noncontrolling interests in consolidated entities	(49.5)	(0.3)	(33.7)
Dividends on preferred shares	(123.6)	_	_
Comprehensive (loss)/income attributable to Invesco Ltd.	712.4	542.2	1,545.4

Invesco Ltd. Consolidated Statements of Cash Flows

	rears	ended December	31,
\$ in millions	2019	2018	2017
Operating activities:			
Net income	737.8	883.1	1,161.0
Adjustments to reconcile net income to net cash provided by/(used in) operating activities:			
Amortization and depreciation	177.6	142.1	116.8
Common share-based compensation expense	207.5	172.4	175.3
Other gains and losses, net	(65.7)	40.0	(39.4)
Other (gains)/losses of CIP, net	(32.9)	55.1	(81.0)
Equity in earnings of unconsolidated affiliates	(56.4)	(33.8)	(44.7
Distributions from equity method investees	9.7	9.2	16.1
Changes in operating assets and liabilities:			
(Purchase)/sale of investments by CIP, net	(213.4)	(340.7)	(342.5
(Purchase)/sale of investments, net	167.0	(45.5)	174.9
(Increase)/decrease in receivables	934.3	944.4	(3,419.4)
Increase/(decrease) in payables	(748.9)	(997.5)	3,440.7
Net cash provided by/(used in) operating activities	1,116.6	828.8	1,157.8
Investing activities:			
Purchase of property, equipment and software	(124.3)	(102.5)	(111.7)
Purchase of investments by CIP	(5,244.8)	(4,488.3)	(5,709.1
Sale of investments by CIP	3,654.9	3,210.1	5,026.5
Purchase of investments	(229.1)	(153.5)	(177.7)
Sale of investments	123.3	123.1	177.3
Capital distribution from equity method investees	78.1	45.5	119.5
Collateral received/(posted), net	26.0	(63.8)	_
Purchase of business, net of cash acquired	290.5	(1,469.3)	(299.2)
Net cash provided by/(used in) investing activities	(1,425.4)	(2,898.7)	(974.4)
Financing activities:			
Purchases of treasury shares	(469.8)	(51.8)	(63.8)
Dividends paid - preferred	(123.6)	_	_
Dividends paid - common	(529.1)	(490.6)	(471.6)
Third-party capital invested into CIP	289.5	465.8	449.4
Third-party capital distributed by CIP	(144.1)	(117.0)	(105.4)
Borrowings of debt of CIP	3,348.8	2,463.8	2,812.4
Repayments of debt of CIP	(1,819.6)	(1,045.4)	(2,410.1)
Net borrowings/(repayments) under credit facility	(330.8)	330.8	(28.7)
Payment of contingent consideration	(20.0)	(15.6)	(13.2)
Net cash provided by/(used in) financing activities	201.3	1,540.0	169.0
Increase/(decrease) in cash and cash equivalents	(107.5)	(529.9)	352.4
Foreign exchange movement on cash and cash equivalents	17.7	(43.8)	99.8
Foreign exchange movement on cash and cash equivalents of CIP	(7.0)	(1.0)	4.3
Net cash inflows (outflows) upon consolidation/deconsolidation of CIP	(7.4)	(137.6)	(9.0)
Cash and cash equivalents, beginning of period	1,805.4	2,517.7	2,070.2
Cash and cash equivalents, end of period	1,701.2	1,805.4	2,517.7
Cash and cash equivalents	1,049.0	1,147.7	2,006.4
Cash and cash equivalents of CIP	652.2	657.7	511.3
Total cash and cash equivalents per consolidated statement of cash flows	1,701.2	1,805.4	2,517.7

Interest paid	(99.4)	(100.8)	(85.4)
Interest received	9.2	8.9	3.1
Taxes paid	(193.7)	(322.0)	(256.5)

Invesco Ltd. Consolidated Statements of Changes in Equity

Equity Attributable to Invesco Ltd.

\$ in millions, except per share data	Preferred Shares	Common Shares	Additional Paid-in- Capital	Treasury Shares	Retained Earnings	Accumulated Other Comprehensive Income	Total Equity Attributable to Invesco Ltd.	Nonredeemable Noncontrolling Interests in Consolidated Entities	Total Permanent Equity	Redeemable Noncontrolling Interests in Consolidated Entities/Temporary Equity
January 1, 2019		98.1	6,334.8	(3,003.6)	5,884.5	(735.0)	8,578.8	357.4	8,936.2	396.2
Net income	_	_	_	_	688.3	_	688.3	9.5	697.8	40.0
Other comprehensive income	_	_	_	_	_	147.7	147.7	_	147.7	_
Change in noncontrolling interests in consolidated entities, net	_	_	_	_	_	_	_	88.9	88.9	(52.7)
Issuance of shares	4,010.5	15.1	1,438.2	_	_	_	5,463.8	_	5,463.8	_
Dividends declared - preferred (\$30.81 per share)	_	_	_	_	(123.6)	_	(123.6)	_	(123.6)	_
Dividends declared - common (\$1.23 per share)	_	_	_	_	(531.4)	_	(531.4)	_	(531.4)	_
Employee common share plans:										
Common share-based compensation	_	_	207.5	_	_	_	207.5	_	207.5	_
Vested common shares	_	_	(118.3)	207.0	_	_	88.7	_	88.7	_
Other common share awards	_	_	(1.4)	8.9	_	_	7.5	_	7.5	_
Purchase of common shares				(664.8)		_	(664.8)		(664.8)	
December 31, 2019	4,010.5	113.2	7,860.8	(3,452.5)	5,917.8	(587.3)	13,862.5	455.8	14,318.3	383.5

Invesco Ltd. Consolidated Statements of Changes in Equity (continued)

Equity Attributable to Invesco Ltd.

\$ in millions, except per share data	Common Shares	Additional Paid-in- Capital	Treasury Shares	Retained Earnings	Accumulated Other Comprehensive Income	Total Equity Attributable to Invesco Ltd.	Nonredeemable Noncontrolling Interests in Consolidated Entities	Total Permanent Equity	Redeemable Noncontrolling Interests in Consolidated Entities/Temporary Equity
January 1, 2018	98.1	6,282.0	(2,781.9)	5,489.1	(391.2)	8,696.1	259.5	8,955.6	243.2
Adjustment for adoption of ASU 2016-01	_	_	_	3.2	(3.2)	_	_	_	_
January 1, 2018, as adjusted	98.1	6,282.0	(2,781.9)	5,492.3	(394.4)	8,696.1	259.5	8,955.6	243.2
Net income	_	_	_	882.8	_	882.8	28.3	911.1	(28.0)
Other comprehensive income	_	_	_	_	(340.6)	(340.6)	_	(340.6)	_
Change in noncontrolling interests in consolidated entities, net	_	_	_	_	_	_	69.6	69.6	181.0
Dividends declared - common (\$1.19 per share)	_	_	_	(490.6)	_	(490.6)	_	(490.6)	_
Employee common share plans:									
Common share-based compensation	_	172.4	_	_	_	172.4	_	172.4	_
Vested common shares	_	(120.6)	120.6	_	_	_	_	_	_
Other common share awards	_	1.0	6.6	_	_	7.6	_	7.6	_
Purchase of common shares	_	_	(348.9)	_	_	(348.9)	_	(348.9)	_
December 31, 2018	98.1	6,334.8	(3,003.6)	5,884.5	(735.0)	8,578.8	357.4	8,936.2	396.2

Invesco Ltd. Consolidated Statements of Changes in Equity (continued)

Equity Attributable to Invesco Ltd.

\$ in millions, except per share data	Common Shares	Additional Paid-in- Capital	Treasury Shares	Retained Earnings	Accumulated Other Comprehensive Income	Total Equity Attributable to Invesco Ltd.	Nonredeemable Noncontrolling Interests in Consolidated Entities	Total Permanent Equity	Redeemable Noncontrolling Interests in Consolidated Entities/Temporary Equity
January 1, 2017	98.1	6,227.4	(2,845.8)	4,833.4	(809.3)	7,503.8	108.0	7,611.8	283.7
Net income	_	_	_	1,127.3	_	1,127.3	4.5	1,131.8	29.2
Other comprehensive income (loss)	_	_	_	_	418.1	418.1	_	418.1	_
Change in noncontrolling interests in consolidated entities, net	_	_	_	_	_	_	147.0	147.0	(69.7)
Dividends declared - common (\$1.15 per share)	_	_	_	(471.6)	_	(471.6)	_	(471.6)	_
Employee common share plans:									
Common share-based compensation	_	175.3	_	_	_	175.3	_	175.3	_
Vested common shares	_	(123.0)	123.0	_	_	_	_	_	_
Other common share awards	_	2.3	4.7	_	_	7.0	_	7.0	_
Purchase of common shares	_	_	(63.8)	_	_	(63.8)	_	(63.8)	_
December 31, 2017	98.1	6,282.0	(2,781.9)	5,489.1	(391.2)	8,696.1	259.5	8,955.6	243.2

Invesco Ltd. Notes to the Consolidated Financial Statements

1. ACCOUNTING POLICIES

Corporate Information

Invesco Ltd. (Parent) and all of its consolidated entities (collectively, the company or Invesco) provide retail and institutional clients with an array of global investment management capabilities. The company operates globally and its sole business is investment management.

Accounting Pronouncements Recently Adopted

Leases. In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update 2016-02, "Leases" (Topic 842). Topic 842 requires that lessees recognize lease assets and lease liabilities on the balance sheet for all leases with a lease term greater than 12 months. The company adopted the leases standard on January 1, 2019 using the modified retrospective approach that did not require comparative financial statements to be adjusted. Periods prior to January 1, 2019 have been presented in accordance with legacy guidance (ASC Topic 840).

The company recorded a right-of-use asset of \$200.9 million and lease liability of \$251.5 million, primarily related to real estate operating leases on January 1, 2019 with no cumulative-effect adjustment to opening retained earnings. The impact of the adoption of the standard on the Consolidated Statements of Income for the year ended December 31, 2019 was not material. The company continues to recognize lease expenses on a straight-line basis over the lease term. The initial recognition of the right-of-use asset and lease liability represented a non-cash activity related to the statement of cash flows.

As of May 24, 2019, the company recorded an additional right-of-use asset of \$144.3 million and lease liability of \$144.0 million in connection with the OppenheimerFunds acquisition. These amounts are included in Other assets and Accounts payable and accrued expenses in the table of identified assets acquired and liabilities assumed in Note 2, "Business Combinations." The initial recognition of the right-of-use asset and lease liability represented a non-cash activity related to the statement of cash flows.

The package of three practical expedients applicable to the company have been elected which resulted in the company not having to reassess whether expired or existing contracts upon adoption contained a lease as well as retaining the historical classifications of the company's leases and initial direct costs. The company also elected the hindsight practical expedient in evaluating lessee options.

The company elected both at transition and on an ongoing basis, to combine lease and non-lease components in calculating the lease liability and right-of-use asset for all operating leases.

Pending Accounting Pronouncements

Financial Instruments. In June 2016, FASB issued Accounting Standards Update 2016-13, "Financial Instruments-Credit Losses: Measurement of Credit Losses on Financial Instruments" (ASU 2016-13). ASU 2016-13 amends guidance reporting credit losses for financial assets measured at amortized cost and available for sale securities. The new guidance adds an impairment model that is based on expected losses rather than incurred losses. ASU 2016-13 is effective for fiscal years and interim periods within those years beginning after December 15, 2019 and requires a modified retrospective approach to adoption. The company has determined that there will be no material impact upon adoption of this amendment.

Goodwill. In January 2017, the FASB issued Accounting Standards Update 2017-04, "Intangibles-Goodwill and Other: Simplifying the Test for Goodwill Impairment" (ASU 2017-04). The standard simplifies the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. Under the amendments of ASU 2017-04, an entity should perform its goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity will recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, but the loss cannot exceed the total amount of goodwill allocated to the reporting unit. ASU 2017-04 is effective for fiscal years and interim periods within those years beginning after December 15, 2019. The amendments require a prospective approach to adoption and early adoption is permitted for interim or annual goodwill impairment tests. The company intends to adopt the ASU 2017-04 on January 1, 2020 and apply the new standard for goodwill impairment testing beginning in fiscal year 2020.

Cloud Computing Arrangements. In August 2018, the FASB issued Accounting Standards Update 2018-15, "Intangibles-Goodwill and Other-Internal-Use Software: Customer's Accounting for Implementation Costs Incurred in a Cloud Computing

Arrangement that is a Service Contract" (ASU 2018-15). The standard update aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. ASU 2018-15 is effective for fiscal years beginning after December 15, 2019 and interim periods within those years and early adoption is permitted. The amendments allow either a retrospective or prospective approach to all implementation costs incurred after adoption. The company has determined that there will be no material impact upon adoption of this amendment.

Income Taxes. In December of 2019, the FASB issued Accounting Standards Update 2019-12, "Simplifying Accounting for Income Taxes" (ASU 2019-12). The standard is intended to simplify various aspects related to income taxes and removes certain exceptions to the general principles in Topic 740. ASU 2019-12 is effective for fiscal years beginning after December 15, 2020, with early adoption permitted. The company is currently in the process of evaluating the effects of this pronouncement on our consolidated financial statements.

Basis of Accounting and Consolidation

The Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States and with rules and regulations of the Securities and Exchange Commission and consolidate the financial statements of the Parent and all of its controlled subsidiaries. In the opinion of management, the Consolidated Financial Statements reflect all adjustments, consisting of normal recurring accruals, which are necessary for the fair presentation of the financial condition and results of operations for the periods presented. All significant intercompany transactions, balances, revenues and expenses are eliminated upon consolidation.

The company provides investment management services to, and has transactions with, various retail mutual funds and similar entities, private equity funds, real estate funds, fund-of-funds, collateralized loan obligations (CLOs), and other investment products sponsored by the company in the normal course of business for the investment of client assets. The company serves as the investment manager, making day-to-day investment decisions concerning the assets of these products.

In addition to consolidating the financial statements of the Parent and all of its controlled subsidiaries, the Consolidated Financial Statements include the consolidation of certain investment products (Consolidated Investment Products or CIP) that meet the definition of either a voting rights entity (VOE), if the company is deemed to have a controlling financial interest in the fund, or a variable interest entity (VIE), if the company has been deemed to be the primary beneficiary of the fund.

Certain of these investment products, typically CLOs, funds that are structured as partnership entities (such as private equity funds, real estate funds, and fund-of-funds), and certain non-U.S. mutual funds, are considered, for accounting and consolidation analysis purposes, to be VIEs if the VIE criteria are met. A VIE, in the context of the company and its managed funds, is a fund that does not have sufficient equity to finance its operations without additional subordinated financial support, or a fund for which the risks and rewards of ownership are not directly linked to voting interests. If the company is deemed to have the power to direct the activities of the fund that most significantly impact the fund's economic performance, and the obligation to absorb losses/right to receive benefits from the fund that could potentially be significant to the fund, then the company is deemed to be the fund's primary beneficiary and is required to consolidate the fund.

The company's economic risk with respect to each investment in a CIP is limited to its equity ownership and any uncollected management and performance fees. See Note 20, "Consolidated Investment Products," for additional information regarding the impact of CIP.

Consolidation Analysis

The company inventories its funds by vehicle type on a quarterly basis. The company assesses modifications to existing funds on an ongoing basis to determine if a significant reconsideration event has occurred. The consolidation analysis includes a detailed review of the terms of the fund's governing documents and a comparison of the significant terms against the consolidation criteria in ASC Topic 810, including a determination of whether the fund is a VIE or a VOE. Seed money and co-investments in managed funds in which the company has determined that it is the primary beneficiary or in which the company has a controlling financial interest are consolidated if the impact of doing so is deemed material. If the company subsequently determines that it no longer controls the managed funds in which it has invested, the company will deconsolidate the funds. If there are any remaining holdings in the managed funds or if the managed funds are not required to be consolidated, the investment is accounted for as described in the "Investments" accounting policy below.

Upon consolidation of an investment product, the company's gain or loss on its investment (before consolidation) eliminates with the company's common share of the offsetting loss or gain in the fund. Upon consolidation of directly held CLOs, the company's and the funds' accounting policies are effectively aligned, resulting in the reclassification of the company's gain or

loss (representing the changes in the market value of the company's holding in the consolidated fund) from other comprehensive income into other gains/losses. The net impact from consolidation of funds previously carried as available-for-sale investments to net income attributable to Invesco Ltd. in each period primarily represents the changes in the value of the company's holdings in its consolidated CLOs.

Consolidation of CLOs

A significant portion of VIEs are CLOs. CLOs are investment vehicles created for the sole purpose of issuing collateralized loan instruments that offer investors the opportunity for returns that vary with the risk level of their investment. The notes issued by the CLOs are backed by diversified collateral asset portfolios consisting primarily of loans or structured debt. For managing the collateral of the CLO entities, the company earns investment management fees, including in some cases subordinated management fees, as well as contingent performance fees. The company has invested in certain of the entities, generally taking a portion of the unrated, junior subordinated position. The company's investments in CLOs are generally subordinated to other interests in the entities and entitle the company and other subordinated tranche investors to receive the residual cash flows, if any, from the entities. The company's subordinated interest can take the form of (1) subordinated notes, (2) income notes or (3) preference/preferred shares. The company has determined that, although the junior tranches have certain characteristics of equity, they should be accounted for and disclosed as debt on the company's Consolidated Balance Sheets, as the subordinated and income notes have a stated maturity indicating a date for which they are mandatorily redeemable. The preference shares are also classified as debt, as redemption is required only upon liquidation or termination of the CLO and not of the company.

The company determined that it was the primary beneficiary of certain CLOs, as it has the power to direct the activities of the CLOs that most significantly impact the CLOs' economic performance, and the obligation to absorb losses/right to receive benefits from the CLOs that could potentially be significant to the CLOs. The primary beneficiary assessment includes an analysis of the rights of the company in its capacity as investment manager. In some CLOs, the company's role as investment manager provides that the company contractually has the power, as defined in ASC Topic 810, to direct the activities of the CLOs that most significantly impact the CLOs' economic performance, such as managing the collateral portfolio and the CLOs' credit risk. In other CLOs, the company determined that it does not have this power in its role as investment manager due to certain rights held by other investors in the products or restrictions that limit the company's ability to manage the collateral portfolio and its credit risk. Additionally, the primary beneficiary assessment includes an analysis of the company's rights to receive benefits and obligations to absorb losses associated with its first loss position and management/performance fees.

The company has elected the fair value option under ASC Topic 825-10-25 to measure the assets of all consolidated CLOs at fair value. All of the investments held by VIEs are presented at fair value in the company's Consolidated Balance Sheets at December 31, 2019 and 2018. The notes issued by consolidated CLOs are measured under the measurement alternative discussed in ASU 2014-13, "Measuring the Financial Assets and the Financial Liabilities of a Consolidated Collateralized Financing Entity," which requires that the reporting entity measure both the financial assets and the fair value of the financial liabilities of the CLO using the more observable of the fair value of the financial assets and the fair value of the financial fair value of the financial displication. The company's earnings from consolidated CLOs reflect changes in fair value of its own economic interests in the CLOs. Gains or losses on assets and liabilities of the CLOs are not attributed to noncontrolling interests but are offset in other gains/(losses) of CIP.

Consolidation of Private Equity, Real Estate, and Fund-of-Funds

The company also consolidates certain private equity funds and from time to time real estate funds that are structured as partnerships in which the company is the general partner receiving a management and/or performance fee. Private equity investments made by the underlying funds consist of direct investments in, or fund investments in other private equity funds that hold direct investments in, equity or debt securities of operating companies that are generally not initially publicly traded. Private equity funds are considered investment companies and are therefore accounted for under ASC Topic 946, "Financial Services - Investment Companies." The company has retained the specialized industry accounting principles of these investment products in its Consolidated Financial Statements. See Note 20, "Consolidated Investment Products," for additional details.

Consolidation basis

The Consolidated Financial Statements have been prepared primarily on the historical cost basis; however, certain items are presented using other bases such as fair value, where such treatment is required or voluntarily elected, as discussed above. The financial statements of subsidiaries, with the exception of certain CIP, are prepared for the same reporting period as the Parent and use consistent accounting policies, which, where applicable, have been adjusted to U.S. GAAP from local generally accepted accounting principles or reporting regulations. The financial information of certain CIP is included in the company's

Consolidated Financial Statements on a one-month or a three-month lag based upon the availability of fund financial information. Noncontrolling interests in consolidated entities represents the interests in certain entities consolidated by the company either because the company has control over the entity or has determined that it is the primary beneficiary, but of which the company does not own all of the entity's equity. To the extent that noncontrolling interests represent equity which is redeemable or convertible for cash or other assets at the option of the equity holder, these are deemed to represent temporary equity, and are classified as equity attributable to redeemable noncontrolling interests in the Consolidated Balance Sheets. Nonredeemable noncontrolling interests are classified as a component of permanent equity.

Use of Estimates

In preparing the Consolidated Financial Statements, management is required to make estimates and assumptions that affect reported revenues, expenses, assets, liabilities, and disclosure of contingent liabilities. The primary estimates and assumptions made relate to goodwill and intangible impairment, certain investments which are carried at fair value, post-employment benefit plan obligations, and taxes. Additionally, estimation is involved when determining investment and debt valuation for certain CIP; however, changes in the fair values of these amounts are largely offset by noncontrolling interests. Use of available information and application of judgment are inherent in the formation of estimates. Actual results in the future could differ from such estimates and the differences may be material to the Consolidated Financial Statements.

Acquisition Accounting

In accordance with ASC Topic 805, "Business Combinations," each acquisition is evaluated to determine if it meets the definition of a business. If the acquisition does not meet the definition of a business, it is accounted for as an asset acquisition. For an asset acquisition, the cost of the acquisition is allocated to the individual assets acquired and liabilities assumed on a relative fair value basis. Transaction costs are included in the cost of the acquisition and no goodwill is recognized. If the acquisition does meet the definition of a business, it is accounted for as a business combination. For a business combination, any excess of the cost of the acquisition over the fair values of the identifiable net assets acquired attributable to the company is recognized as goodwill. With certain exceptions, 100% of the fair values of assets acquired, liabilities assumed, and noncontrolling interests is recognized in acquisitions of less than a 100% controlling interest when the acquisition constitutes a change in control of the acquired entity. Additionally, when partial ownership in an acquire is obtained and it is determined that the company controls the acquiree, the assets acquired, liabilities assumed and any noncontrolling interests are recognized and consolidated at 100% of their fair values at that date, regardless of the percentage ownership in the acquiree. As goodwill is calculated as a residual, all goodwill of the acquired business, not just the company's common share, is recognized under this "full-goodwill" approach. Noncontrolling interests are stated at the noncontrolling shareholder's proportion of the pre-acquisition carrying values of the acquired net assets. The results of entities acquired or sold during the year are included from or to the date control changes.

Contingent consideration obligations that are elements of consideration transferred are recognized as of the acquisition date as part of the fair value transferred in exchange for the acquired business. Acquisition-related costs incurred in connection with a business combination are expensed as transaction, integration and restructuring costs.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash held at banks and short-term investments with a maturity upon acquisition of three months or less. Cash and cash equivalents of CIP are not available for general use by the company.

Cash balances may not be readily accessible to the Parent due to capital adequacy requirements of certain of our subsidiaries. These and other similar provisions of applicable laws and regulations may have the effect of limiting withdrawals of capital, repayment of intercompany loans and payment of dividends by such entities. All of our regulated EU and UK subsidiaries are subject to consolidated capital requirements under applicable EU and UK requirements, including those arising from the EU's Capital Requirements Directive and the UK's Internal Capital Adequacy Assessment Process (ICAAP), and capital is maintained within this European sub-group to satisfy these regulations. We meet these requirements in part by holding cash and cash equivalents. This retained cash can be used for general business purposes in the European sub-group in the countries where it is located. Due to the capital restrictions, the ability to transfer cash between certain jurisdictions may be limited. In addition, transfers of cash between international jurisdictions may have adverse tax consequences. The company is in compliance with all regulatory minimum net capital requirements.

Unsettled Fund Receivables and Payables

The company records unsettled fund receivables from underlying fund investors in certain fund products outside the U.S. when these investors place unsettled investments into the funds. Additionally, the company records unsettled fund receivables from certain non-U.S. funds during the settlement period when underlying fund investors redeem their holdings. Settlement periods for both receivables from underlying investors and funds are generally less than four days. Additionally, in its capacity as sponsor of UITs, the company records receivables from brokers, dealers, and clearing organizations for unsettled sell trades of securities and UITs in addition to receivables from customers for unsettled sell trades of UITs. The company also records payables to brokers, dealers, and clearing organization for unsettled buy trades of securities and UITs in addition to payables to customers for unsettled buy trades of securities and UITs. The presentation of the unsettled fund receivables and substantially offsetting payables at trade date reflects the legal relationship between the underlying investor and the company.

Accounts Receivable and Payable

Accounts receivable and payable are recorded at their original invoice amounts. Accounts receivable are also recorded less any allowance for uncollectible amounts.

Investments

The majority of the company's investment balances relate to balances held in affiliated funds. In the normal course of business, the company invests in various types of affiliated investment products, either as "seed money" or as longer-term investments alongside third-party investors, typically referred to as "co-investments." Seed money investments are investments held in Invesco managed funds with the purpose of providing capital to the funds during their development periods to allow the funds to achieve critical mass, establish their track records, and obtain third-party investments. Seed money may also be held for regulatory purposes in certain jurisdictions. Co-investments are often required of the investment manager by third-party investors in closed-ended funds to demonstrate an aligning of the investment manager's interests with those of the third-party investors. The company also invests in affiliated funds in connection with its deferred compensation plans, whereby certain employees defer portions of their annual bonus into funds.

Investments are categorized as equity investments, available-for-sale investments, equity method investments, foreign time deposits, and other investments. See Note 4 "Investments" for additional details.

Equity investments include seed money, investments held to settle the company's deferred compensation plan liabilities, and other equity securities. Equity investments are securities bought and held principally for the purpose of selling them in the near term. Equity investments are measured at fair value. Gains or losses arising from changes in the fair value of equity investments are included in income.

Available-for-sale investments include co-investments in affiliated CLOs and investments in other debt securities. Available-for-sale investments are measured at fair value. Gains or losses arising from changes in the fair value of available-for-sale investments are recognized in accumulated other comprehensive income, net of tax, until the investment is sold or otherwise disposed of, or if the investment is determined to be other-than-temporarily impaired, at which time the cumulative gain or loss previously reported in equity is included in income. The specific identification method is used to determine the realized gain or loss on securities sold or otherwise disposed.

Equity method investments include investments over which the company is deemed to have significant influence, including corporate joint ventures and non-controlled entities in which the company's ownership is between 20 and 50 percent, and co-investments in certain managed funds generally structured as partnerships or similar vehicles. Investments in joint ventures are investments jointly controlled by the company and external parties. Co-investments in managed funds structured as partnerships or similar vehicles include private equity, real estate, and fund-of-funds. The equity method of accounting requires that the investment is initially recorded at cost, including any excess value paid over the book value of the investment acquired. The carrying amount of the investment is increased or decreased to recognize the company's common share of the after-tax profit or loss of the investee after the date of acquisition and is decreased as dividends are received. Distributions received from equity method investees are classified in the Consolidated Statements of Cash Flows as either operating or investing activities based on the nature of the distribution. The proportionate share of income or loss is included in equity in earnings of unconsolidated affiliates in the Consolidated Statements of Income, and the proportionate share of other comprehensive income or loss is included in accumulated other comprehensive income in the Consolidated Balance Sheets.

Fair value is determined using a valuation hierarchy (discussed in Note 3, "Fair Value of Assets and Liabilities"), generally by reference to an active trading market, using quoted closing or bid prices as of each reporting period end. When a readily ascertainable market value does not exist for an investment, the fair value is calculated based on the expected cash flows of its

underlying net asset base, taking into account applicable discount rates and other factors. Judgment is used to ascertain if a formerly active market has become inactive and in determining fair values when markets have become inactive.

Assets Held for Policyholders and Policyholder Payables

One of the company's subsidiaries, Invesco Pensions Limited, is an insurance entity that was established to facilitate retirement savings plans in the UK. The entity holds assets that are managed for its clients on its balance sheet with an equal and offsetting liability to the policyholders, which is linked to the value of the investments. The investments are legally segregated and are generally not subject to claims that arise from any of the company's other businesses. Investments and policyholder payables held by this business meet the definition of financial instruments and are carried in the Consolidated Balance Sheets as separate account assets and liabilities at fair value in accordance with ASC Topic 944, "Financial Services - Insurance." Changes in fair value are recorded and offset to zero in the Consolidated Statements of Income in other operating revenues. Management fees earned from policyholder investments are accounted for as described in the company's revenue recognition accounting policy.

Deferred Sales Commissions

Mutual fund shares sold without a sales commission at the time of purchase typically have an asset-based fee (12b-1 fee) that is charged to the fund over a period of years and a contingent deferred sales charge (CDSC). The CDSC is an asset-based fee that is charged to investors that redeem during a stated period. Commissions paid at the date of sale to brokers and dealers for sales of mutual funds that have a CDSC are capitalized and amortized over a period not to exceed the redemption period of the related fund (generally up to six years). The deferred sales commission asset, which is included in prepaid assets in our Consolidated Balance Sheets, is reviewed periodically for impairment by reviewing the recoverability of the asset based on estimated future fees to be collected.

Property, Equipment, Software and Depreciation

Property, equipment and software includes owned property, leasehold improvements, computer hardware/software and other equipment and is stated at cost less accumulated depreciation or amortization and any previously recorded impairment in value. Expenditures for major additions and improvements are capitalized; minor replacements, maintenance and repairs are charged to expense as incurred. Amounts incurred are presented as work-in-progress until the construction or purchase of the property and equipment is substantially complete and ready for its intended use, which, at that point, will begin to be depreciated or amortized. Depreciation is provided on property and equipment at rates calculated to write off the cost, less estimated residual value, of each asset on a straight-line basis over its expected useful life: owned buildings over 50 years, leasehold improvements over the shorter of the lease term or useful life of the improvement; and computers and other various equipment between three and seven years. Purchased and internally developed software is capitalized where the related costs can be measured reliably, and it is probable that the asset will generate future economic benefits, and amortized into operating expenses on a straight-line basis over its useful life, generally over five to seven years. The company capitalizes qualified internal and external costs incurred during the application development stage for internally developed software in accordance with ASC Topic 350-40, "Intangibles - Goodwill and Other - Internal-Use Software." The company reevaluates the useful life determination for property and equipment each reporting period to determine whether events and circumstances warrant a revision to the remaining useful life. On sale or retirement, the asset cost and related accumulated depreciation are removed from the Consolidated Financial Statements and any related gain or loss is reflected in income.

The carrying amounts of property and equipment are reviewed for impairment when events or changes in circumstances indicate that the carrying values may not be recoverable. At each reporting date, an assessment is made for any indication of impairment. If an indication of impairment exists, recoverability is tested by comparing the carrying amount of the asset to the net undiscounted cash flows expected to be generated from the asset. If those net undiscounted cash flows do not exceed the carrying amount (i.e. the asset is not recoverable), the next step would be performed, which is to determine the fair value of the asset and record an impairment charge, if any.

Intangible Assets

Intangible assets identified on the acquisition of a business are capitalized separately from goodwill if the fair value can be measured reliably on initial recognition (transaction date). Intangible assets consist primarily of mutual fund and other client management contracts, customer relationships and distribution agreements. Management contracts that are managed and operated on a single global platform are reviewed in aggregate as one unit of valuation and are considered interchangeable because investors may freely transfer between funds. Similarly, cash flows generated by new funds added to the global platform are included when determining the fair value of the intangible asset.

Intangible assets that are determined to be finite-lived, are amortized and recorded as transaction, integration and restructuring expenses on a straight-line basis over their useful lives, from two to twelve years, which reflects the pattern in which the economic benefits are realized. The company reevaluates the useful life determination for intangible assets each reporting period to determine whether events and circumstances warrant a revision to the remaining useful life or there is an indication of impairment. If there is an indication of impairment, management will perform an impairment analysis. The company considers its own assumptions, which require management's judgment, about renewal or extension of the term of the arrangement, consistent with its expected use of the asset. A change in the useful life of an intangible asset could have a significant impact on the company's amortization expense.

Where evidence exists that the underlying arrangements have a high likelihood of continued renewal at little or no cost to the company, the intangible asset is assigned an indefinite life and reviewed for impairment on an annual basis. Intangible assets not subject to amortization are tested for impairment annually as of October 1 or more frequently if events or changes in circumstances indicate that the asset might be impaired. When testing intangible assets for impairment, management has the option to first perform a qualitative assessment. If the qualitative assessment indicates that an impairment may be likely or management elected to not perform the qualitative assessment, management performs a quantitative test to determine the fair value of the intangible assets and compares the fair value with its carrying amount. If the carrying amount of the intangible asset exceeds its fair value, an impairment loss is recognized into transaction, integration and restructuring expenses in an amount equal to that excess. Fair value is generally determined using an income approach where estimated future cash flows are discounted to arrive at a single present value amount.

Goodwill

Goodwill represents the excess of cost over the identifiable net assets of businesses acquired and is recorded in the functional currency of the acquired entity. Goodwill is recognized as an asset and is reviewed for impairment annually as of October 1 and between annual tests when events and circumstances indicate that impairment may have occurred. The company has determined that it has one reporting unit for goodwill impairment testing purposes, the consolidated Invesco Ltd. single operating segment, which is consistent with internal management reporting and management's oversight of operations. The company evaluated the components of its business, which are business units one level below the operating segment level in making this determination. The company's operating segment represents one reporting unit because all of the components are similar due to the common nature of products and services offered, type of clients, methods of distribution, manner in which each component is operated, extent to which they share assets and resources, and the extent to which they support and benefit from common product development efforts. Traditional profit and loss measures are not produced and therefore not reviewed by component management for any of the components. Furthermore, the financial information that is available by component is not sufficient for purposes of performing a discounted cash flow analysis at the component level in order to test goodwill for impairment at that level. As none of the company's components are reporting units, the company has determined that its single operating segment, investment management, is also its single reporting unit.

ASU 2011-08 allows the option to first qualitatively assess whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. If not utilized, a quantitative impairment test is performed at the reporting unit level, which consists of a two-step approach. If the carrying amount of the reporting unit exceeds its fair value (the first step of the goodwill impairment test), then the second step is performed to determine if goodwill is impaired and to measure the amount of the impairment loss, if any. The second step of the goodwill impairment test compares the implied fair value of goodwill with the carrying amount of goodwill. If the carrying amount of goodwill exceeds the implied fair value of goodwill, an impairment loss is recognized in an amount equal to that excess.

The principal method of determining fair value of the reporting unit is an income approach where estimated future cash flows are discounted to arrive at a single present value amount. The discount rate used is derived based on the time value of money and the risk profile of the stream of future cash flows. Recent results and projections based on expectations regarding revenue, expenses, capital expenditure and acquisition earn out payments produce a present value for the reporting unit. The present value produced for the reporting unit is the fair value of the reporting unit. This amount is reconciled to the company's market capitalization to determine an implied control premium, which is compared to an analysis of historical control premiums experienced by peer companies over a long period of time to assess the reasonableness of the fair value of the reporting unit.

The company also utilizes a market approach to provide a secondary and corroborative fair value of the reporting unit by using comparable company and transaction multiples to estimate values for our single reporting unit. Discretion and judgment are required in determining whether the transaction data available represents information for companies of comparable nature, scope and size. The results of the secondary market approach to provide a fair value estimate are not combined or weighted

with the results of the income approach described above but are used to provide an additional basis to determine the reasonableness of the income approach fair value estimate

Debt and Financing Costs

Debt issuance costs related to the issuance of Senior Notes are presented as a deduction from the carrying amount of the related debt liability. Debt issuance costs related to the company's credit facility are presented as a deferred asset within Other Assets on the company's Consolidated Balance Sheets. After initial recognition, debt issuance costs are measured at amortized cost. Finance charges and debt issuance costs are amortized over the term of the debt using the effective interest method. Interest charges are recognized in the Consolidated Statements of Income in the period in which they are incurred.

Revenue Recognition

Revenue is measured and recognized based on the five step process outlined in ASC 606, Revenue from Contracts with Customers. Revenue is determined based on the transaction price negotiated with the customer, net of discounts, value added tax and other sales-related taxes.

Investment management fees are derived from providing professional services to manage client accounts and sponsored investment vehicles. Investment management services are satisfied over time as the services are provided and are typically based upon a percentage of the value of the client's assets under management. Investment management fees for certain arrangements include fees for distribution and administrative-related services. Any fees collected in advance are deferred and recognized as income over the period in which services are rendered.

Service fees are earned for services rendered relating to fund accounting, transfer agent, administrative and/or other maintenance activities performed for sponsored investment vehicles. Service fees are generally based upon a percentage of the value of the assets under management. Service fees are also earned from the delivery of digital solutions to our customers. All of these services are transferred over time.

The company provides distribution services to certain sponsored investment vehicles. Fees are generally earned based upon a percentage of the value of the assets under management, as the fee amounts do not crystallize completely upon the sale of a share or unit. Accordingly, the distribution fee revenues are recognized over time as the amount of the fees becomes known. For example, U.S. distribution fees can include 12b-1 fees earned from certain mutual funds to cover allowable sales and marketing expenses for those funds and also include asset-based sales charges paid by certain mutual funds for a period of time after the sale of those funds. Generally, retail products offered outside of the U.S. do not generate a separate distribution fee; the quoted management fee rate is inclusive of these services. The company also has certain arrangements whereby the distribution fees are paid upon the subscription or redemption of a share or unit.

Performance fee revenues associated with retail funds will fluctuate from period to period and may not correlate with general market changes, since most of the fees are driven by relative performance to the respective benchmark rather than by absolute performance. Performance fee revenues, including carried interests and performance fees related to partnership investments and separate accounts, are generated on certain management contracts when performance hurdles are achieved. Such fee revenues are recorded in operating revenues when the contractual performance criteria have been met and when it is probable that a significant reversal of revenue recognized will not occur in future reporting periods. Cash receipt of performance fees generally occurs after the performance fee revenue is earned; however, the company may receive, from time-to-time, cash distributions of carried interest before any revenue is earned. Such distributions are reflected as deferred carried interest liabilities within accounts payable and accrued expenses on the Consolidated Balance Sheets. Given the uniqueness of each fee arrangement, performance fee contracts are evaluated on an individual basis to determine the timing of revenue recognition. Performance fees typically arise from investment management activities that were initially undertaken in prior reporting periods.

Other revenues include fees derived primarily from transaction commissions earned upon the sale of new investments into certain of our funds and fees earned upon the completion of transactions in our real estate and private equity asset groups. Real estate transaction fees are derived from commissions earned through the buying and selling of properties. Private equity transaction fees include commissions associated with the restructuring of, and fees from providing advice to, portfolio companies held by the funds. These transaction fees are recorded in the Consolidated Statements of Income on the date when Invesco's services are complete which typically coincides with when the transactions are legally complete.

Principal versus Agent

The company utilizes third party service providers to fulfill certain performance obligations in its revenue agreements. Generally, the company is deemed to be the principal in these arrangements, because the company controls the investment management and other related services before they are transferred to customers. Such control is evidenced by the company's primary responsibility to customers, the ability to negotiate the third party contract price and select and direct third party service providers, or a combination of these factors. Therefore, investment management and service and distribution fee revenues and the related third party distribution, service and advisory expenses are reported on a gross basis.

Third-party distribution, service and advisory expenses include periodic "renewal" commissions paid to brokers and independent financial advisors for the continuing oversight of their clients' assets over the time they are invested and are payments for the servicing of client accounts. Renewal commissions are calculated based upon a percentage of the AUM value and apply to much of the company's non-U.S. retail operations. As discussed above, the revenues from the company's U.S. retail operations include 12b-1 distribution fees, which are largely passed through to brokers who sell the funds as third-party distribution expenses along with additional marketing support distribution costs. Both the revenues and the costs are dependent on the underlying AUM of the brokers' clients. Third-party distribution expenses also include the amortization of upfront commissions paid to broker-dealers for sales of fund shares with a contingent deferred sales charge (a charge levied to the investor for client redemption of AUM within a certain contracted period of time). The upfront distribution commissions are amortized over the redemption period. Also included in third-party distribution, service and advisory expenses are sub-transfer agency fees that are paid to third parties for processing client common share purchases and redemptions, call center support and client reporting. These costs are reimbursed by the related funds.

Common Share-Based Compensation

The company issues equity-settled common share-based awards to certain employees, which are measured at fair value at the date of grant. The fair value determined at the grant date is expensed, based on the company's estimate of common shares that will eventually vest, on a straight-line or accelerated basis over the vesting period. The initial forfeiture rate applied to most grants is 3% per year, based upon the company's historical experience with respect to employee turnover. Fair value for the common share awards representing equity interests identical to those associated with common shares traded in the open market is determined using the market price at the date of grant.

Deferred Compensation

The company grants deferred cash awards to certain employees which are linked in value to investment products. During the vesting period, employees earn a return linked to the appreciation or depreciation of specified investments. The company currently hedges economically the exposure to market movements on certain of these awards by holding the investments on its balance sheet and through a total return swap financial instrument. The company recognizes as compensation expense the value of the liability to employees, including the appreciation or depreciation of the liability, over the award's vesting period in proportion to the vested amount of the award. The company immediately recognizes the full value of the related investment, and any subsequent appreciation or depreciation of the investment, in Other gains and losses, net.

Pensions

For defined contribution plans, contributions payable related to the accounting period are charged to the income statement. For defined benefit plans, the cost of providing benefits is separately determined for each plan using the projected unit credit method, based on actuarial valuations performed at each balance sheet date. The company's annual measurement date is December 31. A portion of actuarial gains and losses is recognized through the income statement if the net cumulative unrecognized actuarial gain or loss at the end of the prior period exceeds the greater of 10.0% of the present value of the defined benefit obligation (before deducting plan assets) at that date and 10.0% of the fair value of any plan assets.

Advertising Costs

The company expenses the cost of all advertising and promotional activities as incurred. The company incurred advertising costs of \$35.7 million for the year ended December 31, 2019 (December 31, 2018: \$35.2 million; December 31, 2017: \$35.9 million). These amounts are included in marketing expenses in the Consolidated Statements of Income.

Leases

The company adopted Topic 842, Leases, on January 1, 2019 using the modified retrospective approach that did not require comparative period financial statements to be adjusted. Periods prior to January 1, 2019 have been presented in accordance with legacy guidance (Topic 840).

Refer to the Recently Adopted Accounting Standards section for additional information. The company determines whether an arrangement is a lease at contract inception. Lease liabilities and right-of-use assets are recognized on the lease commencement date based on the net present value of fixed lease payments over the lease term. The company includes options to extend or terminate a lease within the lease term when it is reasonably certain the option will be exercised. Leases with an initial term of 12 months or less are not recorded on the balance sheet. Lease liabilities represent an obligation to make lease payments arising from a lease while right-of-use assets represent a right to use an underlying asset during the lease term. Right-of-use assets exclude capital improvement funding and other lease concessions provided by the landlord.

As the company's leases generally do not have a readily determinable implicit rate, the company uses its incremental borrowing rate to determine the present value of fixed lease payments based on information available at the lease commencement date. Fixed lease expense for operating leases are generally recognized on a straight-line basis over the lease term. The company combines lease components and non-lease components such as fixed maintenance and other costs into a single lease component, which results in the capitalization of all fixed payments within lease liabilities and right-of-use assets. Variable lease payments, such as variable maintenance costs or payments based on an index rate or usage, are expensed as incurred and excluded from lease liabilities and right-of-use assets.

Taxation

Income taxes are provided for in accordance with ASC Topic 740, "Income Taxes" (ASC Topic 740). Deferred tax assets and liabilities are recorded for temporary differences between the tax basis of assets and liabilities and the reported amounts in the Consolidated Financial Statements, using the statutory tax rates in effect for the year in which the differences are expected to reverse. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the results of operations in the period that includes the enactment date. A valuation allowance is recorded to reduce the carrying amounts of deferred tax assets to the amount that is more likely than not to be realized. The company reports a liability for unrecognized tax benefits resulting from uncertain tax positions taken or expected to be taken in a tax return. The company recognizes interest and penalties, if any, related to unrecognized tax benefits in income tax expense.

Certain income tax effects of the 2017 Tax Act are reflected in our financial results in accordance with Staff Accounting Bulletin No. 118 (SAB 118), which provides SEC staff guidance regarding the application of ASC Topic 740 for both the 2017 and 2018 reporting periods. See Note 16, "Taxation," for further details and additional discussion on amounts recorded for the 2017 Tax Act.

Earnings Per Common Share

Basic and diluted earnings per common share are computed using the two-class method, which treats unvested restricted common shares as if they were a separate class of common shares. Under the two-class method, net income attributable to Invesco Ltd. is adjusted for the allocation of earnings to the unvested restricted common shares. In addition, the weighted-average common shares outstanding is adjusted for unvested restricted common shares. There is no difference between the calculated earnings per common share amounts attributable to Invesco Ltd. and the calculated earnings per common share amounts under the two-class method.

Comprehensive Income

The company's other comprehensive income/(loss) consists of foreign currency translation adjustments, employee benefit plan liability adjustments, changes in unrealized gains and losses and reclassification adjustments for realized gains/(losses) on debt securities classified as available-for-sale, and the company's share of other comprehensive income of equity method investments. Such amounts are recorded net of applicable taxes.

Translation of Foreign Currencies

Transactions in foreign currencies (currencies other than the functional currencies of the company's subsidiaries) are recorded at the rates of exchange prevailing on the dates of the transactions. At each balance sheet date, monetary assets and liabilities that are denominated in foreign currencies are remeasured into the functional currencies of the company's subsidiaries at the rates prevailing at the balance sheet date. Gains and losses arising on revaluation are included in the Consolidated Statements of Income.

The company's reporting currency and the functional currency of the Parent is U.S. Dollars. On consolidation, the assets and liabilities of company subsidiary operations whose functional currencies are currencies other than the U.S. Dollar ("foreign" operations) are translated at the rates of exchange prevailing at the balance sheet date. Consolidated Statements of Income amounts are translated at the weighted average rates for the year, which approximate actual exchange rates. Exchange differences arising on the translation of the net assets of foreign operations are taken directly to accumulated other comprehensive income in equity until the disposal of the net investment, at which time they are recognized in the Consolidated Statements of Income. Goodwill and other fair value adjustments arising on acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and are translated at rates of exchange prevailing at the balance sheet date.

The company has in the past purchased several put option contracts to hedge economically foreign currency risk on the translation of its Pound Sterling- and Euro-denominated earnings into U.S. Dollars. See Note 3, "Fair Value of Assets and Liabilities," for additional information. Additionally, the company may, from time to time, designate certain intercompany debt as non-derivative net investment hedging instruments against foreign currency exposure related to its net investment in foreign operations. See Note 11, "Other Comprehensive Income/(Loss)." In the management of its cross-border fund operations, foreign currency forward and swap contracts are purchased daily to hedge against foreign exchange rate movements during the four-day client money settlement period. Certain CIP may also utilize such instruments.

2. BUSINESS COMBINATIONS

On May 24, 2019, the company acquired Massachusetts Mutual Life Insurance Company's (MassMutual) asset management affiliate, OppenheimerFunds, with consideration to MassMutual and OppenheimerFunds employee shareholders consisting of \$35.0 million in cash, 81.9 million shares of common stock and \$4.0 billion in perpetual, non-cumulative preferred shares with a 21-year non-call period and a fixed rate of 5.9%. The 81.9 million shares are composed of 75.7 million common shares issued on the closing date and 6.2 million Invesco restricted common stock awards granted to employee shareholders. MassMutual has an approximate 16.7% stake in the common stock of the combined firm as of December 31, 2019. Invesco and MassMutual entered into a shareholder agreement, in which MassMutual has customary minority shareholder rights, including representation on Invesco's board of directors. The shareholder agreement with MassMutual specifies a lock-up period of two years for the common stock and five years for the preferred stock. MassMutual may not sell common or preferred shares received as purchase consideration during the respective lock-up periods.

The acquired business enhances the company's ability to meet client needs through its comprehensive range of high-conviction active, passive and alternative capabilities.

The transaction was accounted for under the acquisition method of accounting. Accordingly, the purchase price was allocated to the assets acquired and liabilities assumed based upon their estimated fair values as of the date of the transaction. The issuance of common stock and preferred stock consideration represents a non-cash financing activity related to the statement of cash flows.

The following table summarizes the estimate of amounts of identified assets acquired and liabilities assumed at the acquisition date, as well as the consideration transferred to acquire OppenheimerFunds. Additional changes to the allocation to certain assets, liabilities and tax estimates are not expected but could occur. The company will finalize the acquisition accounting (including the valuation) within the required measurement period, but in no event not later than one year from May 24, 2019. The updated valuations would not have had a material impact on depreciation and amortization expense if they had been recorded as of the acquisition date.

	December 31, 2019
\$ in millions	Fair Value Estimate
ASSETS	
Cash and cash equivalents	360.0
Accounts receivable	133.1
Investments	178.4
Prepaid assets	24.8
Other assets	181.2
Property, equipment and software, net	104.1
Intangible assets (1)	5,189.0
Goodwill (2)	1,219.5
Total assets	7,390.1
LIABILITES	
Accrued compensation and benefits	263.9
Accounts payable and accrued expenses	349.1
Deferred tax liabilities, net	1,181.2
Total liabilities	1,794.2
Total identifiable net assets	5,595.9
Summary of consideration	
Cash consideration	35.0
Common stock consideration (3)	1,453.6
Preferred stock consideration (4)	4,010.5
Other consideration (5)	96.8
Total cash and stock consideration	5,595.9

- (1) Intangible assets are comprised of the following:
 - indefinite-lived intangible asset related to management contracts of \$4,907.0 million consists primarily of contracts related to mutual funds.
 - finite-lived intangible asset related to management contracts of \$255.0 million consists primarily of contracts related to sub-advised accounts and has an estimated useful life of eight years.
 - acquired trade name asset of \$27.0 million has an estimated useful life of six years.

The intangible assets created in the acquisition are not expected to be deductible for tax purposes.

- (2) Goodwill is calculated as the difference between the acquisition date fair value of the total consideration transferred and the aggregate values assigned to the assets acquired and liabilities assumed. The goodwill created in the acquisition is not expected to be deductible for tax purposes. The goodwill balance resulted primarily from the opening balance sheet net deferred tax liability. See Note 7, "Goodwill," for an analysis of the change in goodwill balances between periods.
- (3) The common shares were fair valued using the company's market price on closing date and reflects a discount for the common shares issued to MassMutual (75,563,041 shares) with a two-year lock-up period, resulting in a value of approximately \$19.195 per share. Common shares issued to OppenheimerFunds employee shareholders (153,574 shares) were valued at the market price on closing date, which was \$20.42.
- $(4) \ \ The preferred shares were fair valued using a discounted cash flow model, resulting in a value of \$1,000 per share.$

(5) Other consideration primarily consists of the fair value of the vested portion of replacement employee common share-based awards.

Certain revenues earned through legacy processes from the acquired business represent approximately 17% of the company's total revenue for the year-ended December 31, 2019; however, total revenues, expenses and net income of the acquired business are not available to be separately reported due to the continued integration of the combined businesses.

Transaction and integration costs related to the OppenheimerFunds acquisition included within the Transaction, integration, and restructuring line item on the Consolidated Statements of Income were \$625.0 million, for the year ended December 31, 2019. Of these amounts, \$78.5 million during the year ended December 31, 2019, were transaction-related costs, which primarily relate to advisory, legal, valuation, and other professional fees.

As part of the integration activities for the OppenheimerFunds business, the company has identified a matter that involves a reasonably possible loss contingency related to the acquired business. The company estimates that a majority of these reasonably possible losses relate to periods prior to the acquisition. There are significant uncertainties as of the date of this report regarding the nature, scope and amount of the reasonably possible loss. If there are any losses incurred related to this matter, the company believes that the majority would be recorded as an adjustment to goodwill on the consolidated balance sheet with the remainder, if any, recorded as transaction, integration and restructuring expense in the consolidated income statement. See Note 19, "Commitments and Contingencies" for additional information regarding this matter.

Supplemental Pro Forma Information

The following unaudited pro forma summary presents consolidated information of the company as if the business combination had occurred on January 1, 2018, the earliest period presented herein.

	For the year ende	For the year ended December 31,		
\$ in millions	2019	2018		
Operating revenues	6,935.1	7,564.5		
Net income	683.4	1,065.4		

The pro forma adjustments include dividends on preferred shares, transaction costs reflected in the initial periods, and adjustments to depreciation and intangible asset amortization expense. Cost savings or operating synergies expected to result from the acquisition are not included in the pro forma results. These pro forma results are not indicative of the actual results of operations that would have been achieved nor are they indicative of future results of operations.

3. FAIR VALUE OF ASSETS AND LIABILITIES

The fair value of financial instruments are presented in the below summary table. The fair value of financial instruments held by CIP are presented in Note 20, "Consolidated Investment Products".

	December 31, 2019	December 31, 2018
\$ in millions	Fair Value	Fair Value
Cash and cash equivalents	1,049.0	1,147.7
Equity investments	432.5	283.2
Foreign time deposits (1)	32.0	28.1
Assets held for policyholders	10,835.6	11,384.8
Policyholder payables (1)	(10,835.6)	(11,384.8)
Contingent consideration liability	(60.2)	(40.9)
Long-term debt (1)(2)	(2,281.5)	(2,418.2)

⁽¹⁾ These financial instruments are not measured at fair value on a recurring basis. Foreign time deposits are measured at cost plus accrued interest, which approximates fair value, and are accordingly classified as Level 2 securities. Policyholder payables are indexed to the value of the assets held for policyholders.

(2) All assets and liabilities are carried at fair value except debt which has a carrying value of \$2,080.3 million as of December 31, 2019. (December 31, 2018: \$2,408.8 million)

A three-level valuation hierarchy exists for disclosure of fair value measurements based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. The three levels are defined as follows:

- Level 1 inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2 inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
- · Level 3 inputs to the valuation methodology are unobservable and significant to the fair value measurement.

An asset or liability's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

The following table presents, for each of the hierarchy levels described above, the carrying value of the company's assets and liabilities, including major security type for equity and debt securities, which are measured at fair value on the company's Consolidated Balance Sheet as of December 31, 2019 and December 31, 2018, respectively:

		As of December 31, 2019			
\$ in millions	Fair Value Measurements	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Assets:					
Cash equivalents:					
Money market funds	620.9	620.9	_	_	
Investments:(1)					
Equity investments:					
Seed money	235.5	235.5	_	_	
Investments related to deferred compensation plans	192.4	192.4	_	_	
Other equity securities	4.6	4.6	_	_	
Assets held for policyholders	10,835.6	10,835.6	_	_	
Total	11,889.0	11,889.0	_	_	
Liabilities:					
Contingent consideration liability	(60.2)	_	_	(60.2)	
Total	(60.2)		_	(60.2)	

	As of December 31, 2018			
\$ in millions	Fair Value Measurements	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Cash equivalents:				
Money market funds	367.6	367.6	_	_
Investments:(1)				
Equity investments:				
Seed money	202.8	202.8	_	_
Investments related to deferred compensation plans	78.6	78.6	_	
Other equity securities	1.8	1.8	_	_
Assets held for policyholders	11,384.8	11,384.8	_	_
Total	12,035.6	12,035.6		
Liabilities:				
Contingent consideration liability	(40.9)			(40.9)
Total	(40.9)	_	_	(40.9)

⁽¹⁾ Foreign time deposits of \$32.0 million (December 31, 2018: \$28.1 million) are excluded from this table. Equity method and other investments of \$350.8 million and \$14.2 million, respectively, (December 31, 2018: \$296.3 million and \$5.9 million, respectively) are also excluded from this table. These investments are not measured at fair value, in accordance with applicable accounting standards.

The following is a description of the valuation methodologies used for assets and liabilities measured at fair value, as well as the general classification of such assets and liabilities pursuant to the valuation hierarchy.

Put option contracts

The company has purchased several put option contracts to hedge economically foreign currency risk on the translation of a portion of its Pound Sterling-denominated earnings into U.S. Dollars (purchases of \$3.9 million and \$1.1 million for the years ended December 31, 2019 and December 31, 2018, respectively). These were the only contracts entered into during the period to hedge economically foreign currency risk for the Pound Sterling-denominated earnings and provide coverage through June 30, 2020.

The economic hedge is predominantly triggered upon the impact of a significant decline in the Pound sterling/U.S. Dollar foreign exchange rate. Open put option contracts are marked-to-market through earnings, which are recorded in the company's Consolidated Statements of Income in other gains and losses. These derivative contracts are valued using option valuation models and are included in other assets in the company's Consolidated Balance Sheets. The significant inputs in these models (volatility, forward points and swap curves) are readily available in public markets or can be derived from observable market transactions for substantially the full terms of the contracts and are classified within level 2 of the valuation hierarchy. The company recognized a loss of \$4.8 million in the year ended December 31, 2019 (gain of 0.1 million in the year ended December 31, 2018) related to the change in market value of these put option contracts. In these transactions, the reference rate is an average foreign exchange rate for the applicable time frame.

Total return swap

In addition to holding equity investments, the company has a total return swap (TRS) to hedge economically certain deferred compensation liabilities. The notional value of the total return swap at December 31, 2019 was \$177.0 million and the fair value of the TRS was an asset of \$3.1 million. During the year ended December 31, 2019 market valuation gains of \$16.8 million were recognized in other gains and losses, net.

The company also has total return swaps with respect to certain ETFs. At December 31, 2019, the aggregate notional value of the total return swaps was \$145.9 million. Under the terms of each total return swap, the company receives the related market gains or losses on the underlying investments and pays a floating rate to the respective counterparty. At December 31, 2019, the fair value of the total return swaps related to the ETFs resulted in a liability balance of \$1.1 million. For the year ended December 31, 2019, market valuation gains of \$9.9 million were recognized in other gains and losses, net.

The fair value of the total return swaps was determined under the market approach using quoted prices of the underlying investments and, as such, is classified as level 2 of the valuation hierarchy. The total return swaps are not designated for hedge accounting.

Contingent Consideration Liability

The contingent consideration liability related to the investment management contracts acquired from Deutsche Bank was recorded at fair value as of the date of acquisition using a discounted cash flow model, and is categorized within level 3 of the valuation hierarchy. At December 31, 2019 inputs used in the model to determine the fair value of the contingent consideration liability included assumed growth rates in AUM ranging from (9.44)% to 5.73% (weighted average growth rate of (0.54)%) and a discount rate of 3.48%. Changes in fair value are recorded in Other gains and losses, net in the Consolidated Statements of Income in the period incurred. An increase in AUM levels and a decrease in the discount rate would increase the fair value of the contingent consideration liability while a decrease in forecasted AUM and an increase in the discount rate would decrease the liability.

In connection with the OppenheimerFunds acquisition (see Note 2, "Business Combinations"), Invesco acquired a \$13.6 million contingent consideration liability related to historical OppenheimerFunds transactions. The liability is contingent upon the attainment of certain revenue growth objectives during 2019 and 2020. As of December 31, 2019, inputs used to determine the liability related to these arrangements primarily include assumed growth rates in management fees ranging from 28% to 33% and a discount rate of 10.7%.

Additionally, the company made other digital wealth acquisitions during 2019, which, based on initial purchase price allocations, resulted in additional contingent consideration liabilities of \$16.0 million. The liabilities are contingent upon the attainment of certain sales growth targets during 2020, 2021 and 2022.

The following table shows a reconciliation of the beginning and ending fair value measurements for level 3 assets and liabilities during the year ended December 31, 2019 and December 31, 2018, which are valued using significant unobservable inputs:

	For the year ended December 31, 2019	For the year ended December 31, 2018		
\$ in millions	Contingent Consideration Liability	Contingent Consideration Liability	Other Debt Securities	
Beginning balance	(40.9)	(57.4)	9.9	
Purchases/acquisitions	(31.5)	_	_	
Net unrealized gains and losses included in other gains and losses	(7.8)	0.9	_	
Disposition/settlements	20.0	15.6	(9.9)	
Ending balance	(60.2)	(40.9)	_	

4. INVESTMENTS

The disclosures below include details of the company's investments. Investments held by CIP are detailed in Note 20, "Consolidated Investment Products."

\$ in millions	December 31, 2019	December 31, 2018
Equity investments:		
Seed money	235.5	202.8
Investments related to deferred compensation plans	192.4	78.6
Other equity securities	4.6	1.8
Equity method investments	350.8	296.3
Foreign time deposits	32.0	28.1
Other	14.2	5.9
Total investments	829.5	613.5

Available for sale investments

Realized gains and losses recognized in the Consolidated Statements of Income during the year from investments classified as available-for-sale are as follows:

		2019			2018			2017	
\$ in millions	Proceeds from Sales	Gross Realized Gains	Gross Realized Losses	Proceeds from Sales	Gross Realized Gains	Gross Realized Losses	Proceeds from Sales	Gross Realized Gains	Gross Realized Losses
Seed money	_	_	_	_	_		62.5	4.3	(1.5)
CLOs	1.3	_	(0.4)	16.5	2.1	_	7.1	1.9	_
Other debt securities	_	_	_	6.3	_	(3.6)	9.9	2.5	_
	1.3		(0.4)	22.8	2.1	(3.6)	79.5	8.7	(1.5)

Upon the sale of available-for-sale securities, net realized losses of \$0.4 million were transferred from accumulated other comprehensive income into the Consolidated Statements of Income during the year ended December 31, 2019 (2018: \$1.5 million net realized losses; 2017: \$7.2 million net realized gains). The specific identification method is used to determine the realized gain or loss on securities sold or otherwise disposed.

Equity investments

Net gains recorded in Other gains/(losses) in the Consolidated Statements of Income resulting from equity investments and total return swaps, which have equity investments as their underlying asset, for the year ended December 31, 2019, were \$82.5

million (December 31, 2018: \$46.5 million loss). The unrealized gains and losses for the year ended December 31, 2019, that relate to equity investments still held at December 31, 2019, was a \$53.2 million net gain (December 31, 2018: \$30.6 million net loss related to equity investments still held at December 31, 2018).

Equity method investments

Following are the company's investments in joint ventures and affiliates, which are accounted for using the equity method and are recorded as investments on the Consolidated Balance Sheets:

Name of Company	Country of Incorporation	% Voting Interest Owned
Huaneng Invesco WLR (Beijing) Investment Fund Management Company Ltd.	China	50.0%
Invesco Great Wall Fund Management Company Limited	China	49.0%
Pocztylion - ARKA	Poland	29.3%

Undistributed earnings from equity method investees have not been a material restriction on the company's ability to pay dividends to shareholders. Equity method investments also include the company's investments in certain of its managed private equity, real estate and other investment entities. These entities include variable interest entities for which the company has determined that it is not the primary beneficiary and other investment products structured as partnerships for which the company is the general partner and the other limited partners possess either substantive kick-out, liquidation or participation rights. See Note 1, "Accounting Policies," for additional information.

Noncontrolling interests in consolidated entities

Most of the noncontrolling interest balances included in the Consolidated Balance Sheets relate to CIP (see Note 20). The company owns 100% of the voting control of its corporate subsidiary entities, directly or indirectly, with the exception of the following entities, which are consolidated with resulting noncontrolling interests:

Name of Company	Country of Incorporation	% Voting Interest Owned
VV Immobilien Verwaltungs und Beteiligungs GmbH	Germany	70.0%
VV Immobilien Verwaltungs GmbH	Germany	70.0%
HVH Immobilien und Beteiligungs GmbH	Germany	70.0%

5. PROPERTY, EQUIPMENT AND SOFTWARE

The following is a summary of property, equipment and software:

\$ in millions	December 31, 2019	December 31, 2018
Technology and Other Equipment	310.5	264.4
Software	733.4	669.5
Land and Buildings	110.3	83.6
Leasehold Improvements	274.1	212.5
Work in Process	74.4	43.5
Property, Equipment and Software, Gross	1,502.7	1,273.5
Less: Accumulated Depreciation	(919.2)	(804.8)
Property, Equipment and Software, Net	583.5	468.7

Depreciation expense related to property, equipment and software was \$124.9 million, \$112.4 million and \$99.4 million for the years ended December 31, 2019, 2018 and 2017, respectively.

6. INTANGIBLE ASSETS

The following table presents the major classes of the company's intangible assets at December 31, 2019 and 2018:

\$ in millions	Gross Book Value	Accumulated Amortization	Net Book Value
December 31, 2019			
Management contracts - indefinite-lived	6,969.1	N/A	6,969.1
Management contracts - finite-lived	319.3	(84.5)	234.8
Developed technology	98.6	(31.7)	66.9
Other	112.2	(24.7)	87.5
Total	7,499.2	(140.9)	7,358.3
December 31, 2018			
Management contracts - indefinite-lived	2,065.0	N/A	2,065.0
Management contracts - finite-lived	64.3	(64.3)	_
Developed technology	72.3	(17.6)	54.7
Other	66.3	(9.9)	56.4
Total	2,267.9	(91.8)	2,176.1

During 2019, Invesco acquired \$4,907.0 million in indefinite lived management contracts, \$255.0 million of finite-lived intangible asset related management contracts, and \$27.0 million of trade name assets related to the Oppenheimer acquisition. Other 2019 additions to intangible assets related to the preliminary valuations of acquisitions of digital wealth technology companies (2018: \$563.4 million in indefinite lived management contracts and \$100.4 million in technology related and other intangible assets as part of the Guggenheim Investments' ETF and Intelliflo acquisitions). Amortizable intangible assets of \$315.4 million related to 2019 acquisitions have a weighted-average amortization period of 7.15 years.

The 2019 and 2018 annual impairment reviews of indefinite-lived intangible assets determined that no impairment existed at the respective review dates. Amortization expense was \$52.7 million during the year ended December 31, 2019 (December 31, 2018: \$29.7 million; December 31, 2017: \$17.4 million). Estimated amortization expense for each of the five succeeding fiscal years based upon the company's intangible assets at December 31, 2019 is as follows:

\$ in millions Years Ended December 31,	Estimated Amortization Expense
2020	(64.4)
2021	(63.5)
2022	(60.6)
2023	(52.6)
2024	(47.1)

7. GOODWILL

The table below details changes in the goodwill balance:

\$ in millions	Net Book Value
January 1, 2019	7,157.1
Business combinations (See Note 2)	1,229.1
Foreign exchange	123.2
December 31, 2019	8,509.4
January 1, 2018	6,590.7
Business combinations	819.2
Foreign exchange	(252.8)
December 31, 2018	7,157.1

The 2019 additions to goodwill primarily consists of \$1,219.5 million related to the preliminary valuations of the Oppenheimer acquisition. See Note 2, "Business Combination," for additional details. Other 2019 additions to goodwill related to the preliminary valuations of acquisitions of digital wealth technology companies. The 2018 addition to goodwill consists of \$819.2 million related to the valuation of the acquisition Guggenheim Investments' ETF and Intelliflo.

The 2019 and 2018 annual impairment reviews determined that no impairment existed at the respective review dates. No interim impairment tests were deemed necessary during 2019 or 2018.

8. OTHER LIABILITIES

The table below details the components of other liabilities:

	As of		
\$ in millions	December 31, 2019	December 31, 2018	
Compensation and benefits	195.6	103.7	
Accrued bonus and deferred compensation	835.1	542.8	
Accrued compensation and benefits	1,030.7	646.5	
Accruals and other liabilities	403.9	360.4	
Forward contract payable (See Note 10)	496.5	297.1	
Lease liability (See Note 14)	364.8	_	
Deferred carried interest	45.8	61.3	
Contingent consideration liability (See Note 3)	60.2	40.9	
Accounts payable	414.6	284.3	
Income taxes payable	118.2	43.2	
Accounts payable and accrued expenses	1,904.0	1,087.2	

9. LONG-TERM DEBT

The issuer of the senior notes, Invesco Finance PLC, is an indirect 100% owned finance subsidiary of Invesco Ltd. (the Parent), and the Parent fully and unconditionally guarantees the securities. As discussed in Note 1, "Accounting Policies - Cash and cash equivalents," certain of our subsidiaries are required to maintain minimum levels of capital. These and other similar provisions of applicable law may have the effect of limiting withdrawals of capital, repayment of intercompany loans and payment of dividends by such entities.

The disclosures below include details of the company's debt. Debt of CIP is detailed in Note 20, "Consolidated Investment Products."

	December	31, 2019	December	31, 2018
\$ in millions	Carrying Value	Fair Value	Carrying Value ⁽²⁾	Fair Value
\$1.5 billion floating rate credit facility expiring August 11, 2022	_	_	330.8	330.8
Unsecured Senior Notes:(1)				
\$600 million 3.125% - due November 30, 2022	598.1	617.5	597.5	585.2
\$600 million 4.000% - due January 30, 2024	595.8	639.2	594.9	594.5
\$500 million 3.750% - due January 15, 2026	496.1	533.0	495.6	487.6
\$400 million 5.375% - due November 30, 2043	390.3	491.8	390.0	420.1
Long-term debt	2,080.3	2,281.5	2,408.8	2,418.2

- (1) The company's senior note indentures contain certain restrictions on mergers or consolidations. Beyond these items, there are no other restrictive covenants in the indentures.
- (2) The difference between the principal amounts and the carrying values of the senior notes in the table above reflect the unamortized debt issuance costs and discounts.

The fair market value of the company's senior notes was determined by market quotes provided by Bloomberg, which is considered a Level 2 valuation input. In the absence of an active market, the company relies upon the average price quoted by brokers for determining the fair market value of the debt.

Analysis of Borrowings by Maturity:

\$ in millions	December 31, 2019
2022	598.1
2024	595.8
2026	496.1
2043	390.3
Long-term debt	2,080.3

At December 31, 2019, the outstanding balance on the credit facility was zero. Borrowings under the credit facility will bear interest at (i) LIBOR for specified interest periods or (ii) a floating base rate (based upon the highest of (a) the Bank of America prime rate, (b) the Federal Funds rate plus 0.50% and (c) LIBOR for an interest period of one month plus 1.00%), plus, in either case, an applicable margin determined with reference to the higher of the available credit ratings of the company or its indirect subsidiary Invesco Finance PLC. Based on credit ratings as of December 31, 2019 of the company, the applicable margin for LIBOR-based loans was 1.13% and for base rate loans was 0.13%. In addition, the company is required to pay the lenders a facility fee on the aggregate commitments of the lenders (whether or not used) at a rate per annum which is based on the higher of the available credit ratings of company or its indirect subsidiary Invesco Finance PLC. Based on credit ratings as of December 31, 2019, the annual facility fee was equal to 0.15%.

The credit agreement governing the credit facility contains customary restrictive covenants on the company and its subsidiaries. Restrictive covenants in the credit agreement include, but are not limited to: prohibitions on creating, incurring or assuming any liens; entering into merger arrangements; selling, leasing, transferring or otherwise disposing of assets; making a material change in the nature of the business; making a significant accounting policy change in certain situations; entering into transactions with affiliates; and incurring indebtedness through the subsidiaries (other than the borrower, Invesco Finance PLC). Many of these restrictions are subject to certain minimum thresholds and exceptions. Financial covenants under the credit agreement include: (i) the quarterly maintenance of a debt/EBITDA leverage ratio, as defined in the credit agreement, of not greater than 3.25:1.00, (ii) a coverage ratio (EBITDA, as defined in the credit agreement/interest payable for the four consecutive fiscal quarters ended before the date of determination) of not less than 4.00:1.00.

The credit agreement governing the credit facility also contains customary provisions regarding events of default which could result in an acceleration or increase in amounts due, including (subject to certain materiality thresholds and grace periods) payment default, failure to comply with covenants, material inaccuracy of representation or warranty, bankruptcy or insolvency proceedings, change of control, certain judgments, ERISA matters, cross-default to other debt agreements,

governmental action prohibiting or restricting the company or its subsidiaries in a manner that has a material adverse effect and failure of certain guaranty obligations. The company is in compliance with all regulatory minimum net capital requirements.

At December 31, 2019, the company maintains approximately \$11.2 million in letters of credit from a variety of banks. The letters of credit are generally one-year automatically-renewable facilities and are maintained for various commercial reasons.

10. SHARE CAPITAL

The preferred shares issued in connection with the acquisition of OppenheimerFunds have a \$0.20 par value, liquidation preference of \$1,000 per share and fixed cash dividend rate of 5.90% per annum, payable quarterly on a non-cumulative basis. Shares of preferred stock are not redeemable prior to the 21st anniversary of their original issue date of May 24, 2019. The number of preferred shares issued and outstanding is represented in the table below:

	As of
in millions	December 31, 2019
Preferred shares issued (1)	4.0
Preferred shares outstanding (1)	4.0

(1) Shares held by MassMutual and are subject to a lock-up period of five years, which disallows the sale of shares by MassMutual during the five-year period beginning on the original issue date of May 24, 2019.

The number of common shares and common share equivalents issued are represented in the table below:

In millions	December 31, 2019	December 31, 2018	December 31, 2017
Common shares issued	566.1	490.4	490.4
Less: Treasury shares for which dividend and voting rights do not apply	(112.8)	(93.3)	(83.3)
Common shares outstanding	453.3	397.1	407.1

During the year ended December 31, 2019, the company entered into three forward contracts to purchase its common shares. The details of the forward contracts for the years ended December 31, 2019 and December 31, 2018, respectively, are as follows:

In millions, except strike price	Year ended December 31, 2019							
	Common Shares Purchased	St	rike Price	Hedge Completion Date		al Treasury res Recorded	Settlement Date	otal Liability Recorded
\$200 million - entered on May 13, 2019	9.8	\$	20.51	05/30/2019	\$	198.7	01/04/2021	\$ 199.1
\$200 million - entered on July 2, 2019	10.0	\$	20.00	07/30/2019	\$	193.7	04/01/2021	\$ 195.3
\$100 million - entered on August 27, 2019	6.0	\$	16.59	09/27/2019	\$	102.6	04/01/2021	\$ 102.1
	25.8				\$	495.0		\$ 496.5
In millions, except strike price				Year ended D	ecemb	er 31, 2018		
	Common Shares Purchased	St	rike Price	Hedge Completion Date		al Treasury res Recorded	Settlement Date	tal Liability Recorded
\$300 million - entered on October 24, 2018	14.4	\$	20.85	12/03/2018	\$	297.1	07/01/2019	\$ 297.1
	14.4				\$	297.1		\$ 297.1

Treasury shares were calculated by multiplying the number of common shares being purchased by the fair market value of Invesco's common share price as of the hedge completion date. The company has recorded a corresponding payable to the counterparty, which represents the present value of the amount to be paid at settlement, discounted by using the implicit interest rate at inception of the forward contract. The implicit interest rate was calculated using the effective interest method. The payable includes a discount or premium on the forward purchase price represented by the difference between the fair market value of the common share price and the strike price on hedge completion date. In addition, the company's total collateral paid related to the forward contracts as of December 31, 2019 was \$37.8 million (December 31, 2018: \$63.8 million). The

company's total liability and collateral paid are recorded in accounts payable and accrued expenses and other assets, respectively on the Consolidated Balance Sheet. The forward contracts represent non-cash activity related to the statement of cash flows until the common shares are physically settled. The forward contract entered into on October 24, 2018 settled on July 1, 2019.

Also, during the year ended December 31, 2019, the company repurchased 5.6 million common shares in the open market at a cost of \$110.8 million (December 31, 2018: none). Separately, an aggregate of 3.3 million shares were withheld on vesting events during the year ended December 31, 2019 to meet employees' withholding tax obligations (December 31, 2018: 1.6 million). The fair value of these common shares withheld at the respective withholding dates was \$59.0 million (December 31, 2018: \$48.9 million). At December 31, 2019, approximately \$732.2 million remained authorized under the company's common share repurchase authorization approved by the Board on July 22, 2016 (December 31, 2018: \$1,343.0 million).

Total treasury shares at December 31, 2019 were 128.2 million (December 31, 2018: 103.0 million), including 15.4 million unvested restricted common stock awards (December 31, 2018: 9.7 million) for which dividend and voting rights apply. The market price of common shares at the end of 2019 was \$17.98. The total market value of the company's 128.2 million treasury shares was \$2.3 billion at December 31, 2019.

Movements in Treasury Shares comprise:

	Year ended				
In millions	December 31, 2019	December 31, 2018	December 31, 2017		
Beginning balance	103.0	92.4	95.9		
Acquisition of common shares	34.7	16.0	1.9		
Distribution of common shares	(9.2)	(5.2)	(5.2)		
Common shares distributed to meet ESPP obligation	(0.3)	(0.2)	(0.2)		
Ending balance	128.2	103.0	92.4		

11. OTHER COMPREHENSIVE INCOME/(LOSS)

The components of accumulated other comprehensive income/(loss) were as follows:

	2019				
\$ in millions	Foreign currency translation	Employee benefit plans	Equity method investments	Available-for- sale investments	Total
Other comprehensive income/(loss), net of tax:					
Currency translation differences on investments in foreign subsidiaries	155.6	_	_		155.6
Actuarial gain/(loss) related to employee benefit plans	_	(10.8)	_	_	(10.8)
Other comprehensive income/(loss), net		2.4	0.1	0.4	2.9
Other comprehensive income/(loss), net of tax	155.6	(8.4)	0.1	0.4	147.7
Beginning balance	(617.6)	(117.7)	_	0.3	(735.0)
Other comprehensive income/(loss), net of tax	155.6	(8.4)	0.1	0.4	147.7
Ending balance	(462.0)	(126.1)	0.1	0.7	(587.3)

	2018				
\$ in millions	Foreign currency translation	Employee benefit plans	Equity method investments	Available-for-sale investments	Total
Other comprehensive income/(loss) net of tax:					
Currency translation differences on investments in foreign subsidiaries	(327.1)				(327.1)
Actuarial gain/(loss) related to employee benefit plans	_	(13.0)		_	(13.0)
Other comprehensive income/(loss), net	_	5.0	(4.3)	(1.2)	(0.5)
Other comprehensive income/(loss), net of tax	(327.1)	(8.0)	(4.3)	(1.2)	(340.6)
Beginning balance	(290.5)	(109.7)	4.3	4.7	(391.2)
Adjustment for adoption of ASU 2016-01	_	_	_	(3.2)	(3.2)
January 1, 2018, as adjusted	(290.5)	(109.7)	4.3	1.5	(394.4)
Other comprehensive income/(loss)	(327.1)	(8.0)	(4.3)	(1.2)	(340.6)
Ending balance	(617.6)	(117.7)		0.3	(735.0)

	2017				
\$ in millions	Foreign currency translation	Employee benefit plans	Equity method investments	Available-for-sale investments	Total
Other comprehensive income/(loss) net of tax:					
Currency translation differences on investments in foreign subsidiaries	389.4	_	_	_	389.4
Actuarial gain/(loss) related to employee benefit plans	_	21.1		_	21.1
Other comprehensive income/(loss), net		8.4	(0.5)	(0.3)	7.6
Other comprehensive income/(loss), net of tax	389.4	29.5	(0.5)	(0.3)	418.1
			-		
Beginning balance	(679.9)	(139.2)	4.8	5.0	(809.3)
Other comprehensive income/(loss)	389.4	29.5	(0.5)	(0.3)	418.1
Ending balance	(290.5)	(109.7)	4.3	4.7	(391.2)

Net Investment Hedge

The Company designated certain intercompany debt as a non-derivative net investment hedging instrument against foreign currency exposure related to its net investment in foreign operations. At December 31, 2019 and December 31, 2018, £130 million (\$172.1 million and \$165.6 million, respectively) of intercompany debt was designated as a net investment hedge. For the year ended December 31, 2019, the Company recognized foreign currency losses of \$6.5 million (2018: gains of \$10.3 million, 2017: losses of \$15.3 million) resulting from the net investment hedge within currency translation differences on investments in foreign subsidiaries in other comprehensive income.

12. COMMON SHARE-BASED COMPENSATION

The company recognized total expenses of \$207.5 million, \$172.4 million and \$175.3 million related to equity-settled common share-based payment transactions in 2019, 2018 and 2017, respectively. The total income tax benefit recognized in the Consolidated Statements of Income for common share-based compensation arrangements was \$50.2 million for 2019 (2018: \$38.6 million; 2017: \$48.9 million).

Common share awards are broadly classified into two categories: time-vested and performance-vested. Common share awards are measured at fair value at the date of grant and are expensed, based on the company's estimate of common shares that will eventually vest, on a straight-line or accelerated basis over the vesting period. The company's RSU grant-date fair value is measured by Invesco's common stock price.

Time-vested awards vest ratably over a defined period of continued employee service. Performance-vested awards vest upon (i) the company's attainment of certain pre-established performance criteria, and (ii) a defined period of continued employee

service. Time-vested and performance-vested equity awards are granted in the form of restricted stock awards (RSAs) or restricted stock units (RSUs). With respect to performance-vested awards granted in February 2017 and February 2018, vesting is tied to the achievement of specified levels of adjusted operating margin with vesting ranging from 0% and 150%. With respect to the performance-vested awards granted in February 2019, vesting in tied to the achievement of specific levels of adjusted operating margin and relative total shareholder return with vesting ranging from 0% to 150%.

With respect to time-vested awards, dividends accrue directly to the employee holder of RSAs, and cash payments in lieu of dividends are made to employee holders of certain RSUs. With respect to performance-vested awards, dividends and cash payments in lieu of dividends are deferred and are paid at the same rate as on the underlying shares if and to the extent the award vests.

The 2016 Global Equity Incentive Plan (2016 GEIP) authorizes the issuance of up to 31.4 million shares under this plan. The company's common shareholders initially approved the 2016 GEIP in May 2016 and subsequently approved the 2016 GEIP, as amended, in May 2019. The 2011 Global Equity Incentive Plan and the 2008 Global Equity Incentive Plan are predecessor plans to the 2016 GEIP. Although there are outstanding awards under the 2011 and 2008 plans, no further grants may be made under such plans. In May 2010, the board approved the 2010 Global Equity Incentive Plan (GEIPST). The GEIPST authorizes the issuance of up to 8.5 million shares. With respect to the GEIPST, awards are only granted as employment inducement awards in connection with a strategic transaction and, as a result, do not require shareholder approval under the rules of the New York Stock Exchange or otherwise.

Movements on employee common share awards priced in U.S. Dollars during the years ended December 31, are detailed below:

		2019			2018	2017		
Millions of common shares, except fair values	Time- Vested	Performance- Vested	Weighted Average Grant Date Fair Value (\$)	Time-Vested	Performance- Vested	Time- Vested	Performance- Vested	
Unvested at the beginning of year	12.5	0.9	31.46	12.0	0.9	12.1	0.8	
Granted during the year ⁽¹⁾	15.5	0.6	19.66	5.7	0.4	5.3	0.3	
Forfeited during the year	(0.5)	_	20.75	(0.3)	_	(0.4)	_	
Vested and distributed during the year	(8.8)	(0.4)	22.82	(4.9)	(0.4)	(5.0)	(0.2)	
Unvested at the end of the year	18.7	1.1	21.94	12.5	0.9	12.0	0.9	

⁽¹⁾ With respect to the time-vested awards granted in 2019, includes 6.2 million restricted shares as employment inducement awards in connection with completed acquisitions.

The total fair value of common shares that vested during 2019 was \$177.1 million (2018: \$160.8 million; 2017: \$168.7 million). The weighted average grant date fair value of the U.S. dollar share awards that were granted during 2019 was \$19.66 (2018: \$31.78; 2017: \$32.23).

At December 31, 2019, there was \$289.8 million of total unrecognized compensation cost related to non-vested common share awards; that cost is expected to be recognized over a weighted average period of 2.43 years.

Employee Common Stock Purchase Plan (ESPP)

The company operates a nonqualified, broad-based ESPP for all eligible employees. Employees may purchase common shares of our common stock generally in annual intervals at 85% of fair market value. Employee ESPP contributions may not exceed \$6,000 per offering period. Upon the plan vesting date, the company either issues new common shares or can utilize common shares held in treasury (see Note 10, "Share Capital") to satisfy the exercise. For the year ended December 31, 2019, the company recognized \$1.0 million in compensation expense related to the employee stock purchase plan (December 31, 2018: \$1.0 million, December 31, 2017: \$0.9 million).

13. RETIREMENT BENEFIT PLANS

Defined Contribution Plans

The company operates defined contribution retirement benefit plans for all qualifying employees. The assets of the plans are held separately from those of the company in funds under the control of trustees. When employees leave the plans prior to vesting fully in the contributions, the contributions payable by the company are reduced by the amount of forfeited contributions.

The total amounts charged to the Consolidated Statements of Income for the year ended December 31, 2019, of \$73.5 million (December 31, 2018: \$69.3 million, December 31, 2017: \$73.1 million) represent contributions paid or payable to these plans by the company at rates specified in the rules of the plans. As of December 31, 2019, accrued contributions of \$31.3 million (December 31, 2018: \$26.7 million) for the current year will be paid to the plans.

Defined Benefit Plans

The company maintains legacy defined benefit pension plans for qualifying employees of its subsidiaries in the UK, Ireland, Germany and Taiwan. All defined benefit plans are closed to new participants.

The most recent actuarial valuations of plan assets and the present value of the defined benefit obligation were valued as of December 31, 2019. The benefit obligation, related current service cost and prior service cost were measured using the projected unit credit method.

Benefit Obligations and Funded Status

The amounts included in the Consolidated Balance Sheets arising from the company's obligations and plan assets in respect of its defined benefit retirement plans are as follows:

	Retiremen	t Plans
\$ in millions	2019	2018
Benefit obligation	(551.7)	(475.6)
Fair value of plan assets	524.5	430.2
Funded status	(27.2)	(45.4)
Amounts recognized in the Consolidated Balance Sheets:		
Other assets	2.5	3.3
Accrued compensation and benefits	(29.7)	(48.7)
Funded status	(27.2)	(45.4)

Changes in the benefit obligations were as follows:

	Retiremen	nt Plans
\$ in millions	2019	2018
January 1	475.6	548.6
Service cost	1.1	3.8
Interest cost	13.4	12.6
Actuarial (gains)/losses	64.0	(34.1)
Exchange difference	16.4	(32.0)
Benefits paid	(18.6)	(8.5)
Curtailment	0.4	_
Settlement	(0.6)	(14.8)
December 31	551.7	475.6

Key assumptions used in plan valuations are detailed below. Appropriate local mortality tables are also used. The weighted average assumptions used to determine defined benefit obligations at December 31, 2019, and 2018 are as follows:

	Retiremen	Retirement Plans	
	2019	2018	
Discount rate	1.93%	2.82%	
Expected rate of salary increases	2.95%	3.24%	
Future pension trend rate increases	2.74%	3.04%	

Changes in the fair value of plan assets in the current period were as follows:

	Retirement Plans	
\$ in millions	2019	2018
January 1	430.2	486.9
Actual return on plan assets	73.7	(26.3)
Foreign currency changes	16.0	(28.2)
Contributions from the company	24.0	21.2
Benefits paid	(18.6)	(8.5)
Settlement and other	(0.8)	(14.9)
December 31	524.5	430.2

The components of the amount recognized in accumulated other comprehensive income at December 31, 2019, and 2018 are as follows:

	Retiremen	nt Plans
\$ in millions	2019	2018
Prior service cost/(credit)	6.1	6.1
Net actuarial loss/(gain)	145.4	136.3
Total	151.5	142.4

The amounts in accumulated other comprehensive income expected to be amortized into the Consolidated Income Statement during the year ending December 31, 2020 are as follows:

\$ in millions	Retirement Plans
Prior service cost/(credit)	0.2
Net actuarial loss/(gain)	3.0
Total	3.2

The total accumulated and projected benefit obligation and fair value of plan assets for plans with accumulated and projected benefit obligations in excess of plan assets are as follows:

	Retirem	Retirement Plans	
\$ in millions	2019	2018	
Plans with accumulated and projected benefit obligation in excess of plan assets:			
Accumulated and projected benefit obligation	540.1	467.3	
Fair value of plan assets	512.8	418.6	

Net Periodic Benefit Cost

The components of net periodic benefit cost in respect of these defined benefit plans are as follows:

	Retirement Plans		
\$ in millions	2019	2018	2017
Service cost	1.1	3.8	2.3
Interest cost	13.4	12.6	14.1
Expected return on plan assets	(22.1)	(22.0)	(22.6)
Amortization of prior service cost/(credit)	0.3	0.2	0.2
Amortization of net actuarial (gain)/loss	2.9	2.1	3.0
Settlement	(0.2)	3.1	7.3
Curtailment (gain)/loss	0.4	_	
Net periodic benefit cost/(credit)	(4.2)	(0.2)	4.3

The weighted average assumptions used to determine net periodic benefit cost for the years ended December 31, 2019, 2018, and 2017 are:

		Retirement Plans		
	2019	2018	2017	
Discount rate	2.82%	2.47%	2.64%	
Expected return on plan assets	5.00%	4.73%	5.01%	
Expected rate of salary increases	3.24%	3.26%	3.26%	
Future pension rate increases	3.04%	2.97%	2.98%	

In developing the expected rate of return, the company considers long-term compound annualized returns based on historical and current market data. Using this reference information, the company develops forward-looking return expectations for each asset category and an expected long-term rate of return for a targeted portfolio. Discount rate assumptions were based upon AA-rated corporate bonds of suitable terms and currencies.

Plan Assets

The analysis of the plan assets as of December 31, 2019 was as follows:

\$ in millions	Retirement Plans	% of Plan Assets
Cash and cash equivalents	27.3	5.2%
Fund investments	207.3	39.5%
Equity securities	181.4	34.6%
Government debt securities	22.5	4.3%
Guaranteed investments contracts	13.2	2.5%
Other assets	72.8	13.9%
Total	524.5	100.0%

The analysis of the plan assets as of December 31, 2018 was as follows:

\$ in millions	Retirement Plans	% of Plan Assets
Cash and cash equivalents	20.4	4.7%
Fund investments	169.5	39.4%
Equity securities	136.9	31.8%
Government debt securities	20.3	4.7%
Guaranteed investments contracts	11.9	2.8%
Other assets	71.2	16.6%
Total	430.2	100.0%

Plan assets are not held in company stock. The investment policies and strategies for plan assets held by defined benefit plans include:

- Funding to have sufficient assets available to pay members benefits;
- Security to maintain the minimum Funding Requirement;
- Stability to have due regard to the employer's ability in meeting contribution payments given their size and incidence.

The following is a description of the valuation methodologies used for each major category of plan assets measured at fair value. Information about the valuation hierarchy levels used to measure fair value is detailed in Note 3, "Fair Value of Assets and Liabilities."

Cash and cash equivalents

Cash equivalents include cash in the bank and cash investments in money market funds. Cash investments in money market funds are valued under the market approach through the use of quoted market prices in an active market, which is the net asset value of the underlying funds, and are classified within level 1 of the valuation hierarchy.

Fund investments

These plan assets are primarily invested in affiliated funds and are classified within level 1 of the valuation hierarchy. They are valued at the net asset value of common shares held by the plan at year end.

Equity securities, corporate debt securities and other investments

These plan assets are classified within level 1 of the valuation hierarchy and are valued at the closing price reported on the active market on which the individual securities are traded.

Government debt securities

Government debt securities that have a readily available market price are classified within level 1 of the valuation hierarchy. These securities are valued at the closing price reported on the active market on which the individual securities are traded. Government debt securities that include index-linked bonds are classified within level 2 of the valuation hierarchy. Prices for these bonds are calculated using the relevant index ratio. There were no government debt securities without a readily available market price at December 31, 2019 (December 31, 2018: \$6.6 million).

Guaranteed investment contracts

These plan assets are classified within level 3 of the valuation hierarchy and are valued through use of unobservable inputs by discounting the related cash flows based on current yields of similar instruments with comparable durations considering the credit-worthiness of the issuer. Guaranteed investment contracts balance at December 31, 2019 is \$13.2 million (December 31, 2018: \$11.9 million).

Cash Flows

The estimated amounts of contributions expected to be paid to the plans during 2020 are \$24.9 million for retirement plans. There are no future annual benefits of plan participants covered by insurance contracts issued by the employer or related parties.

The benefits expected to be paid in each of the next five fiscal years and in the five fiscal years thereafter are as follows:

\$ in millions	Retirement Plans
Expected benefit payments:	
2020	8.3
2021	8.6
2022	8.9
2023	9.2
2024	9.5
Thereafter in the succeeding five years	52.7

14. OPERATING LEASES

The company leases office space in almost all its locations of business, data centers and certain equipment under non-cancelable operating leases. The operating leases have a weighted-average remaining lease term of 6.40 years and generally include one or more options to renew, with renewal terms that can extend the lease term from 1 to 10 years. Certain lease arrangements include an option to terminate the lease if a notification is provided to the landlord within 1-9 years prior to the end of the lease term. The company has sole discretion in exercising lease renewal and termination options. The lease terms used in the company's lease measurements do not include renewal options as they are not reasonably certain to be exercised as of the date of this report.

The company elected to combine lease and non-lease components in calculating the lease liability and right-of-use asset for operating leases.

Variable lease payments are determined based on the terms and conditions outlined in the lease contracts and are primarily determined in relation to the extent of the company's usage of the right-of use-asset or the nature and extent of services received from the lessor. Variable lease costs consists primarily of common area maintenance and other operating expenses as negotiated with the lessor.

As of December 31, 2019, the right-of-use asset of \$325.0 million was included within Other assets, and the lease liability of \$364.8 million was included within Accounts payable and accrued expenses, on the Consolidated Balance Sheet.

The components of lease expense for the year ended December 31, 2019 were as follows:

\$ in millions	Year ended December 31, 2019
Operating lease cost	70.0
Variable lease cost	26.8
Less: sublease income	(0.6)
Total lease expense	96.2

Supplemental cash flow information related to leases for the year ended December 31, 2019 was as follows:

\$ in millions	Year ended December 31, 2019
Operating cash flows from operating leases included in the measurement of lease liabilities	72.8
Right-of-use assets obtained in exchange for new operating lease liabilities	167.7

In determining the discount rate, the company considered the interest rate yield for specific interest rate environments and the company's credit spread at the inception of the lease.

The weighted-average discount rate for the operating lease liability for the year ended December 31, 2019 was 3.50%.

As of December 31, 2019, the maturities of the company's lease liabilities (primarily related to real estate leases) were as follows:

\$ in millions

Year Ending December 31,	Lease Liabilities
2020	77.6
2021	71.9
2022	63.3
2023	54.9
2024	40.7
Thereafter	99.3
Total lease payments	407.7
Less: interest	(42.9)
Present value of lease liabilities	364.8

Under the legacy leasing standard (ASC 840), minimum future commitments by year under non-cancelable operating leases as of December 31, 2018, were as follows:

\$ in millions	Total	Buildings	Other
2019	61.6	59.4	2.2
2020	56.3	54.2	2.1
2021	49.3	48.3	1.0
2022	42.8	42.6	0.2
2023	36.7	36.7	_
Thereafter	53.5	53.5	_
Gross lease commitments	300.2	294.7	5.5
Less: future minimum payments expected to be received under non-cancelable subleases	(2.5)	(2.5)	_
Net lease commitments	297.7	292.2	5.5

Excluded from the tables above is an additional operating lease for the company's new Atlanta headquarters that was entered into during third quarter of 2019, but has not yet commenced. The expected lease obligations are approximately \$232.5 million which will be paid over an expected lease term of 15 years. This operating lease will commence in fiscal year 2022 and will replace the company's existing lease for the current headquarters.

The company recognized \$72.3 million, \$53.2 million, and \$54.3 million in operating lease expenses in the Consolidated Statements of Income in 2019, 2018 and 2017, respectively. These expenses are net of \$0.6 million, \$0.4 million and \$1.0 million of sublease income in 2019, 2018 and 2017, respectively.

15. OTHER GAINS AND LOSSES, NET

The components of other gains and losses, net, are as follows:

\$ in millions	2019	2018	2017
Other gains:			
Gain on sale of investments	1.5	6.9	11.3
Gain on equity investments and total return swap, net	82.5	_	40.4
Foreign exchange hedge gain	_	0.1	_
Gain on contingent consideration liability	_	0.9	7.6
Net foreign exchange gains			
	_	_	16.2
Other realized gains	_	_	0.2
Non-service pensions gains	5.2	4.4	
Total other gains	89.2	12.3	75.7
Other losses:			
Other-than-temporary impairment of available-for-sale investments	(2.0)	(3.9)	(3.2)
Loss on equity investments and total return swap, net	_	(46.5)	_
Loss on contingent consideration liability	(7.8)	_	_
Net foreign exchange losses	(8.9)	(1.9)	_
Foreign exchange hedge loss	(4.8)	_	(21.0)
Non-service pension costs	_	_	(2.0)
Total other losses	(23.5)	(52.3)	(26.2)
Other gains and losses, net	65.7	(40.0)	49.5

16. TAXATION

The Tax Cuts and Jobs Act (2017 Tax Act) was enacted on December 22, 2017. The 2017 Tax Act significantly revises the U.S. Tax Code by reducing the U.S. federal corporate tax rate and requiring companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred. In accordance with SAB 118, as of December 31, 2017 the company recognized a provisional income tax benefit of \$130.7 million as a component of the provision for income taxes for the effects of the U.S. federal corporate tax rate reduction on existing deferred tax balances. In 2018, the Company filed its 2017 tax return and adjusted the provisional estimate for the re-measurement of deferred taxes by \$13.1 million. As of December 31, 2018, the company no longer considers these amounts to be provisional and has completed its accounting under SAB 118.

The company's income tax (expense)/benefit for income taxes is summarized as follows:

\$ in millions	2019	2018	2017
Current:			
Federal	(102.0)	(38.8)	(147.5)
State	(17.0)	(20.5)	(30.2)
Foreign	(94.0)	(158.2)	(142.2)
	(213.0)	(217.5)	(319.9)
Deferred:			
Federal	(16.6)	(35.5)	63.0
State	(4.3)	(10.0)	(11.2)
Foreign	(1.2)	8.0	(0.1)
	(22.1)	(37.5)	51.7
Total income tax (expense)/benefit	(235.1)	(255.0)	(268.2)

The net deferred tax recognized in the Consolidated Balance Sheets at December 31, 2019 and 2018, respectively, includes the following:

\$ in millions	2019	2018
Deferred tax assets:		
Deferred compensation arrangements	139.0	62.0
Lease obligations	65.9	4.8
Tax loss carryforwards	86.9	93.0
Postretirement medical, pension and other benefits	12.5	18.9
Investment basis differences	32.7	34.0
Accrued bonus	28.1	14.4
Other	29.6	15.1
Total deferred tax assets	394.7	242.2
Valuation allowance	(88.4)	(94.1)
Deferred tax assets, net of valuation allowance	306.3	148.1
Deferred tax (liabilities):		
Deferred sales commissions	(7.3)	(7.7)
Goodwill and intangibles	(1,710.4)	(417.5)
Leased assets	(62.5)	_
Fixed assets	(40.0)	(34.9)
Other	(13.3)	(10.8)
Total deferred tax (liabilities)	(1,833.5)	(470.9)
Net deferred tax assets/(liabilities)	(1,527.2)	(322.8)

As discussed in Note 1, the company implemented Topic 842 which requires the company to recognize lease obligations and leased assets and a corresponding deferred tax asset and liability.

Deferred income tax assets and liabilities that relate to the same tax jurisdiction are recorded net on the consolidated balance sheet. The deferred tax asset is included in other assets and the deferred tax liability is separately presented on the consolidated balance sheet.

At December 31, 2019 the company had tax loss carryforwards accumulated in certain taxing jurisdictions in the aggregate of \$391.1 million (2018: \$402.4 million), approximately \$23.9 million of which will expire over several years starting in 2023, with the remaining \$367.2 million having an indefinite life. The decrease in tax loss carryforwards from 2018 to 2019 of \$11.3 million results from loss expiration and utilization of \$34.2 million, offset with \$18.5 million of additional losses not recognized with the remainder of the movement mainly due to the impact of foreign exchange translation on non-U.S. dollar denominated gains, the acquisition of OppenheimerFunds and other adjustments. A valuation allowance has been recorded against the deferred tax assets related to these losses where a history of losses in the respective tax jurisdiction makes it unlikely that the deferred tax asset will be realized.

A reconciliation between the statutory rate and the effective tax rate on income from operations for the years ended December 31, 2019, 2018 and 2017 is as follows:

	2019	2018	2017
Statutory Rate	21.0 %	21.0 %	35.0 %
Foreign jurisdiction statutory income tax rates	(1.2)%	0.2 %	(9.6)%
State taxes, net of federal tax effect	2.3 %	2.8 %	2.2 %
Non-deductible transaction expenses	0.9 %	— %	<u> </u>
U.S. Tax Reform Impact	<u> </u>	(1.3)%	(9.3)%
Change in valuation allowance for unrecognized tax losses	0.5 %	0.4 %	0.4 %
Common Share-Based Compensation			
	0.9 %	(0.2)%	(0.3)%
Other	0.9 %	(0.5)%	1.2 %
(Gains)/losses attributable to noncontrolling interests	(1.1)%	— %	(0.8)%
Effective tax rate per Consolidated Statements of Income	24.2 %	22.4 %	18.8 %

The company's subsidiaries operate in several taxing jurisdictions around the world, each with its own statutory income tax rate. As a result, the blended average statutory tax rate will vary from year to year depending on the mix of the profits and losses of the company's subsidiaries. The majority of our profits are earned in the U.S. and the UK.

The enacted UK statutory tax rate, for U.S. GAAP purposes, was 19% as of December 31, 2019. As of December 31, 2019, the U.S. federal statutory tax rate was 21%.

The division of income/(losses) before taxes between U.S. and foreign for the years ended December 31, 2019, 2018 and 2017 is as follows:

\$ in millions (except percentages)	2019	2018	2017
U.S.	486.9	472.9	638.4
CIP - U.S.	24.2	18.9	0.1
Total U.S. income before income taxes	511.1	491.8	638.5
Foreign	438.1	656.1	754.8
CIP - Foreign	23.7	(9.8)	35.9
Total Foreign income before income taxes	461.8	646.3	790.7
Income before income taxes	972.9	1,138.1	1,429.2

As a multinational corporation, the company operates in various locations around the world and we generate substantially all of our earnings from our subsidiaries. Under ASC 740-30 deferred tax liabilities are recognized for taxes that would be payable on the unremitted earnings of the company's subsidiaries, direct investments in CIP and joint ventures, except where it is our intention to continue to indefinitely reinvest the undistributed earnings. Our Canadian and U.S. subsidiaries continue to be directly owned by Invesco Holding Company Limited, a UK company, which is directly owned by Invesco Ltd. Our Canadian unremitted earnings, for which we are indefinitely reinvested, are estimated to be \$1,017.0 million at December 31, 2019, compared with \$935.0 million at December 31, 2018. If distributed as a dividend, Canadian withholding tax of 5.0% would be due. Dividends from our investment in the U.S. should not give rise to additional tax as we are not subject to withholding tax between the U.S. and UK. Deferred tax liabilities in the amount of \$1.6 million (2018: \$0.1 million) for withholding tax on

unremitted earnings from our China JV and Taiwan subsidiary have been recognized. These subsidiaries have regularly remitted earnings and we expect to continue to remit earnings in the foreseeable future. The UK dividend exemption should apply to the remainder of our UK subsidiary investments. There is no additional tax on dividends from the UK to Bermuda.

The company and its subsidiaries file annual income tax returns in the U.S. federal jurisdiction, various U.S. state and local jurisdictions, and in numerous foreign jurisdictions. A number of years may elapse before an uncertain tax position, for which the company has unrecognized tax benefits, is finally resolved. To the extent that the company has favorable tax settlements, or determines that accrued amounts are no longer needed due to a lapse in the applicable statute of limitations or other change in circumstances, such liabilities, as well as the related interest and penalty, would be reversed as a reduction of income tax expense (net of federal tax effects, if applicable) in the period such determination is made. At December 31, 2018, the company had approximately \$20.0 million (December 31, 2017: \$19.6 million) of gross unrecognized income tax benefits (UTBs), of which \$16.4 million (December 31, 2017: \$16.5 million) represents the amount of unrecognized tax benefits that, if recognized, would favorably affect the effective tax rate in future periods. A reconciliation of the change in the UTB balance from January 1, 2017, to December 31, 2019, is as follows:

\$ in millions	Gross Unrecognized Income Tax Benefits
Balance at January 1, 2017	10.5
Additions for tax positions related to the current year	0.9
Additions for tax positions related to prior years	11.5
Other reductions for tax positions related to prior years	(0.2)
Reductions for statute closings	(3.1)
Balance at December 31, 2017	19.6
Additions for tax positions related to the current year	1.0
Additions for tax positions related to prior years	0.1
Other reductions for tax positions related to prior years	(0.2)
Reductions for statute closings	(0.5)
Balance at December 31, 2018	20.0
Additions for tax positions related to the current year	1.4
Additions for tax positions related to prior years	1.2
Additions for tax positions related to acquisitions	
	54.1
Other reductions for tax positions related to prior years	(4.0)
Reductions for statute closings	(2.8)
Balance at December 31, 2019	69.9

The company recognizes accrued interest and penalties, as appropriate, related to unrecognized tax benefits as a component of the income tax provision. At December 31, 2019, the total amount of gross unrecognized tax benefits was \$69.9 million. 2019 movement is mainly due to \$54.1 million of OppenheimerFunds' historical uncertain tax positions being recorded to the opening balance sheet at May 24, 2019 as a result of the OppenheimerFunds acquisition and \$6.8 million reduction related to the favorable state audit settlement and the expiration of statute of limitation on one of OppenheimerFunds' tax positions during the year. The OppenheimerFunds historical unrecognized tax benefits relate to state tax positions from years prior to the acquisition date for which the company is fully indemnified.

Of this total, \$54.2 million (net of tax benefits in other jurisdictions and the federal benefit of state taxes) represents the amount of unrecognized tax benefits that, if recognized, would favorably affect the effective tax rate in future periods. The Consolidated Balance Sheet includes accrued interest and penalties of \$11.7 million at December 31, 2019, reflecting \$8.5 million for accrued interest and penalties in 2019 (year ended December 31, 2018: \$3.2 million of accrued interest and penalties, \$0.3 million for accrued interest and penalties in 2018; year ended December 31, 2017: \$2.9 million accrued interest and penalties, \$1.2 million for accrued interests and penalties in 2017). As a result of potential legislative changes, settlements with taxing authorities and the expiration of statutes of limitations for certain jurisdictions, it is reasonably possible that the company's gross unrecognized tax benefits balance may change within the next twelve months by a range of \$8.0 million to \$17.0 million.

The company and its subsidiaries are periodically examined by various taxing authorities. With few exceptions, the company is no longer subject to income tax examinations by the primary tax authorities for years prior to 2012. Management

monitors changes in tax statutes and regulations and the issuance of judicial decisions to determine the potential impact to uncertain income tax positions. As of December 31, 2019, management had identified no other potential subsequent events that could have a significant impact on the unrecognized tax benefits balance.

17. EARNINGS PER COMMON SHARE

The calculation of earnings per common share is as follows:

	Years ended December 31,		
In millions, except per share data	2019	2018	2017
Net income attributable to Invesco Ltd.	\$564.7	\$882.8	\$1,127.3
Invesco Ltd:			
Weighted average common shares outstanding - basic	437.8	412.4	409.4
Dilutive effect of non-participating common share-based awards	2.7	0.1	0.5
Weighted average common shares outstanding - diluted	440.5	412.5	409.9
Earnings per common share:			
-basic	\$1.29	\$2.14	\$2.75
-diluted	\$1.28	\$2.14	\$2.75

See Note 12, "Common Share-Based Compensation," for a summary of common share awards outstanding under the company's common share-based payment programs. These programs could result in the issuance of common shares that would affect the measurement of basic and diluted earnings per common share.

There were 0.7 million common shares of performance-vested awards excluded from the computation of diluted earnings per common share during the year ended December 31, 2019 due to their inclusion being anti-dilutive (years ended December 31, 2018: \$0.5 million; December 31, 2017: none). There were no common shares of time-vested awards excluded from the computation of diluted earnings per common share during the year ended December 31, 2019 (years ended December 31, 2018: none; December 31, 2017: none). There were no contingently issuable common shares excluded from the diluted earnings per common share computation during the year ended December 31, 2019 (December 31, 2018: none; December 31, 2017: 0.1 million), because the necessary performance conditions for the common shares to be issuable had not yet been satisfied at the end of the respective period.

18. GEOGRAPHIC INFORMATION

The company operates under one business segment, investment management. Geographical information is presented below. There are no revenues or long-lived assets attributed to the company's country of domicile, Bermuda.

In the second quarter of 2019, the company changed the presentation of its AUM and has changed the presentation of the revenue tables to reflect the change. The new presentation reflects the combination of the U.S and Canada to form Americas and Continental Europe to now be EMEA ex UK. In the revenue tables below, all periods have been reclassified to conform to the new presentation.

\$ in millions	Americas	UK	EMEA Ex UK	Asia	Total
For the year ended December 31, 2019					
Revenue from external customers	4,314.3	720.9	902.2	180.0	6,117.4
Inter-company revenue	(24.1)	98.8	(203.9)	129.2	_
Total operating revenues (1)	4,290.2	819.7	698.3	309.2	6,117.4
Long-lived assets	416.0	138.5	8.2	20.8	583.5
For the year ended December 31, 2018					
Revenue from external customers	3,261.7	835.0	1,085.0	132.4	5,314.1
Inter-company revenue	(16.7)	142.2	(269.1)	143.6	_
Total operating revenues (1)	3,245.0	977.2	815.9	276.0	5,314.1
Long-lived assets	319.4	122.8	8.1	18.4	468.7
For the year ended December 31, 2017					
Revenue from external customers	3,086.9	955.8	999.6	118.0	5,160.3
Inter-company revenue	(22.5)	122.8	(243.0)	142.7	
Total operating revenues (1)	3,064.4	1,078.6	756.6	260.7	5,160.3
Long-lived assets	341.1	118.3	10.0	21.3	490.7

⁽¹⁾ Operating revenues reflect the geographical regions from which services are provided.

The opening and closing balance of deferred carried interest liabilities for the year ended December 31, 2019 was \$61.3 million and \$45.8 million, respectively. During the year ended December 31, 2019, \$6.8 million performance fee revenue was recognized that had been included in the deferred carried interest liability balance at the beginning of the period.

19. COMMITMENTS AND CONTINGENCIES

Commitments and contingencies may arise in the ordinary course of business.

The company has committed to co-invest in certain investment products which may be called in future periods. At December 31, 2019, the company's undrawn capital and purchase commitments were \$357.0 million (December 31, 2018: \$391.6 million).

On October 18, 2018, the company announced plans to buy back \$1.2 billion of the company's common shares within the next two years. In connection with this effort, the company entered into several forward contracts to purchase its common shares. See Note 10, "Share Capital" for details of these forward contracts and the related liability outstanding at December 31, 2019.

The Parent and various company subsidiaries have entered into agreements with financial institutions to guarantee certain obligations of other company subsidiaries. The company would be required to perform under these guarantees in the event of certain defaults. The company has not had prior claims or losses pursuant to these contracts and expects the risk of loss to be remote.

Pursuant to an agreement entered into at the consummation of the acquisition of OppenheimerFunds, MassMutual, as the holder of seed capital investments in certain funds and accounts included in the acquisition, has the right to redeem its seed capital investments in accordance with an agreed upon schedule. In the event MassMutual exercises its redemption rights and the applicable fund or account is unable to meet such redemption (for example, due to illiquid investments or the need to maintain a level of investment in the fund), the company would be required to fund such redemption to MassMutual and seek reimbursement from the applicable fund or account at a later time when the fund or account is able to fulfill a redemption request. At December 31, 2019, the total amount of seed capital subject to this agreement is approximately \$625 million. Since December 31, 2019, MassMutual exercised its redemption rights and redeemed a portion of the seed capital per the agreed upon schedule. As of the date of this report, the company was not required to fund these redemptions nor does the company anticipate having to fund any of the seed capital subject to this agreement.

Legal Contingencies

The company is from time to time involved in litigation relating to claims arising in the ordinary course of its business. The nature and progression of litigation can make it difficult to predict the impact a particular lawsuit will have on the company. There are many reasons that the company cannot make these assessments, including, among others, one or more of the following: the proceeding is in its early stages; the damages sought are unspecified, unsupportable, unexplained or uncertain; the claimant is seeking relief other than compensatory damages; the matter presents novel legal claims or other meaningful legal uncertainties; discovery has not started or is not complete; there are significant facts in dispute; and there are other parties who may share in any ultimate liability.

In assessing the impact that a legal or regulatory matter will have on the company, management evaluates the need for an accrual on a case-by-case basis. If the likelihood of a loss is deemed probable and is reasonably estimable, the estimated loss is accrued. If the likelihood of a loss is assessed as less than probable, or an amount or range of loss cannot be reasonably estimated, a loss is not accrued. In management's opinion, adequate accrual has been made as of December 31, 2019 to provide for any losses that may arise from matters for which the company has assessed the likelihood as probable and could reasonably estimate an amount. Management is of the opinion that the ultimate resolution of such claims will not materially affect the company's business, financial position, results of operation or liquidity. Furthermore, in management's opinion, except as set forth in the "OppenheimerFunds acquisition-related matter" below it is not possible to estimate a range of reasonably possible losses with respect to other litigation contingencies.

The investment management industry also is subject to extensive levels of ongoing regulatory oversight and examination. In the United States, United Kingdom, and other jurisdictions in which the company operates, governmental authorities regularly make inquiries, hold investigations and administer market conduct examinations with respect to the company's compliance with applicable laws and regulations. Additional lawsuits or regulatory enforcement actions arising out of these inquiries may in the future be filed against the company and related entities and individuals in the United States, United Kingdom and other jurisdictions in which the company and its affiliates operate. Any material loss of investor and/or client confidence as a result of such inquiries and/or litigation could result in a significant decline in assets under management, which would have an adverse effect on the company's future financial results and its ability to grow its business.

OppenheimerFunds acquisition-related matter

As part of the integration activities for the OppenheimerFunds business, the company has identified a matter that involves a reasonably possible loss contingency related to the acquired business. The company estimates that a majority of these reasonably possible losses relate to periods prior to the acquisition. There are significant uncertainties as of the date of this report regarding the nature, scope and amount of the reasonably possible loss. In the event of an actual loss relating to this matter, the company may be entitled to seek reimbursement for certain of such losses under applicable insurance policies (subject to the terms of such policies, including, without limitation, applicable deductibles and policy limits). The company also, in such circumstances, may be entitled to seek indemnification for certain of such losses from MassMutual under the OppenheimerFunds acquisition agreement (subject to the terms of such indemnification, including, without limitation, the specified deductible and limit).

As of the date of this report, the company has concluded that it is reasonably possible that the company may incur at least some losses regarding this matter. Because the company does not believe the likelihood of a loss is probable, no accrual has been made for this matter as of December 31, 2019. Based on information that is known and readily available, the company estimates that (prior to application of any available insurance or indemnification) losses could be up to \$400 million. However, certain information is not readily available, which could lead to changes to this estimate. If there are any losses incurred related to this matter, the company believes that the majority would be recorded as an adjustment to goodwill on the consolidated balance sheet with the remainder, if any, recorded as transaction, integration and restructuring expense in the consolidated income statement.

Canada Revenue Agency matter

In a separate matter, a Canadian subsidiary of the company had previously received assessments related to prior taxation periods up to and including the year ended December 31, 2013 for goods and services tax that the Canada Revenue Agency (CRA) believes should be levied on certain fees payable. The assessments, including applicable interest, are approximately \$8.0 million. The company has secured a letter of credit in the same amount, which has been posted with the CRA as security for payment. The company objected to and appealed the assessments and in May 2017 the Tax Court of Canada ruled in favor of the CRA. The company filed an appeal with the Federal Court of Appeal in June 2017, a hearing was held before the court of appeal on November 29, 2018 and a judgment in favor of the Company was issued August 9, 2019. The CRA did not further appeal the judgment and therefore, the matter is closed.

20. CONSOLIDATED INVESTMENT PRODUCTS

The following table presents the balances related to CIP that are included on the Consolidated Balance Sheets as well as Invesco's net interest in the CIP for each period presented.

	A	s of
\$ in millions	December 31, 2019	December 31, 2018
Cash and cash equivalents of CIP	652.2	657.7
Accounts receivable and other assets of CIP	172.9	110.8
Investments of CIP	7,808.0	6,213.5
Less: Debt of CIP	(6,234.6)	(5,226.0)
Less: Other liabilities of CIP	(949.6)	(387.6)
Less: Retained earnings	9.5	7.9
Less: Accumulated other comprehensive income, net of tax	(9.4)	(7.8)
Less: Equity attributable to redeemable noncontrolling interests	(383.5)	(396.2)
Less: Equity attributable to nonredeemable noncontrolling interests	(454.9)	(356.5)
Invesco's net interests in CIP	610.6	615.8

The following table reflects the impact of consolidation of investment products into the Consolidated Statements of Income for the years ended December 31, 2019, 2018 and 2017.

Summary of Income Statement Impact of CIP

	Years ended December 31,		
\$ in millions	2019	2018	2017
Total operating revenues	(33.5)	(28.6)	(32.4)
Total operating expenses	28.1	16.2	10.5
Operating income	(61.6)	(44.8)	(42.9)
Equity in earnings of unconsolidated affiliates	5.1	(10.2)	(20.0)
Interest and dividend income	(4.6)	_	
Other gains and losses, net	(40.8)	34.5	(38.4)
Interest and dividend income of CIP	345.4	275.4	211.6
Interest expense of CIP	(228.5)	(190.7)	(155.3)
Other gains/(losses) of CIP, net	32.9	(55.1)	81.0
Income before income taxes	47.9	9.1	36.0
Income tax provision	_	_	_
Net income	47.9	9.1	36.0
Net (income)/loss attributable to noncontrolling interests in consolidated			
entities	(49.5)	(0.3)	(33.7)
Net income attributable to Invesco Ltd.	(1.6)	8.8	2.3

The company's risk with respect to each investment in CIP is limited to its equity ownership and any uncollected management and performance fees. The company has no right to the benefits from, nor does it bear the risks associated with,

these investments, beyond the company's direct investments in, and management and performance fees generated from, the investment products. If the company were to liquidate, these investments would not be available to the general creditors of the company, and as a result, the company does not consider investments held by CIP to be company assets. Additionally, the collateral assets of consolidated collateralized loan obligations (CLOs) are held solely to satisfy the obligations of the CLOs, and the investors in the consolidated CLOs have no recourse to the general credit of the company for the notes issued by the CLOs. CIP are taxed at the investor level and not at the product level; therefore, there is no tax provision reflected in the net impact of CIP.

Non-consolidated VIEs

At December 31, 2019, the company's carrying value and maximum risk of loss with respect to VIEs in which the company is not the primary beneficiary was \$188.0 million (December 31, 2018; \$181.8 million).

Balance Sheet information - newly consolidated VIEs/VOEs

During the year ended December 31, 2019, the company invested in and consolidated four new VIEs and five new VOEs (December 31, 2018: the company invested in and consolidated twenty-five new VIEs and eight new VOEs). The tables below illustrate the summary balance sheet amounts related to these products before consolidation into the company. The balances below are reflective of the balances existing at the consolidation date after the initial funding of the investments by the company and unrelated third-party investors. The current period activity for the consolidated funds, including the initial funding and subsequent investment of initial cash balances into underlying investments of CIP, is reflected in the company's Consolidated Financial Statements.

	For the year ended December 31, 2019		For the year ended I	December 31, 2018
\$ in millions	VIEs	VOEs	VIEs	VOEs
Cash and cash equivalents of CIP	9.8	0.2	400.7	_
Accounts receivable and other assets of CIP	3.1	0.3	6.6	1.9
Investments of CIP	508.7	25.5	914.8	172.6
Total assets	521.6	26.0	1,322.1	174.5
Debt of CIP	188.8	_	1,017.1	_
Other liabilities of CIP	332.8	_	38.5	_
Total liabilities	521.6		1,055.6	_
Total equity	_	26.0	266.5	174.5
Total liabilities and equity	521.6	26.0	1,322.1	174.5

During the year ended December 31, 2019, the company determined it was no longer the primary beneficiary of six VIEs and eleven VOE. During the year ended December 31, 2018, the company determined that it was no longer the primary beneficiary of six VIEs and one VOE. The amounts deconsolidated from the Consolidated Balance Sheets are illustrated in the table below. There was no net impact to the Consolidated Statements of Income for the years ended December 31, 2019 and December 31, 2018 from the deconsolidation of these investment products.

	For the year ended Dec	ember 31, 2019	For the year ended De	cember 31, 2018
\$ in millions	VIEs	VOEs	VIEs	VOEs
Cash and cash equivalents of CIP	7.6	_	104.8	_
Accounts receivable and other assets of CIP	22.3	0.6	26.3	0.1
Investments of CIP	626.1	94.3	917.4	5.9
Total assets	656.0	94.9	1,048.5	6.0
Debt of CIP	526.2	_	938.4	_
Other liabilities of CIP	22.2	_	8.9	_
Total liabilities	548.4		947.3	
Total equity	107.6	94.9	101.2	6.0
Total liabilities and equity	656.0	94.9	1,048.5	6.0

The following tables present the fair value hierarchy levels of certain CIP balances which are measured at fair value as of December 31, 2019 and December 31, 2018:

		As	of December 31, 2019		
\$ in millions	Fair Value Measurements	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Investments Measured at NAV as a practical expedient
Assets:					
Bank loans	6,504.4	_	6,504.4	_	
Bonds	705.9	0.5	705.4	_	_
Equity securities	275.9	204.4	71.5	_	
Equity and fixed income mutual funds	29.8	20.3	9.5	_	_
Investments in other private equity funds	213.4	_	_	_	213.4
Real estate investments	78.6	_	_	78.6	_
Total assets at fair value	7,808.0	225.2	7,290.8	78.6	213.4

		As	s of December 31, 2018		
\$ in millions	Fair Value Measurements	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Investments Measured at NAV as a Practical expedient
Assets:					
Bank loans	5,117.0	_	5,117.0	_	_
Bonds	636.0	_	636.0		_
Equity securities	241.2	208.1	33.1	_	_
Equity and fixed income mutual funds	18.8	18.8	_	_	_
Investments in other private equity funds	188.7	_	_	_	188.7
Real estate investments	11.8	_	_	11.8	_
Total assets at fair value	6,213.5	226.9	5,786.1	11.8	188.7

The following table shows a reconciliation of the beginning and ending fair value measurements for level 3 assets using significant unobservable inputs:

	Year ended December 31, 2019	Year ended December 31, 2018
\$ in millions	Level 3 Assets	Level 3 Assets
Beginning balance	11.8	76.2
Purchases	58.9	13.0
Sales	_	(84.8)
Gains and losses included in the Consolidated Statements of Income ⁽¹⁾	7.9	7.4
Ending balance	78.6	11.8

(1) Included in gains/(losses) of CIP, net in the Consolidated Statement of Income for the year ended December 31, 2019 are \$7.9 million in net unrealized gains attributable to investments still held at December 31, 2019 by CIP (year ended December 31, 2018: \$1.1 million net unrealized losses attributable to investments still held at December 31, 2018).

The impact of any gains or losses resulting from valuation changes in the investments of non-CLO CIP attributable to the interests of third parties are offset by resulting changes in gains and losses attributable to noncontrolling interests in consolidated entities and therefore do not have a material effect on the financial condition, operating results (including earnings per common share), liquidity or capital resources of the company's common shareholders. Similarly, any gains or losses resulting from valuation changes in the investments of CLOs attributable to the interests of third parties are offset by the calculated value of the notes issued by the CLOs (offsetting in other gains/(losses) of CIP) and therefore also do not have a material effect on the financial condition, operating results (including earnings per common share), liquidity or capital resources of the company's common shareholders.

Value of consolidated CLOs

The company elected the fair value option for collateral assets held and notes issued by its consolidated CLOs to eliminate the measurement and recognition inconsistency that would otherwise arise from measuring assets and liabilities and recognizing the related gains and losses on different accounting bases. By electing the fair value option, the notes issued by the CLOs are measured based on the fair value of the assets of the CLOs.

The collateral assets held by consolidated CLOs are primarily invested in senior secured bank loans, bonds, and equity securities. Bank loan investments at December 31, 2019 of \$6,464.3 million (December 31, 2018: \$5,074.1 million), which comprise the majority of consolidated CLO portfolio collateral, are senior secured corporate loans from a variety of industries, including but not limited to the aerospace and defense, broadcasting, technology, utilities, household products, healthcare, oil and gas, transportation, real estate, packaging, and finance industries. Bank loan investments mature at various dates between 2019 and 2030, pay interest at Libor plus a spread of up to 11.75%, and typically range in S&P credit rating categories from BBB down to unrated. Interest income on bank loans and bonds is recognized based on the unpaid principal balance and stated interest rate of these investments on an accrual basis. At December 31, 2019, the unpaid principal balance exceeds the fair value of the senior secured bank loans and bonds by approximately \$181.2 million (December 31, 2018: the unpaid principal balance exceeded the fair value of the senior secured bank loans and bonds by approximately \$184.3 million). Approximately 0.08% of the collateral assets are in default as of December 31, 2019 (December 31, 2018: approximately 0.15% of the collateral assets were in default). CLO investments are valued based on price quotations provided by third party pricing sources. These third party sources aggregate indicative price quotations daily to provide the company with a price for the CLO investments. The company has developed internal controls to review the reasonableness and completeness of these price quotations on a daily basis. If necessary, price quotations are challenged through the third-party pricing source price challenge process.

In addition, the company's internal valuation committee conducts an annual due diligence review of all independent third-party pricing sources to review the provider's valuation methodology as well as ensure internal controls exist over the valuation of the CLO investments. In the event that the third-party pricing source is unable to price an investment, other relevant factors, data and information are considered, including: i) information relating to the market for the investment, including price quotations for and trading in the investment and interests in similar investments, the market environment, and investor attitudes towards the investment and interests in similar investments; ii) the characteristics of and fundamental analytical data relating to the investment, including, for senior secured corporate loans, the cost, size, current interest rate, period until next interest rate reset, maturity and base lending rate, the terms and conditions of the senior secured corporate loan and any related agreements,

and the position of the senior secured corporate loan in the borrower's debt structure; iii) the nature, adequacy and value of the senior secured corporate loan's collateral, including the CLO's rights, remedies and interests with respect to the collateral; iv) for senior secured corporate loans, the creditworthiness of the borrower, based on an evaluation of its financial condition, financial statements and information about the business, cash flows, capital structure and future prospects; v) the reputation and financial condition of the agent and any intermediate participants in the senior secured corporate loan; and vi) general economic and market conditions affecting the fair value of the senior secured corporate loan.

Notes issued by consolidated CLOs mature at various dates between 2026 and 2032 and have a weighted average maturity of 10.9 years. The notes are issued in various tranches with different risk profiles. The interest rates are generally variable rates based on Libor plus a pre-defined spread, which varies from 0.55% for the more senior tranches to 8.07% for the more subordinated tranches. The investors in this debt are not affiliated with the company and have no recourse to the general credit of the company for this debt.

Fair value of consolidated real estate funds

The real estate investment vehicles use one or more valuation techniques (e.g. the market approach, the income approach, or the recent transaction "cost" approach) for which sufficient and reliable data is available to value investments classified within level 3. The use of the market approach generally consists of using comparable market transactions, while the use of the income approach generally consists of the net present value of estimated future cash flows, adjusted as appropriate for liquidity, credit, market and/or other risk factors.

The inputs used by the real estate funds in estimating the value of level 3 investments include the original transaction price, recent transactions in the same or similar instruments, as well as completed or pending third-party transactions in the underlying investment or comparable investments. Level 3 investments may also be adjusted to reflect illiquidity and/or non-transferability. Other inputs used include discount rates, cap rates, and income and expense assumptions. The fair value measurement of level 3 investments does not include transaction costs and acquisition fees that may be capitalized as part of the investment's cost basis.

Fair value of consolidated partnership entities

Consolidated private equity funds are generally structured as partnerships. Generally, the investment strategy of underlying holdings in these partnerships is to seek capital appreciation through direct investments in public or private companies with compelling business models or ideas or through investments in partnership investments that also invest in similar private or public companies. Various strategies may be used. Companies targeted could be distressed organizations, targets of leveraged buyouts or fledgling companies in need of venture capital. Investors in CIP generally may not redeem their investment until the partnership liquidates. Generally, the partnerships have a life that ranges from seven to twelve years unless dissolved earlier. The general partner may extend the partnership term up to a specified period of time as stated in the Partnership Agreement. Some partnerships allow the limited partners to cause an earlier termination upon the occurrence of certain events as specified in the Partnership Agreement.

For private equity partnerships, fair value is determined by reviewing each investment for the sale of additional securities of an issuer to sophisticated investors or for investee financial conditions and fundamentals. Publicly traded portfolio investments are carried at market value as determined by their most recent quoted sale, or if there is no recent sale, at their most recent bid price. For these investments held by CIP, level 1 classification indicates that fair values have been determined using unadjusted quoted prices in active markets for identical assets that the partnership has the ability to access. Level 2 classification may indicate that fair values have been determined using quoted prices in active markets but give effect to certain lock-up restrictions surrounding the holding period of the underlying investments.

The fair value of level 3 investments held by CIP are derived from inputs that are unobservable and which reflect the limited partnerships' own determinations about the assumptions that market participants would use in pricing the investments, including assumptions about risk. These inputs are developed based on the partnership's own data, which is adjusted if information indicates that market participants would use different assumptions. The partnerships which invest directly into private equity portfolio companies (direct private equity funds) take into account various market conditions, subsequent rounds of financing, liquidity, financial condition, purchase multiples paid in other comparable third-party transactions, the price of securities of other companies comparable to the portfolio company, and operating results and other financial data of the portfolio company, as applicable.

The partnerships which invest into other private equity funds (funds-of-funds) take into account information received from those underlying funds, including their reported net asset values and evidence as to their fair value approach, including consistency of their fair value application. These investments do not trade in active markets and represent illiquid long-term

investments that generally require future capital commitments. The partnerships' reported share of the underlying net asset values of the underlying funds is used as a practical expedient, as allowed by ASC Topic 820, in arriving at fair value.

Quantitative Information about Level 3 Fair Value Measurements

At December 31, 2019, there were \$78.6 million of investments held by consolidated real estate funds that were valued using recent private market transactions.

At December 31, 2018, there were \$11.8 million of investments held by consolidated real estate funds that were valued using recent private market transactions.

The following narrative will indicate the sensitivity of inputs illustrating the impact of significant increases to the inputs. A directionally opposite impact would apply for significant decreases in these inputs:

• For real estate investments, a change in the average rent growth rate would result in a directionally-opposite change in the assumptions for discount rate and terminal capitalization rate. Significant increases in the average growth rate would result in significantly higher fair values. Significant increases in the assumptions for discount rate and terminal capitalization rate in isolation would result in significantly lower fair value measurements.

The table below summarizes as of December 31, 2019 and December 31, 2018, the nature of investments that are valued using the NAV as a practical expedient and any related liquidation restrictions or other factors which may impact the ultimate value realized:

		December 31, 2019			December 31, 2018	3
in millions, except term data	Fair Value	Total Unfunded Commitments	Weighted Average Remaining Term ⁽²⁾	Fair Value	Total Unfunded Commitments	Weighted Average Remaining Term (2)
Private equity funds (1)	\$213.4	\$78.3	6.7 years	\$188.7	\$101.9	6.1 years

- (1) These investments are not subject to redemption; however, for certain funds, the investors may sell or transfer their interest, which may require approval by the general partner of the underlying funds.
- (2) These investments are expected to be returned through distributions as a result of liquidations of the funds' underlying assets over the weighted average periods indicated.

For investments held by consolidated private equity funds, significant increases in discounts in isolation would result in significantly lower fair value measurements, while significant increases in revenue multiple assumptions in isolation would result in significantly higher fair value measurements. An increase in discount assumptions would result in a directionally opposite change in the assumptions for revenue multiple resulting in lower fair value measurements.

Fair Value of Equity Securities, Bonds, and Equity/Fixed Income Mutual Funds

Equity securities are valued under the market approach through use of quoted prices on an exchange. To the extent these securities are actively traded, valuation adjustments are not applied and they are categorized within level 1 of the valuation hierarchy; otherwise, they are categorized in level 2 or level 3 depending on the inputs used.

Bonds are fair valued using an evaluated quote provided by an independent pricing service. Evaluated quotes provided by the pricing service may be determined without exclusive reliance on quoted prices, and may reflect appropriate factors such as institution-size trading in similar groups of securities, developments related to specific securities, yield, quality, type of issue, coupon rate, maturity, individual trading characteristics and other market data. Depending on the nature of the inputs, these investments are categorized as level 1, 2, or 3.

Equity and fixed income mutual funds are valued under the market approach through the use of quoted market prices available in an active market and is classified within level 1 of the valuation hierarchy; there is no modeling or additional information needed to arrive at the fair values of these investments.

21. RELATED PARTIES

Certain managed funds are deemed to be affiliated entities under the related party definition in ASC 850, "Related Party Disclosures." Related parties include those defined in the company's proxy statement. As a result of the OppenheimerFunds acquisition (see Note 2, "Business Combinations"), MassMutual has an approximate 16.7% stake in the common stock of the company and owns all of the outstanding \$4.0 billion in perpetual, non-cumulative preferred shares. Based on the level of shares owned by MassMutual and the corresponding customary minority shareholder rights, which includes representation on Invesco's board of directors, the company considers MassMutual a related party. Affiliated balances are illustrated in the tables below:

Years ended December 31,

12,827.6

12,907.4

\$ in millions	2019	2018	2017
Affiliated operating revenues:			
Investment management fees	4,039.7	3,591.7	3,624.7
Service and distribution fees	1,219.1	945.8	851.2
Performance fees	58.0	17.5	73.8
Other	219.5	192.4	59.1
Total affiliated operating revenues	5,536.3	4,747.4	4,608.8
	_	As of Decen	nber 31,
\$ in millions		2019	2018
Affiliated asset balances:			
Cash and cash equivalents		620.9	367.6
Unsettled fund receivables		113.6	105.0
Accounts receivable		599.8	391.4
Investments		633.5	655.7
Assets held for policyholders		10,835.3	11,384.5
Other assets		24.5	3.2

Affiliated liability balances:

Total affiliated asset balances

Accrued compensation and benefits	65.7	83.2
Accounts payable and accrued expenses	53.8	64.8
Unsettled fund payables	116.6	100.3
Total affiliated liability balances	236.1	248.3

22. SUBSEQUENT EVENTS

On January 29, 2020, the company declared a fourth quarter 2019 dividend of \$0.31 per common share, payable on March 2, 2020, to common shareholders of record at the close of business on February 13, 2020 with an ex-dividend date of February 12, 2020.

On January 29, 2020, the company declared a preferred dividend of \$14.75 per preferred share to the holders of preferred shares, representing the period from December 1, 2019 through February 29, 2020. The preferred dividend is payable on March 2, 2020, to preferred shareholders of record at the close of business on February 14, 2020.

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

None

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Management, with the participation of the chief executive officer and chief financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in the Securities and Exchange Act of 1934 Rules 13a-15(e) and 15d-15(e)) as of December 31, 2019. Based upon this evaluation, the chief executive officer and chief financial officer concluded that the company's disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the applicable rules and forms, and that it is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding the required disclosure.

Management's report on internal control over financial reporting is located in Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K. Our independent registered public accounting firm PricewaterhouseCoopers LLP, have issued an attestation report on the effectiveness of our internal control over financial reporting for the year ended December 31, 2019.

Changes in Internal Control over Financial Reporting

On May 24, 2019, the company acquired MassMutual's asset management affiliate, OppenheimerFunds. Consistent with guidance issued by the Securities and Exchange Commission that an assessment of a recently acquired business may be omitted from management's report on internal control over financial reporting in the year of acquisition, management excluded an assessment of the effectiveness of the company's internal control over financial reporting related to certain OppenheimerFunds revenue processes due to the ongoing transition of middle- and back-office transaction processing systems. Accordingly, a portion of the acquired revenue was excluded from evaluation, which represented approximately 17% of the company's total revenue for the year ended December 31, 2019. The company will complete integration of OppenheimerFunds into its internal control over financial reporting during 2020.

Other than the integration of certain revenue processes of the acquired OppenheimerFunds business described above, there were no changes in the company's internal control over financial reporting during the fourth quarter of 2019 which were identified in connection with management's evaluation required by the Securities Exchange Act of 1934 Rules 13a-15(f) and 15d-15(f), that have materially affected, or are reasonably likely to materially affect, the company's internal control over financial reporting.

Item 9B. Other Information

None

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Invesco filed the certification of its Chief Executive Officer with the New York Stock Exchange (NYSE) in 2019 as required pursuant to Section 303A of the NYSE Listed Company Manual. In addition, Invesco filed the Sarbanes-Oxley Act Section 302 certifications of its Chief Executive Officer and Chief Financial Officer with the Securities and Exchange Commission, which certifications are attached hereto as Exhibit 31.1 and Exhibit 31.2, respectively.

The information required by this Item will be included in the definitive Proxy Statement for the company's annual meeting of shareholders, which will be filed with the SEC no later than 120 days after the close of the fiscal year ended December 31, 2019, under the captions "Information About Director Nominees," "Information About the Executive Officers of the Company," "Corporate Governance," "Information About the Board and its Committees," and possibly elsewhere therein. Such information is incorporated into this Item 10 by reference.

Item 11. Executive Compensation

The information required by this Item will be included in the definitive Proxy Statement for the company's annual meeting of shareholders, which will be filed with the SEC no later than 120 days after the close of the fiscal year ended December 31, 2019, under the captions "Information About the Board and its Committees - Director Compensation," "Executive Compensation," "Compensation Committee Interlocks and Insider Participation," and possibly elsewhere therein. Such information is incorporated into this Item 11 by reference.

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

The information required by this Item will be included in the definitive Proxy Statement for the company's annual meeting of shareholders, which will be filed with the SEC no later than 120 days after the close of the fiscal year ended December 31, 2019, under the captions "Executive Compensation," "Security Ownership of Principal Shareholders," "Security Ownership of Management," and possibly elsewhere therein. Such information is incorporated into this Item 12 by reference.

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

The information required by this Item will be included in the definitive Proxy Statement for the company's annual meeting of shareholders, which will be filed with the SEC no later than 120 days after the close of the fiscal year ended December 31, 2019, under the captions "Corporate Governance," "Certain Relationships and Related Transactions," "Information about Director Nominees," "Related Person Transaction Policy," and possibly elsewhere therein. Such information is incorporated into this Item 13 by reference.

Item 14. Principal Accountant Fees and Services

The information required by this Item will be included in the definitive Proxy Statement for the company's annual meeting of shareholders, which will be filed with the SEC no later than 120 days after the close of the fiscal year ended December 31, 2019, under the captions "Fees Paid to Independent Registered Public Accounting Firm," "Pre-Approval Process and Policy," and possibly elsewhere therein. Such information is incorporated into this Item 14 by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedule

- (a)(1) The Consolidated Financial Statements filed as part of this Report are listed in Item 8, "Financial Statements and Supplementary Data."
- (a)(2) No financial statement schedules are required to be filed as part of this Report; therefore, all such schedules have been omitted. Such omission has been made on the basis that information is provided in the Consolidated Financial Statements or related footnotes in Item 8, "Financial Statements and Supplementary Data," or is not required to be filed as the information is not applicable.
 - (a)(3) The exhibits listed on the Exhibit Index are included with this Report.

Item 16. Form 10-K Summary

Not applicable

Exhibit Index

(Note: Exhibits 10.2 through 10.20 and 10.22 through 10.30 are management contracts or compensatory plans or arrangements required to be filed as an exhibit to this Report pursuant to Item 15(b) of this Report. References herein to "AMVESCAP," or "AMVESCAP PLC" are to the predecessor registrant to Invesco Ltd.)

- 3.1 Memorandum of Association of Invesco Ltd., incorporating amendments up to and including December 4, 2007, incorporated by reference to exhibit 3.1 to Invesco's Current Report on Form 8-K, filed with the Securities and Exchange Commission on December 12, 2007
- 3.2 Third Amended and Restated Bye-Laws of Invesco Ltd., incorporating amendments up to and including May 11, 2017, incorporated by reference to exhibit 3.2 to Invesco's Quarterly Report on Form 10-Q for the period ended June 30, 2017, filed with the Securities and Exchange Commission on July 27, 2017
- 3.3 Certificate of Designation for the 5.900% fixed rate non-cumulative perpetual series A preference shares, par value \$0.20 per share, of Invesco Ltd. incorporated by reference to Exhibit 3.1 to the Invesco's Current Report on Form 8-K, filed with the Securities and Exchange Commission on May 24, 2019
- 4.1 Specimen Certificate for Common Shares of Invesco Ltd., incorporated by reference to exhibit 4.1 to Invesco's Current Report on Form 8-K, filed with the Securities and Exchange Commission on December 12, 2007
- 4.2 <u>Indenture, dated as of November 8, 2012, among Invesco Finance PLC, the Guarantors and The Bank of New York Mellon, as trustee, incorporated by reference to exhibit 4.1 to Invesco's Current Report on Form 8-K, filed with the Securities and Exchange Commission on November 9, 2012</u>

- 4.3 Supplemental Indenture, dated November 8, 2012, for Invesco Finance PLC's 3.125% Senior Notes due 2022, among Invesco Finance PLC, the Guarantors and The Bank of New York Mellon, as trustee, incorporated by reference to exhibit 4.2 to Invesco's Current Report on Form 8-K, filed with the Securities and Exchange Commission on November 9, 2012
- 4.4 Form of 3.125% Senior Notes due 2022 (included in Exhibit 4.3 hereto)
- 4.5 Second Supplemental Indenture, dated November 12, 2013, for Invesco Finance PLC's 4.000% Senior Notes due 2024, among Invesco Finance PLC, the company and The Bank of New York Mellon, as trustee, incorporated by reference to exhibit 4.2 to Invesco's Current Report on Form 8-K, filed with the Securities and Exchange Commission on November 12, 2013
- 4.6 Third Supplemental Indenture, dated November 12, 2013, for Invesco Finance PLC's 5.375% Senior Notes due 2043, among Invesco Finance PLC, the company and The Bank of New York Mellon, as trustee, incorporated by reference to exhibit 4.2 to Invesco's Current Report on Form 8-K, filed with the Securities and Exchange Commission on November 12, 2013
- 4.7 Fourth Supplemental Indenture, dated October 14, 2015, for Invesco Finance PLC's 3.750% Senior Notes due 2026, among Invesco Finance PLC, the company and The Bank of New York Mellon, as trustee, incorporated by reference to exhibit 4.2 to Invesco's Current Report on Form 8-K, filed with the Securities and Exchange Commission on October 14, 2015
- 4.8 Form of 4.000% Senior Notes due 2024 (included in Exhibit 4.5)
- 4.9 Form of 5.375% Senior Notes due 2043 (included in Exhibit 4.6)
- 4.10 Form of 3.750% Senior Notes due 2026 (included in Exhibit 4.7)
- 4.11 Description of Invesco Ltd's Securities
- 10.1 Fourth Amended and Restated Credit Agreement, dated as of August 11, 2017, among Invesco Finance PLC, the company, the banks, financial institutions and other institutional lenders from time to time a party thereto and Bank of America, N.A., as administrative agent, incorporated by reference to exhibit 10.1 to Invesco's Quarterly Report on Form 10-Q for the period ended September 30, 2017, filed with the Securities and Exchange Commission on October 26, 2017
- 10.2 Invesco Ltd. 2011 Global Equity Incentive Plan, as amended and restated effective February 12, 2015, incorporated by reference to exhibit 10.5 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2014, filed with the Securities and Exchange Commission on February 20, 2015
- 10.3 <u>Invesco Ltd. 2016 Global Equity Plan, incorporated by reference to Appendix A to the Proxy Statement on Schedule 14A filed with the Securities and Exchange Commission on March 24, 2016</u>
- 10.4 First Amendment to the Invesco Ltd. 2016 Global Equity Incentive Plan, dated May 9, 2019, incorporated by reference to exhibit 4.3 to Invesco's Form S-8, filed with the Securities and Exchange Commission on May 14, 2019
- 10.5 Invesco Ltd. 2010 Global Equity Incentive Plan (ST), as amended and restated on October 10, 2017, incorporated by reference to exhibit 4.2 to Invesco's Form S-8, filed with the Securities and Exchange Commission on May 14, 2019
- 10.6 First Amendment to the Invesco Ltd. 2010 Global Equity Incentive Plan (ST), as amended and restated on October 10, 2017, dated May 9, 2019, incorporated by reference to exhibit 4.3 to Invesco's Form S-8, filed with the Securities and Exchange Commission on May 14, 2019
- 10.7 Form of Restricted Stock Award Agreement Time Vesting under the Invesco Ltd. 2011 Global Equity Incentive Plan, incorporated by reference to exhibit 10.16 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2014, filed with the Securities and Exchange Commission on February 20, 2015
- 10.8 Form of Restricted Stock Unit Award Agreement Time Vesting under the Invesco Ltd. 2011 Global Equity Incentive Plan, incorporated by reference to exhibit 10.17 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2014, filed with the Securities and Exchange Commission on February 20, 2015
- 10.9 Form of Restricted Stock Award Agreement Time Vesting with respect to Martin L. Flanagan under the Invesco
 Ltd. 2011 Global Equity Incentive Plan, incorporated by reference to exhibit 10.20 to Invesco's Annual Report on
 Form 10-K for the year ended December 31, 2014, filed with the Securities and Exchange Commission on February
 20, 2015
- 10.10 Form of Restricted Stock Award Agreement Time Vesting under the Invesco Ltd. 2016 Global Equity Incentive Plan, incorporated by reference to exhibit 10.17 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2016, filed with the Securities and Exchange Commission on February 23, 2017
- 10.11 Form of Restricted Stock Award Agreement Time Vesting with respect to Martin L. Flanagan under the Invesco Ltd. 2016 Global Equity Incentive Plan, incorporated by reference to exhibit 10.18 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2016, filed with the Securities and Exchange Commission on February 23, 2017

- 10.12 Form of Restricted Stock Unit Award Agreement Time Vesting under the Invesco Ltd. 2016 Global Equity Incentive Plan, incorporated by reference to exhibit 10.19 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2016, filed with the Securities and Exchange Commission on February 23, 2017
- 10.13 Form of Restricted Stock Unit Award Agreement -Performance Vesting under the Invesco Ltd. 2016 Global Equity Incentive Plan, incorporated by reference to exhibit 10.22 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2016, filed with the Securities and Exchange Commission on February 23, 2017
- 10.14 Form of Restricted Stock Unit Award Agreement -Performance Vesting with respect to Martin L. Flanagan under the Invesco Ltd. 2016 Global Equity Incentive Plan, incorporated by reference to exhibit 10.23 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2016, filed with the Securities and Exchange Commission on February 23, 2017
- 10.15 Form of Restricted Stock Unit Award Agreement -Performance Vesting (Feb 2019)- under the Invesco Ltd. 2016 Global Equity Incentive Plan, incorporated by reference to exhibit 10.2 to Invesco's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed with the Securities and Exchange Commission on April 25, 2019
- 10.16 Form of Restricted Stock Unit Award Agreement -Performance Vesting (Feb 2019) with respect to Martin L. Flanagan under the Invesco Ltd. 2016 Global Equity Incentive Plan, incorporated by reference to exhibit 10.1 to Invesco's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed with the Securities and Exchange Commission on April 25, 2019
- 10.17 Form of Restricted Stock Unit Award Agreement Time Vesting for UCITS staff under the Invesco Ltd. 2016 Global Equity Incentive Plan, incorporated by reference to exhibit 10.1 to Invesco's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed with the Securities and Exchange Commission on April 26, 2018
- 10.18 Invesco Ltd. Deferred Incentive Plan, as amended and restated January 30, 2018, incorporated by reference to exhibit 10.1 to Invesco's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed with the Securities and Exchange Commission on April 26, 2018
- 10.19 Form of Restricted Fund Unit Agreement Upfront Awards for UCITS staff (UK version) under Invesco Ltd. Deferred Incentive Plan, incorporated by reference to exhibit 10.1 to Invesco's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed with the Securities and Exchange Commission on April 26, 2018
- 10.20 Form of Award Agreement for Non-Executive Directors under the Invesco Ltd. 2016 Global Equity Incentive Plan, incorporated by reference to exhibit 10.25 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2016, filed with the Securities and Exchange Commission on February 23, 2017
- 10.21 Form of Aircraft Time Sharing Agreement incorporated by reference to exhibit 10.19 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2013, filed with the Securities and Exchange Commission on February 21, 2014
- 10.22 Invesco Ltd. Executive Incentive Bonus Plan, as amended and restated effective January 1, 2013, incorporated by reference to Appendix A to Proxy Statement on Schedule 14A filed with the Securities and Exchange Commission on April 1, 2013
- 10.23 <u>Invesco Ltd. Amended and Restated 2005 Non-Qualified Deferred Compensation Plan, effective as of January 1, 2009, incorporated by reference to exhibit 10.8 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2008, filed with the Securities and Exchange Commission on February 27, 2009</u>
- 10.24 <u>Deferred Fees Share Plan, as amended and restated effective December 10, 2008, incorporated by reference to exhibit 10.13 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2008, filed with the Securities and Exchange Commission on February 27, 2009</u>
- 10.25 Second Amended and Restated Master Employment Agreement, dated April 1, 2011, between the company and Martin L. Flanagan, incorporated by reference to exhibit 10.1 to Invesco's Quarterly Report on Form 10-Q for the quarter ended March 31, 2011, filed with the Securities and Exchange Commission on April 29, 2011
- 10.26 Global Partner Agreement, dated November 10, 2005, between AMVESCAP PLC and Loren M. Starr, incorporated by reference to exhibit 10.14 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2007, filed with the Securities and Exchange Commission on February 29, 2008
- 10.27 Global Partners Employment Contract, dated April 1, 2000, between INVESCO Pacific Holdings Limited and Andrew Lo, incorporated by reference to exhibit 10.17 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2007, filed with the Securities and Exchange Commission on February 29, 2008
- 10.28 Senior Managing Director Agreement, between Andrew Lo and Invesco Group Services, Inc., effective as of January 1, 2010, incorporated by reference to exhibit 10.32 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2011, filed with the Securities and Exchange Commission on February 24, 2012
- 10.29 Global Partner Agreement, dated June 7, 2006, between AMVESCAP PLC and Colin D. Meadows, incorporated by reference to exhibit 10.35 to Invesco's Annual Report on Form 10-K for the year ended December 31, 2017, filed with the Securities and Exchange Commission on February 23, 2017
- 10.30 Agreement between Philip Taylor and Invesco Ltd., incorporated by reference to Invesco's Current Report on Form 8-K filed with the Securities and Exchange Commission on November 26, 2018

- 10.31 Agreement and Plan of Merger by and among MM Asset Management Holding LLC, Oppenheimer Acquisition Corp., Invesco Ltd., Gem Acquisition Corp. and Gem Acquisition Two Corp. dated as of October 17, 2018, incorporated by reference to exhibit 10.1 to Invesco's Quarterly Report on Form 10-Q for the period ended September 30, 2018, filed with the Securities and Exchange Commission on October 24, 2018
- 10.32 First Amendment, dated as of April 11, 2019, to the Agreement and Plan of Merger, dated as of October 17, 2018, by and among Invesco Ltd., Gem Acquisition Corp., Gem Acquisition Two Corp., MM Asset Management Holding LLC and Oppenheimer Acquisition Corp., incorporated by reference to exhibit 10.4 to Invesco's Quarterly Report on Form 10-Q for the quarter ended March 31, 2019, filed with the Securities and Exchange Commission on April 25, 2019
- 10.33 Second Amendment to the Agreement and Plan of Merger, dated May 24, 2019, by and among Invesco Ltd., Gem Acquisition Corp., Gem Acquisition Two Corp., MM Asset Management Holding LLC, and Oppenheimer Acquisition Corp., incorporated by reference to exhibit 2.3 to Invesco's Current Report on Form 8-K, filed with the Securities and Exchange Commission on May 24, 2019
- 10.34 Shareholder Agreement, dated May 24, 2019, by and between Invesco Ltd. and Massachusetts Mutual Life Insurance Company, incorporated by reference to exhibit 10.1 to Invesco's Current Report on Form 8-K, filed with the Securities and Exchange Commission on May 24, 2019
- 21.0 List of Subsidiaries
- 23.1 Consent of PricewaterhouseCoopers LLP, dated March 2, 2020
- 31.1 Certification of Martin L. Flanagan pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 31.2 Certification of Loren M. Starr pursuant to Rule 13a-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 32.1 Certification of Martin L. Flanagan pursuant to Rule 13a-14(b) and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
- 32.2 <u>Certification of Loren M. Starr pursuant to Rule 13a-14(b) and 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u>
- The following financial statements from the Company's Quarterly Report on Form 10-K for the year ended December 31, 2019, formatted in Inline XBRL (Extensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Income, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Statements of Cash Flows, (v) Consolidated Statements of Changes in Equity, and (vi) Notes to Consolidated Financial Statements, tagged as blocks of text and including detailed tags.
- 104 The cover page from the Company's Annual Report on Form 10-K for the year ended December 31, 2019, formatted in Inline XBRL

SIGNATURES

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

Invesco Ltd.

Date:

By: /s/ MARTIN L. FLANAGAN

Name: Martin L. Flanagan

Title: President and Chief Executive Officer

March 2, 2020

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

Title Name Date Chief Executive Officer (Principal Executive Officer) and President; Director March 2, 2020 /s/ MARTIN L. FLANAGAN Martin L. Flanagan Senior Managing Director and Chief Financial Officer (Principal Financial Officer) March 2, 2020 /s/ LOREN M. STARR Loren M. Starr Chief Accounting Officer (Principal Accounting Officer) March 2, 2020 /s/ ANNETTE LEGE Annette Lege Chairman and Director March 2, 2020 /s/ G. RICHARD WAGONER, JR. G. Richard Wagoner, Jr. Director March 2, 2020 /s/ SARAH E. BESHAR Sarah E. Beshar Director March 2, 2020 /s/ JOSEPH R. CANION Joseph R. Canion Director March 2, 2020 /s/ WILLIAM F. GLAVIN, JR. William F. Glavin, Jr. March 2, 2020 Director /s/ C. ROBERT HENRIKSON C. Robert Henrikson Director March 2, 2020 /s/ DENIS KESSLER Denis Kessler March 2, 2020 Director /s/ SIR NIGEL SHEINWALD Sir Nigel Sheinwald Director March 2, 2020 /s/ PHOEBE A. WOOD Phoebe A. Wood

DESCRIPTION OF CAPITAL STOCK

The following summary of the terms of Invesco Ltd.'s share capital may not be complete and is subject to, and qualified in its entirety by reference to, the terms and provisions of our Memorandum of Association and our Third Amended and Restated Bye-Laws, as amended ("Bye-Laws"). The descriptions of the Memorandum of Association and the Bye-Laws contained herein are qualified by reference to the actual documents.

General

Shares Authorized and Outstanding. The authorized share capital of Invesco Ltd. is 1,050,000,000 common shares of par value \$0.20 each and 20,000,000 undesignated shares of par value \$0.20 each, which may be issued without any prior shareholder approval as common shares or preference shares. The company has designated 4,010,448 shares of 5.9% fixed rate non-cumulative perpetual series A preference shares that are currently outstanding. Our preferred stock is not registered. Please refer to the cover of our annual report on Form 10-K for the number of shares of our common stock outstanding.

DESCRIPTION OF COMMON STOCK

Unless the context otherwise requires, references to "shareholder" or "shareholders" means the person(s) whose name(s) appears on a company's register of members or shareholders and who are the legal owners of the common shares concerned.

Voting Rights. In general, and except as provided below, a shareholder who is present in person and entitled to vote at a shareholders' meeting is entitled to one vote on a show of hands regardless of the number of shares he or she holds. On a poll, the method by which we have conducted our previous shareholders' meetings, each shareholder having the right to vote, who is present in person or by proxy, is entitled to one vote for each common share held. Under our Bye-Laws, subject to certain exceptions, including amalgamations and schemes of arrangement, which, in certain circumstances in accordance with the Bermuda Companies Act 1981 (as amended), require the affirmative vote of at least three-fourths of the votes cast, any questions proposed for the consideration of the shareholders at any general meeting generally are decided by the affirmative votes of a majority of the votes cast in accordance with our Bye-Laws. At the commencement of any general meeting, two or more persons present in person and representing, in person or by proxy, more than 50 percent of the issued and outstanding shares entitled to vote at the meeting constitute a quorum for the transaction of business.

Action by Written Consent. Under Bermuda law and subject to our Bye-Laws, the Bermuda Companies Act 1981 (as amended) provides that shareholders may take action by resolution in writing signed by the majority of shareholders representing the majority required to pass the resolution if it was considered at a general meeting; our Bye-Laws, however, require a resolution in writing to be signed by 100 percent of shareholders who on the date of the resolution would be entitled to attend that meeting and vote on the resolution.

Listing. Our common shares are listed on the New York Stock Exchange under the symbol "IVZ."

Sources and Payment of Dividends

Bermuda law does not permit the declaration or payment of dividends or distributions of contributed surplus by a company if there are reasonable grounds for believing that a company is, or after the payment is made would be, unable to pay its liabilities as they become due, or the realizable value of such company's assets would be less, as a result of the payment, than its liabilities. Dividends or distributions of contributed surplus may not be paid out of the company's share premium account. The excess of the consideration paid on an issue of shares over the aggregate par value of such shares must (except in certain limited circumstances) be credited to a share premium account. Share premium may be applied in certain limited circumstances, for example, to pay up unissued shares which may be distributed to shareholders in proportion to their holdings as fully paid bonus shares, but is otherwise subject to limitation. Holders of our common shares are entitled to receive such dividends as lawfully may be declared from time to time by our board of directors.

Rights of Repurchase and Redemption

Upon a resolution of our board of directors, we may generally make open-market purchases of our shares without shareholder approval. Any shares repurchased by Invesco Ltd. would either be cancelled or held as treasury shares in accordance with the Bermuda Companies Act 1981 (as amended). In addition, we may only repurchase shares if on the date the repurchase is to be effected there are reasonable grounds for believing that Invesco Ltd. can pay its liabilities as they become due at the time of repurchase and thereafter.

Our Board of Directors

Our Bye-Laws provide that the number of directors will be determined by our board of directors. Currently, our board of directors consists of nine persons. Each director is elected for a one-year term.

Liquidation Rights

If Invesco Ltd. is to be wound up, the liquidator may, with the sanction of a resolution of the shareholders, divide amongst the shareholders the whole or any part of the assets of Invesco Ltd. (whether they consist of property of the same kind or not) and may, for this purpose, set such value on these assets as the liquidator deems fair. However, no shareholder will be compelled to accept any shares or other securities or assets whereon there is any liability.

Nomination Procedures

The Bermuda Companies Act 1981 (as amended) provides that shareholders may, as set forth below and at their own expense (unless a company otherwise resolves), require a company to give notice of any resolution that the shareholders can properly propose at the next annual general meeting and/or to circulate a statement prepared by the requesting shareholders in respect of any matter referred to in a proposed resolution or any business to be conducted at a general meeting. The number of shareholders necessary for such a requisition is either that number of shareholders representing at least five percent (5%) of the total voting rights of all shareholders having a right to vote at the meeting to which the requisition relates or not less than 100 shareholders.

Under our Bye-Laws, for nominations or other business to be properly brought before an annual general meeting by a shareholder, the shareholder must have given timely notice thereof in writing to our corporate secretary and such other business must otherwise be a proper matter for shareholder action. Notice is considered timely only if given to our corporate secretary not less than 90 nor more than 120 days prior to the first anniversary of the date of the preceding year's annual general meeting of shareholders. However, if the date of the annual general meeting is more than 30 days before or more than 60 days after such anniversary date, any notice by the shareholder of business or the nomination of directors for election or re-election to be brought before the annual general meeting to be timely must be so delivered not earlier than the close of business on the 120th day prior to such annual general meeting and not later than the close of business on the later of the 90th day prior to such annual general meeting is first made. Our Bye-Laws set forth the information that must be furnished to our corporate secretary in order for any such notice to be proper.

Amendment of Bye-Laws

Generally, our Bye-Laws may be rescinded, altered or amended, and new Bye-Laws may be made when approved by a resolution of our board of directors and by a resolution of our shareholders. However, our Bye-Laws require the affirmative vote of the holders of at least three-quarters of the total combined voting power of all our issued and outstanding shares in order to amend certain of our Bye-Laws.

Pre-emptive Rights

Under Bermuda law, unless otherwise provided in a company's Bye-Laws, shareholders of a company are not entitled to pre-emptive rights. Our Bye-Laws do not provide for pre-emptive rights.

Preference Shares

Subject to our Bye-Laws and Bermuda law, our board of directors has the power to issue any of Invesco Ltd.'s undesignated shares as it determines, including the power to issue any shares or class of shares with preferred, deferred or other special rights.

Subject to certain limitations contained in our Bye-Laws and any limitations prescribed by applicable law, our board of directors is authorized to issue preference shares in one or more series and to fix the designation, powers, preferences and rights and the qualifications, limitations or restrictions of such shares, including but not limited to dividend rates, conversion rights, voting rights, terms of redemption/repurchase (including sinking fund provisions), redemption/repurchase prices and liquidation preferences, and the number of shares constituting, and the designation of, any such series, without further vote or action by shareholders. Under our Memorandum of Association and Bye-Laws, there are 15,989,552 undesignated shares that may be issued either as common shares or as preference shares.

Share Class Rights

The rights attached to any class or series may be amended with the written consent of the holders of seventy-five percent (75%) of the issued shares of the class or series being affected or with the sanction of a resolution passed by the holders of not less than seventy-five percent (75%) of the issued shares of that class at a separate general meeting of the holders of the class or series voting in person or by proxy.

Rights of Inspection

Members of the general public have the right to inspect Invesco Ltd.'s public documents available at the office of the Registrar of Companies in Bermuda and the company's registered office in Bermuda, which will include the company's Memorandum of Association (including its objects and powers) and any alteration to the Memorandum of Association and documents relating to any increase or reduction of authorized capital. Shareholders have the additional right to inspect our Bye-Laws, minutes of general meetings and audited annual financial statements, which must be presented to the annual general meeting of shareholders. The register of shareholders is also open to inspection by shareholders or members of the public without charge, and copies are to be provided on request with the payment of the appropriate fee. Invesco Ltd. is also required to maintain a share register in Bermuda, but by giving the required notice to the Bermuda Registrar of Companies, the company may establish a branch register outside of Bermuda. Invesco Ltd. is required to keep at the registered office a register of the company's directors and officers (containing that information required under Bermuda law), which is open for inspection by members of the public without charge. Bermuda law does not, however, provide a general right for shareholders to inspect or obtain copies of any other corporate records.

Restrictions of Transfer

Unless otherwise required by any applicable requirements of the New York Stock Exchange (or any other applicable stock exchange), we may decline to approve or to register any transfer of any shares if a written opinion from counsel has not been obtained to the effect that registration of such shares under the Securities Act is not required, and we must decline to approve or to register any transfer of any share if the transferee has not been approved by applicable governmental authorities if approval is required or if not in compliance with applicable consent, authorization or permission of any governmental body or agency in Bermuda. If we refuse to register a transfer of any share, our corporate secretary must send the transferor and transferee notice of the refusal within one month after the date on which the transfer was lodged. The registration of transfers may be suspended at such times and for such periods as the company may from time to time determine, but registration cannot be suspended for more than 45 days in any year.

Change of Control

Our Bye-Laws contain certain provisions that may impede or delay an unsolicited takeover of the company under certain circumstances. For example, under our Bye-Laws:

- we are prohibited from engaging, under certain circumstances, in a business combination (as defined in our Bye-Laws) with any interested shareholder (as defined in our Bye-Laws) for three years following the date that the shareholder became an interested shareholder;
- our board of directors, without further shareholder action, is permitted by our Bye-Laws to issue preference shares, in one or more series, and determine by resolution any designations, preferences, qualifications, privileges, limitations, restrictions, or special or relative rights of an additional series. The rights of preferred shareholders may supersede the rights of common shareholders;
- Shareholders may only remove directors for cause (as defined in our Bye-Laws);
- our board of directors is authorized to expand its size and fill vacancies; and
- shareholders cannot act by written consent unless the consent is unanimous.

Company Subsidiary Report

Company Name	Jurisdiction
Accretive Asset Management, LLC	Washington
Atlantic Wealth Holdings Limited	United Kingdom
Atlantic Wealth Management Limited	United Kingdom
Beijing HIW Ruichi Investment Management Center	China
Beijing HIW XinHE Investment Co., Ltd.	China
C M Investment Nominees Limited	United Kingdom
Coff Associates (Cayman) Limited	
	Grand Cayman
Elliot Associates Limited	United Kingdom
Gatefold Hayes GP Limited	United Kingdom
Greenspruce GP Limited	United Kingdom
Harbourview Asset Management Corp	New York
HIW China Opportunity Fund SPC	Cayman Islands
HIW Private Equity Investment Management Limited	Hong Kong
Huaneng Invesco WLR Investment Consulting Company Ltd.	China
HVH Immobilien- und Beteiligungs GmbH	Germany
i4C Technology Limited	United Kingdom
India Asset Recovery Management Limited	Mauritius
IntelliFlo Bidco Limited	United Kingdom
IntelliFlo Midco Limited	United Kingdom
IntelliFlo Holdings 2013 Limited	United Kingdom
IntelliFlo Intermediate Holdings Limited	United Kingdom
IntelliFlo Limited	United Kingdom
Invesco (BVI) Nominees Limited	Virgin Islands, British
Invesco Administration Services Limited	United Kingdom
Invesco Advisers, Inc.	Delaware
Invesco Asia Pacific Private Equity Investment and Fund Management Consulting (Shenzhen) Limited	China
Invesco Asset Management (Bermuda) Ltd	Bermuda
Invesco Asset Management (Japan) Limited	Japan
Invesco Asset Management Asia Limited	Hong Kong
Invesco Asset Management Australia (Holdings) Ltd	Victoria
Invesco Asset Management Deutschland GmbH	Germany
Invesco Asset Management (Schweiz) AG	Switzerland
Invesco Asset Management (India) Private Limited	India
Invesco Asset Management Ireland Holdings Limited	Ireland
Invesco Asset Management Limited	United Kingdom
Invesco Asset Management Limited Spain	Spain
Invesco Asset Management Pacific Limited	Hong Kong
Invesco Asset Management SA	France
Invesco Asset Management Singapore Ltd	Singapore
Invesco Australia Limited	Victoria

Company Name	Jurisdiction
Invesco Canada Ltd.	Ontario
Invesco Capital Management LLC	Delaware
Invesco Capital Markets, Inc.	Delaware
Invesco (Cayman Islands) Ltd.	Cayman Islands
Invesco Continental Europe SA	Luxembourg
Invesco Distributors, Inc.	Delaware
Invesco Far East Limited	United Kingdom
Invesco Finance Inc.	Delaware
Invesco Finance PLC	United Kingdom
Invesco Financial Services Ltd.	Canada
Invesco Fund Managers Limited	United Kingdom
	Delaware
Invesco Gemini Associates LLC	
Invesco Global Asset Management DAC	Ireland
Invesco Global Direct Real Estate Feeder GP Ltd.	Ontario
Invesco Global Direct Real Estate GP Ltd.	Ontario
Invesco Global Funds GP, LLC	Delaware
Invesco Global Investment Funds Limited	United Kingdom
Invesco Global Real Estate Asia Pacific Inc.	Delaware
Invesco Group Limited	United Kingdom
Invesco Group Services, Inc.	Delaware
Invesco GT Asset Management Limited	United Kingdom
Invesco Holding Company Limited	United Kingdom
Invesco Holding Company (US) Limited	Delaware
Invesco Hong Kong Limited	Hong Kong
Invesco Inc.	Nova Scotia
Invesco Indexing LLC	Delaware
Invesco (India) Private Limited	India
Invesco Insurance Agency, Inc.	Delaware
Invesco International (Southern Africa) Limited	South Africa
Invesco International Holdings Limited	United Kingdom
Invesco International Limited	Great Britian
Invesco Investment Advisers LLC	Delaware
Invesco Investment Advisers LLC Invesco Investment Management (Shanghai) Limited	China
invesco investment Management (Snangnar) Limited	China
Invesco Investment Management Limited	Ireland
Invesco Investment Services, Inc.	Delaware
Invesco Investments (Bermuda) Ltd.	Bermuda
Invesco IP Holdings (Canada) Ltd.	Canada
Invesco Investment Consulting (Beijing) Limited	China
Invesco Ltd.	Bermuda
Invesco Loan Manager, LLC	Delaware
Invesco Managed Accounts, LLC	Washington
Invesco Management GmbH	Germany
Invesco Management S.A.	Luxembourg
Invesco (Nominees) Limited	United Kingdom

Company Name	Jurisdiction
Invesco North American Group Limited	United Kingdom
Invesco OFI Global Asset Management LLC	Delaware
Invesco Overseas Investment Fund Management (Shanghai) Limited	China
Invesco Pacific Group Limited	United Kingdom
Invesco Pacific Partner Ltd	Bermuda
Invesco Pension Limited	United Kingdom
INVESCO Polska Sp.z.o.o.	Poland
INVESCO Private Capital Investments, Inc.	Delaware
Invesco Private Capital, Inc.	Delaware
Invesco Real Estate Advisors (Shanghai) Limited	Shanghai
Invesco Real Estate Investment (Asia) LLC	Delaware
Invesco Real Estate Investment Asia Pacific Limited	Hong Kong
Invesco Real Estate Korea	Republic of Korea
Invesco Real Estate Management S.a.r.l.	Luxembourg
Invesco Real Estate s.r.o.	Czech Republic
Invesco Real Estate TAM S.a.r.l.	Luxembourg
Invesco Real Estate UK Residential S.a.r.l.	Luxembourg
Invesco Real Estate Value Add S.a.r.l.	Luxembourg
Invesco Realty Asia I, Ltd.	Cayman Island
Invesco Realty, Inc.	Delaware
Invesco Senior Secured Management, Inc.	Delaware
Invesco Services (Bahamas) Private Limited	Lyford Cay, Nassau
Invesco Singapore Ptd. Ltd.	Singapore
Invesco Specialized Products LLC	United States
Invesco Taiwan Limited	Taiwan
Invesco Trust Company	Texas
Invesco Trustee Private Ltd.	India
Invesco US Senior Loans Associates LLC	Delaware
Invesco UK Holdings Limited	United Kingdom
Invesco UK Limited	United Kingdom
Invesco UK Services Limited	United Kingdom
Invesco WLR Limited	Hong Kong
Invesco WLR Ross (Beijing) Management Consulting Co. Ltd.	China
IRE AF II, Ltd.	Cayman Island
IRE AF III, Ltd.	Cayman Island
IRE Asia Fund I LP	Cayman Island
IREPAC, Ltd	Cayman Island
IRE (Cayman) Limited	Cayman Island
IVZ Finance DAC	Ireland
IVZ Immobilien Verwaltunga GmbH	Germany
James Bryant Limited	United Kingdom
Jamestan Inc	Delaware
Jemstep, Inc. OFI Global Institutional Inc.	New York
OFI International Ltd.	United Kingdom
OTT INCIDENCE DATE.	Chilea Kingaoiii

Company Name	Jurisdiction
OFI Private Investments, Inc.	New York
OFI SteelPath, Inc	Delaware
Oppenheimer Acquisition Corp	Delaware
OppenheimerFunds, Inc	Colorado
OppenheimerFunds Distributor, Inc	New York
Oxygen KR (BVI) Limited	Virgin Islands
Oxygen KR (HK) Limited	Hong Kong
Portfolio Pathway, LLc	Pennsylvania
Perpetual Limited	United Kingdom
POCZTYLION - ARKA POWSZECHNE TOWARZYSTWO EMERYTALNE SPOLKA AKCYJNA	Poland
RedBlack Software, LLC	New Hampshire
Ross CG Management LP	New York
Ross Expansion Associates LP	New York
Sermon Lane Nominees Limited	United Kingdom
Settlement Agent, LLC	Bermuda
Shareholder Services, Inc	Colorado
SNW Asset Management Corp.	Delaware
Source Holdings Limited	Cayman Island
Source Schweiz GmbH	Switzerland
Tremont (Bermuda) Ltd.	Bermuda
Tremont GP, LLC	Delaware
Tremont Group Holdings LLC	Connecticut
Tremont Partners LLLC	Connecticut
Trimark Investments Ltd.	Canada
Trinity Investment Management Corp	Pennsylvania
VV Immobilien Verwaltungs GmbH	Germany
VV Immobilien Verwaltungs und Beteiligungs GmbH	Germany
Wessex Winchester GP Limited	United Kingdom
WLR China Energy Associates Ltd	Cayman Islands
WLR Euro Wagon Management Ltd.	New York
W.L. Ross & Co. (India) LLC	Delaware
W.L. Ross & Co., LLC	Delaware
W.L. Ross Dip Management LLC	New York
W.L. Ross GW Holdings (Cayman) Ltd	Cayman Islands
W.L. Ross (India) Private Limited	New York
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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-226836) and Form S-8 (Nos. 333-150970; 333-166919; 333-174584; 333-181536; 333-212037; 333-231453; and 333-231454) of Invesco Ltd., of our report dated March 2, 2020 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP Atlanta, GA March 2, 2020

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Martin L. Flanagan, certify that:

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

March 2, 2020 /s/ MARTIN L. FLANAGAN

Martin L. Flanagan

President and Chief Executive Officer

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Loren M. Starr, certify that:

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

March 2, 2020
/s/ LOREN M. STARR

Loren M. Starr

Senior Managing Director and Chief Financial Officer

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

In connection with Invesco Ltd.'s (the "Company") Annual Report on Form 10-K for the period ended December 31, 2019 (the "Report"), I, Martin L. Flanagan, do hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

March 2, 2020	/s/ MARTIN L. FLANAGAN	
	Martin L. Flanagan	
	President and Chief Executive Officer	

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

In connection with Invesco Ltd.'s (the "Company") Annual Report on Form 10-K for the period ended December 31, 2019 (the "Report"), I, Loren M. Starr, do hereby certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

March 2, 2020	/s/ LOREN M. STARR
	Loren M. Starr
	Senior Managing Director and Chief Financial Officer