

MSCI Reports Financial Results for Fourth Quarter and Full-Year 2018

New York – January 31, 2019 – MSCI Inc. (NYSE: MSCI), a leading provider of indexes and portfolio construction and risk management tools and services for global investors, today announced results for the three months ended December 31, 2018 ("fourth quarter 2018") and full-year ended December 31, 2018 ("full-year 2018").

Financial and Operational Highlights for Fourth Quarter 2018 and Full-Year 2018

(Notes: Percentage and other changes refer to fourth quarter 2017 or full-year 2017 unless otherwise noted.)

- Organic subscription Run Rate growth as of December 31, 2018 of 10.0% with Index up 11.4%, Analytics up 6.5% and All Other up 18.6%.
- Full-year 2018 operating revenues up 12.5%; recurring subscription revenues up 9.6%; asset-based fees up 21.9%; non-recurring revenues up 23.3%.
- Fourth quarter 2018 operating revenues up 8.0%; recurring subscription revenues up 9.0%; asset-based fees up 3.8%; non-recurring revenues up 19.9%.
- Fourth quarter 2018 diluted EPS up 142.9%, and full-year 2018 diluted EPS up 71.0%; fourth quarter 2018 adjusted EPS of \$1.31, up 13.9%, resulting in full-year 2018 adjusted EPS of \$5.35, up 34.4%.
- Fourth quarter and full-year 2018 operating income growth of 10.2% and 18.5%, respectively; fourth quarter 2018 operating margin of 47.0%, and 47.9% for full-year 2018.
- Fourth quarter and full-year 2018 adjusted EBITDA growth of 9.2%, and 17.1%, respectively; fourth quarter 2018 adjusted EBITDA margin of 52.5%, and 53.9% for the full-year 2018.
- Continued strong retention with full-year 2018 total Retention Rate at 94.1%.
- During fourth quarter 2018 and through January 25, 2019, a total of 5.1 million shares were repurchased at an average price of \$147.71 per share for a total value of \$754.5 million.

		Th	ree	Months Ende	d		Year Ended							
	Dec. 31,		Dec. 31,			Sep. 30,	YoY %		Dec. 31,		Dec. 31,	YoY %		
In thousands, except per share data		2018		2017		2018	Change		2018		2017	Change		
Operating revenues	\$	361,688	\$	334,779	\$	357,934	8.0%	\$	1,433,984	\$:	1,274,172	12.5%		
Operating income	\$	169,818	\$	154,139	\$	176,403	10.2%	\$	686,898	\$	579,770	18.5%		
Operating margin %		47.0%		46.0%		49.3%			47.9%		45.5%			
Net income	\$	152,132	\$	64,602	\$	123,832	135.5%	\$	507,885	\$	303,972	67.1%		
Diluted EPS	\$	1.70	\$	0.70	\$	1.36	142.9%	\$	5.66	\$	3.31	71.0%		
Adjusted EPS	\$	1.31	\$	1.15	\$	1.35	13.9%	\$	5.35	\$	3.98	34.4%		
Adjusted EBITDA Adjusted EBITDA margin %	\$	189,762 52.5%	\$	173,817 51.9%	\$	195,537 54.6%	9.2%	\$	772,433 53.9%	\$	659,757 51.8%	17.1%		

"During a year of volatility in international markets and a heightened level of uncertainty in the U.S. market over the last several months, the remarkable financial and operating successes achieved in the fourth quarter and the full year 2018 highlight the resiliency of our franchise, the mission-critical nature of our differentiated content and capabilities, as well as the strong secular tailwinds fueling our business. We have shown that we have the ability to take advantage of opportunities even in times of volatility and uncertainty in the markets," commented Henry A. Fernandez, Chairman and CEO of MSCI.



"While we are witnessing a rapid pace of change across the investment industry, coupled with a volatile market environment, the continued double-digit organic growth in our core subscription business together with the robust demand for equity ETFs linked to our indexes reflect our increasing ability to provide tools that help clients adapt for the future. As we head into 2019, we are well-positioned to continue to capitalize on the tremendous opportunities in front of us and drive increasingly attractive subscription growth," added Mr. Fernandez.

Fourth Quarter and Full-Year 2018 Consolidated Results

<u>Revenues</u>: Operating revenues for fourth quarter 2018 increased \$26.9 million, or 8.0%, to \$361.7 million, compared to \$334.8 million for the three months ended December 31, 2017 ("fourth quarter 2017"). The \$26.9 million increase in operating revenues was driven by a \$22.5 million, or 9.0%, increase in recurring subscriptions (driven primarily by a \$12.0 million, or 10.8%, increase in Index products and a \$6.2 million, or 27.8%, increase in All Other products), a \$2.9 million, or 3.8%, increase in asset-based fees and a \$1.4 million, or 19.9%, increase in non-recurring revenues. Adjusting for the impact from foreign currency exchange rate fluctuations ("ex-FX") in fourth quarter 2018, operating revenues increased 8.2%. Foreign currency exchange rate fluctuations had a negligible impact on recurring subscription revenues and asset-based fees. Asset-based fees ex-FX does not adjust for the impact from foreign currency exchange rate fluctuations on the underlying assets under management ("AUM").

For full-year 2018, operating revenues increased \$159.8 million, or 12.5%, to \$1,434.0 million, compared to \$1,274.2 million for the full-year ended December 31, 2017 ("full-year 2017"). The increase was primarily driven by a \$93.5 million, or 9.6%, increase in recurring subscriptions, and by a \$60.5 million, or 21.9%, increase in asset-based fees. For full-year 2018, operating revenues ex-FX increased 12.4%, and recurring subscription revenues ex-FX increased 9.4%. There was a negligible impact on asset-based fees ex-FX.

<u>Run Rate</u>: Total Run Rate at December 31, 2018 grew by \$65.6 million, or 4.8%, to \$1,431.3 million, compared to December 31, 2017. The \$65.6 million increase was driven by a \$70.5 million, or 6.7%, increase in recurring subscription Run Rate to \$1,119.4 million, which was partially offset by a decrease of \$4.9 million, or 1.5%, in asset-based fees Run Rate to \$311.9 million and a \$25.3 million decline in recurring subscription Run Rate from the divestitures of Financial Engineering Associates, Inc. ("FEA") and Investor Force Holdings, Inc. ("InvestorForce"). Organic subscription Run Rate growth was 10.0% in fourth quarter 2018 driven by strong growth in the Index and ESG segments and in the Analytics segment's Multi-Asset Class and Equity Analytics products. Retention Rate was 92.9% in fourth quarter 2018, compared to 91.6% in fourth quarter 2017 and 94.1% for full-year 2018 compared to 93.8% for full-year 2017.

Expenses: Total operating expenses for fourth quarter 2018 increased \$11.2 million, or 6.2%, to \$191.9 million compared to fourth quarter 2017, driven mainly by a \$6.2 million, or 5.4%, increase in compensation and benefits costs. The compensation and benefits costs increase is attributable to an increase in incentive compensation and wages and salaries, partially offset by a decrease in severance costs. Non-compensation costs increased by \$4.8 million, or 10.4%, and was attributable to an increase in professional fees, marketing costs and IT costs. Adjusted EBITDA expenses for fourth quarter 2018 increased \$11.0 million, or 6.8%, to \$171.9 million compared to fourth quarter 2017. Total operating expenses ex-FX and adjusted EBITDA expenses 8.1% and 8.8%, respectively, compared to fourth quarter 2017.



For full-year 2018, total operating expenses increased \$52.7 million, or 7.6%, to \$747.1 million. Adjusted EBITDA expenses increased \$47.1 million, or 7.7%, to \$661.6 million compared to full-year 2017. Total operating expenses ex-FX and adjusted EBITDA expenses ex-FX for full-year 2018 increased 7.3% and 7.4%, respectively, compared to full-year 2017.

Headcount: As of December 31, 2018, there were 3,112 employees, up 2.4% from 3,038 as of December 31, 2017, and relatively flat compared to 3,121 employees as of September 30, 2018. The 2.4% year-over-year increase in employees was primarily driven by increased headcount in emerging market centers and in areas related to technology, marketing and research. As of December 31, 2018, a total of 39% and 61% of employees were located in developed market and emerging market centers, respectively, compared to 41% in developed market centers as of December 31, 2017.

<u>Amortization and Depreciation Expenses</u>: Amortization and depreciation expenses of \$19.9 million increased by \$0.3 million, or 1.4%, for fourth quarter 2018, compared to fourth quarter 2017, primarily as a result of higher software depreciation and higher amortization of internally capitalized software development costs released into production.

For full-year 2018, amortization and depreciation expenses of \$85.5 million increased by \$5.5 million, or 6.9%, compared to full-year 2017. This increase was primarily attributable to an increase in amortization expense reflecting a \$7.9 million non-cash charge recognized in the three months ended June 30, 2018 related to the write-off of the IPD tradename used by the Real Estate segment, as well as higher amortization of internally capitalized software development costs released into production, partially offset by certain intangible assets becoming fully amortized.

<u>Other Expense (Income), Net</u>: Other expense (income), net reflected an income amount of \$17.5 million for fourth quarter 2018, compared to an expense amount of \$27.2 million for fourth quarter 2017. The \$44.7 million change was primarily due to the gain realized from the divestiture of InvestorForce and higher interest income driven by higher yields on higher cash balances, partially offset by higher interest expense associated with higher outstanding debt.

For full-year 2018, other expense (income), net was \$57.0 million which decreased \$55.9 million, or 49.5%, compared to full-year 2017, primarily as a result of the gain realized from the divestitures of FEA and InvestorForce being recognized in second quarter and fourth quarter 2018, respectively, and higher interest income driven by higher yields on higher cash balances, partially offset by higher interest expense associated with higher outstanding debt.

Tax Rate: Income tax expense was \$35.2 million for fourth quarter 2018, compared to \$62.4 million for fourth quarter 2017. The effective tax rates were 18.8% and 49.1% for fourth quarter 2018 and fourth quarter 2017, respectively. The decline largely reflected the impact of the Tax Cuts and Jobs Act that was enacted on December 22, 2017 ("Tax Reform") and the favorable impact of various discrete items, offset by an unfavorable impact resulting from the taxes associated with the gain realized upon the completion of the divestiture of InvestorForce. The tax benefit of the sale of InvestorForce and certain discrete items related to the true up of a one-time charge taken in Q4 2017 related to the implementation of Tax Reform are an adjustment to net income in the adjusted net income and adjusted EPS measures for fourth quarter 2018.

Income tax expense was \$122.0 million for full-year 2018, compared to \$162.9 million for full-year 2017. The effective tax rates were 19.4% and 34.9% for full-year 2018 and full-year 2017, respectively. Full-Year 2018



included a benefit of \$11.2 million relating to a revision of the full-year 2017 net charge of \$34.5 million associated with taxes arising from the enactment of Tax Reform.

The benefit of \$11.2 million related to Tax Reform adjustments in the full-year 2018 consisted of a tax benefit of \$5.7 million recognized on the deemed repatriated earnings of foreign subsidiaries, a tax benefit of \$2.9 million related to the revaluation of deferred taxes at the now lower statutory corporate rate and a tax benefit of \$2.6 million related to the assertion that cumulative profits were permanently reinvested overseas as of December 31, 2017. The \$2.9 million benefit related to the revaluation of deferred taxes was associated with active tax planning the Company undertook in response to Tax Reform to accelerate certain tax deductible expense items into the year ended December 31, 2017. This \$2.9 million benefit will not be an adjustment to net income in the adjusted net income and adjusted EPS measures for full-year 2018.

The final cumulative charge recognized related to Tax Reform was \$23.3 million.

Net Income: Net income increased 135.5% to \$152.1 million in fourth quarter 2018, compared to \$64.6 million in fourth quarter 2017. For full-year 2018, net income increased 67.1% to \$507.9 million, compared to \$304.0 million for full-year 2017.

Adjusted EBITDA: Adjusted EBITDA was \$189.8 million in fourth quarter 2018, up \$15.9 million, or 9.2%, from fourth quarter 2017. Adjusted EBITDA margin in fourth quarter 2018 was 52.5%, compared to 51.9% in fourth quarter 2017. For full-year 2018, adjusted EBITDA was \$772.4 million, up 17.1% from full-year 2017, and adjusted EBITDA margin was 53.9% for full-year 2018, compared to 51.8% for full-year 2017.

Cash Balances and Outstanding Debt: Total cash and cash equivalents as of December 31, 2018 was \$904.2 million. MSCI seeks to maintain minimum cash balances globally of approximately \$200.0 million to \$250.0 million for general operating purposes.

Total outstanding debt as of December 31, 2018 was \$2,600.0 million, which excludes deferred financing fees of \$24.5 million. Net debt, defined as total outstanding debt less cash and cash equivalents, was \$1,695.8 million at December 31, 2018. The total debt to operating income ratio (based on trailing twelve months operating income) was 3.8x. The total debt to adjusted EBITDA ratio (based on trailing twelve months adjusted EBITDA) was 3.4x, which is within the stated gross leverage to adjusted EBITDA target range of 3.0x to 3.5x.

Cash Flow and Capex: Net cash provided by operating activities was \$173.2 million in fourth quarter 2018, compared to \$143.2 million in fourth quarter 2017 and \$143.8 million in the three months ended September 30, 2018 ("third quarter 2018"). Capex for fourth quarter 2018 was \$22.8 million, compared to \$20.6 million in fourth quarter 2018. Free cash flow was \$150.4 million in fourth quarter 2018, compared to \$122.6 million in fourth quarter 2017 and \$130.7 million in third quarter 2018. The increase in net cash provided by operating activities and free cash flow, compared to third quarter 2018, was driven primarily by higher cash collections and lower income tax payments, partially offset by higher payments of cash expenses. The increase in net cash provided by operating activities and free cash flow, compared to fourth quarter 2017, was primarily driven by increased cash collections, partially offset by higher scheduled interest payments attributable to the notes offering completed in May 2018 and higher income tax payments.

Net cash provided by operating activities was \$612.8 million for full-year 2018, compared to \$404.2 million for full-year 2017. Capex for full-year 2018 was \$49.0 million, compared to \$48.8 million for full-year 2017. Free cash flow was \$563.8 million for full-year 2018, compared to \$355.3 million for full-year 2017. The increase in



both net cash provided by operating activities and free cash flow for full-year 2018 compared to full-year 2017 was primarily driven by higher cash collections, partially offset by higher payments of cash expenses, higher income tax payments and higher scheduled interest payments.

Share Count and Capital Return: The weighted average diluted shares outstanding in fourth quarter 2018 declined 3.2% to 89.5 million, compared to 92.5 million in fourth quarter 2017. In fourth quarter 2018 and through January 25, 2019, MSCI repurchased 5.1 million shares at an average price of \$147.71 per share for a total value of \$754.5 million. A total of \$0.7 billion remains on the outstanding share repurchase authorization as of January 25, 2019. Total shares outstanding as of December 31, 2018 was 84.2 million.

On January 30, 2019, the Board declared a cash dividend of \$0.58 per share for first quarter 2019. The first quarter 2019 dividend is payable on March 15, 2019 to shareholders of record as of the close of trading on February 22, 2019.

Table 1: Results by Segment (unaudited)

				Index				4	Analytics				A	ll Other	
					Adjusted					Adjusted					Adjusted
	C	perating	ŀ	Adjusted	EBITDA	С	perating	A	Adjusted	EBITDA	0	perating	Α	djusted	EBITDA
In thousands	R	evenues		EBITDA	Margin	R	levenues		EBITDA	Margin	R	evenues		EBITDA	Margin
Q4'18	\$	210,433	\$	149,930	71.2%	\$	121,935	\$	36,679	30.1%	\$	29,320	\$	3,153	10.8%
Q4'17	\$	193,774	\$	142,702	73.6%	\$	117,510	\$	31,141	26.5%	\$	23,495	\$	(26)	(0.1%)
Q3'18	\$	210,194	\$	154,477	73.5%	\$	119,898	\$	37,046	30.9%	\$	27,842	\$	4,014	14.4%
YoY % change		8.6%	6	5.1%			3.89	%	17.8%			24.89	%	nm	
FY 2018	\$	835,475	\$	607,853	72.8%	\$	479,939	\$	143,645	29.9%	\$	118,570	\$	20,935	17.7%
FY 2017	\$	718,959	\$	522,241	72.6%	\$	458,269	\$	125,624	27.4%	\$	96,944	\$	11,892	12.3%
YoY % change		16.29	6	16.4%			4.79	%	14.3%			22.39	%	76.0%	

nm: not meaningful

Index Segment: Operating revenues for fourth quarter 2018 increased \$16.7 million, or 8.6%, to \$210.4 million, compared to \$193.8 million for fourth quarter 2017. The increase was driven by a \$12.0 million, or 10.8%, increase in recurring subscriptions, a \$2.9 million, or 3.8%, increase in asset-based fees and a \$1.7 million, or 45.5%, increase in non-recurring revenues.

The increase in recurring subscriptions was driven by strong growth in core products, custom and specialized index products and factor and ESG index products.

The increase in asset-based fees was driven by growth in revenue from non-exchange traded funds ("ETFs") passive funds linked to MSCI indexes and exchange traded futures and options contracts based on MSCI indexes, partially offset by a decrease in revenues from ETFs linked to MSCI indexes. A \$3.6 million, or 17.4%, increase in revenue from non-ETF passive products was driven by higher AUM and an increased contribution from higher-fee products. Revenues from exchange traded futures and options grew \$1.5 million, or 41.4%, driven primarily by an increase in total trading volumes. The revenues from ETFs linked to MSCI indexes decreased \$2.2 million, or 4.0%, driven by relatively flat average AUM, coupled with a decline in average basis point fees resulting primarily from a change in product mix.

The increase in non-recurring revenues was primarily driven by growth in license fees associated with use of our indexes for over-the-counter derivatives.



Operating revenues for full-year 2018 increased \$116.5 million, or 16.2%, to \$835.5 million, compared to \$719.0 million for full-year 2017. The increase was driven by a \$60.5 million, or 21.9%, increase in asset-based fees, a \$50.3 million, or 11.8%, increase in recurring subscriptions, and a \$5.7 million, or 36.7%, increase in non-recurring revenues. The adjusted EBITDA margin for Index was 72.8% for full-year 2018, compared to 72.6% for full-year 2017.

Index Run Rate at December 31, 2018 grew by \$46.7 million, or 6.1%, to \$814.6 million, compared to December 31, 2017. The increase was driven by a \$51.6 million, or 11.4%, increase in recurring subscriptions Run Rate, partially offset by a decrease of \$4.9 million, or 1.5%, in asset-based fees Run Rate. The decline in asset-based fees Run Rate was primarily driven by lower AUM in ETFs linked to MSCI indexes, which was attributable to a decline of \$110.3 billion in asset values, partially offset by cash inflows of \$61.6 billion. Within asset-based fees, a change in product mix drove a decline in average basis point fees to 2.92 at December 31, 2018 from 3.04 a year ago. The 11.4% increase in Index recurring subscriptions Run Rate was driven by strong growth in core products, factor and ESG indexes and custom and specialized index products and growth in the asset owners, hedge fund and wealth management client segments.

<u>Analytics Segment</u>: Operating revenues for fourth quarter 2018 increased \$4.4 million, or 3.8%, to \$121.9 million, compared to \$117.5 million for fourth quarter 2017, primarily driven by growth in both Multi-Asset Class and Equity Analytics products and the timing of client implementations, partially offset by the divestitures of InvestorForce and FEA. There was negligible impact on operating revenue from foreign currency exchange rate fluctuations. Operating revenues ex-FX and excluding the impact of the divestitures of InvestorForce and FEA ("ex-divestitures") increased 9.7%.

Operating revenues for full-year 2018 increased \$21.7 million, or 4.7%, to \$479.9 million, compared to \$458.3 million for full-year 2017. Operating revenues ex-FX increased 4.6%. Operating revenues ex-FX and exdivestitures increased 7.0%. The adjusted EBITDA margin for Analytics was 29.9% for full-year 2018, compared to 27.4% for full-year 2017.

Analytics Run Rate at December 31, 2018 grew by \$2.4 million, or 0.5%, to \$491.9 million, compared to December 31, 2017, primarily driven by growth in both Multi-Asset Class and Equity Analytics products, partially offset by the removal of Run Rate associated with FEA, which was divested in April 2018, and InvestorForce, which was divested in October 2018. Analytics organic Run Rate growth was 6.5% compared to December 31, 2017.

<u>All Other Segment</u>: Operating revenues for fourth quarter 2018 increased \$5.8 million, or 24.8%, to \$29.3 million, compared to \$23.5 million for fourth quarter 2017. The increase in All Other revenues was driven by a \$4.4 million, or 30.1%, increase in ESG revenues to \$19.1 million, and a \$1.4 million, or 16.0%, increase in Real Estate revenues to \$10.2 million. The increase in ESG revenues was driven by strong growth in ESG Ratings product revenues, which benefited from increased investments. The increase in Real Estate revenues was primarily driven by growth in Enterprise Analytics and Market Information products. Fourth quarter 2018 All Other revenues ex-FX increased 26.7% with Real Estate revenues ex-FX increasing 19.3% and ESG revenues ex-FX increasing 31.1%.

Operating revenues for full-year 2018 increased \$21.6 million, or 22.3%, to \$118.6 million, compared to \$96.9 million for full-year 2017. The increase in All Other revenues was driven by a \$16.6 million, or 30.2%, increase in ESG revenues to \$71.4 million, and a \$5.1 million, or 12.0%, increase in Real Estate revenues to \$47.2 million. Operating revenues ex-FX for full-year 2018 for All Other increased 20.8%, with Real Estate increasing 8.3% and



ESG increasing 30.4%. The adjusted EBITDA margin for All Other was 17.7% for full-year 2018, compared to 12.3% for full-year 2017.

All Other Run Rate at December 31, 2018 grew by \$16.5 million, or 15.2%, to \$124.9 million, compared to December 31, 2017. The increase was driven by a \$14.8 million, or 23.0%, increase in ESG Run Rate to \$79.5 million, and a \$1.6 million, or 3.7%, increase in Real Estate Run Rate to \$45.4 million. The increase in ESG Run Rate was primarily driven by strong growth in ESG Ratings products and an increase in ESG Screening products. The increase in Real Estate Run Rate was primarily driven by growth in Market Information products. All Other Run Rate ex-FX increased 18.6% with ESG Run Rate ex-FX increasing 25.1% and Real Estate Run Rate ex-FX increasing 8.9%, each compared to December 31, 2017.

Full-Year 2019 Guidance

MSCI's guidance for full-year 2019 is as follows:

- Total operating expenses are expected to be in the range of \$772 million to \$800 million.
- Adjusted EBITDA expenses¹ are expected to be in the range of \$685 million to \$705 million.
- Interest expense, including the amortization of financing fees, is expected to be approximately \$144 million, assuming no additional financings.
- Capex is expected to be in the range of \$45 million to \$55 million.
- Net cash provided by operating activities and free cash flow are expected to be in the ranges of \$600 million to \$630 million and \$545 million to \$585 million, respectively.
- The effective tax rate² is expected to be in the range of 11.5% to 14.5%.

¹Excludes the estimated payroll tax impact from the vesting in the three months ending March 31, 2019 of the multi-year PSU awards granted to executives in 2016 (the "Multi-Year PSUs"). ²Includes the estimated income tax windfall benefit related to the vesting of the Multi-Year PSUs which is expected to reduce the 2019 effective tax rate by 8.5 to 9.5 percentage points.

New Revenue Standard Effective January 1, 2018

Effective January 1, 2018, MSCI adopted the new revenue standard using the modified retrospective transition method. This resulted in a cumulative adjustment to increase retained earnings on January 1, 2018 by \$16.1 million, net of tax, reflecting future period revenue from existing contracts under the old revenue standard that would have been recognized in prior periods under the new revenue standard, and the application of the provisions of the new standard prospectively.

Compared to the revenue recognition method used prior to 2018, the new revenue standard has resulted in more revenue being recognized up-front or earlier in the life of new contracts for certain products and services, including fees related to the licensing of desktop applications, implementation and set-up services and multi-year deals. The lost future period revenue from existing contracts as a result of the cumulative adjustment to retained earnings is expected to be largely offset by the acceleration of revenue from certain new contracts. As



a result, the overall impact of adopting the new revenue standard is not expected to have a material impact on MSCI's consolidated financial statements or the annual trend of revenue. It is possible that some increased quarterly revenue variability may exist by segment depending on the timing of the execution of new license contracts and renewals.

As a result of the adoption of the new revenue standard, MSCI recorded \$0.7 million of higher revenue in fourth quarter 2018 and \$6.2 million for full-year 2018.

In addition, as a result of the adoption of the new revenue standard, the amount of accounts receivable and deferred revenue reported on the Company's balance sheet as of December 31, 2017 would have increased, with no increase to net assets, by approximately \$135.5 million. Accounts receivable was \$473.4 million at December 31, 2018 and \$327.6 million at December 31, 2017. Deferred revenue was \$538 million at December 31, 2018 and \$374.4 million at December 31, 2017. Under the old revenue standard, MSCI only recorded the value of an invoice to accounts receivable and deferred revenue once the service period began. Under the new revenue standard, MSCI now records accounts receivable and a corresponding offset to deferred revenue when an invoice is issued for a non-cancellable, non-refundable contract, regardless of when the service period begins.

There are no changes to how we calculate our operating metrics.



Conference Call Information

MSCI's senior management will review the fourth quarter and full-year 2018 results on Thursday, January 31, 2019 at 11:00 AM Eastern Time. To listen to the live event, visit the events and presentations section of MSCI's Investor Relations homepage, <u>http://ir.msci.com/events.cfm</u>, or dial 1-877-376-9931 conference ID: 3474708 within the United States. International callers dial 1-720-405-2251 conference ID: 3474708. The earnings release and related investor presentation used during the conference call will be made available on MSCI's Investor Relations homepage.

An audio recording of the conference call will be available on our Investor Relations website, <u>http://ir.msci.com/events.cfm</u>, beginning approximately two hours after the conclusion of the live event. Through February 3, 2019, the recording will also be available by dialing 1-855-859-2056 conference ID: 3474708 within the United States or 1-404-537-3406 conference ID: 3474708 for international callers. A replay of the conference call will be archived in the events and presentations section of MSCI's Investor Relations website for 12 months after the call.

-Ends-

About MSCI

For more than 45 years, MSCI's research-based indexes and analytics have helped the world's leading investors build and manage better portfolios. Clients rely on our offerings for deeper insights into the drivers of performance and risk in their portfolios, broad asset class coverage and innovative research.

Our line of products and services includes indexes, analytical models, data, real estate benchmarks and ESG research.

For more information, visit us at www.msci.com. MSCI#IR

MSCI Inc. Contact

Investors

Andrew Wiechmann	andrew.wiechmann@msci.com	+ 1 212 804 3986
Media		
Samuel Wang	samuel.wang@msci.com	+ 1 212 804 5244

Forward-Looking Statements

This earnings release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including without limitation, our full-year 2019 guidance. These forward-looking statements relate to future events or to future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these statements. In some cases, you can identify forward-looking statements by the use of words such as "may," "could," "expect," "intend," "plan," "seek," "anticipate," "believe," "estimate," "predict," "potential" or "continue," or the negative of these terms or other comparable terminology. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties and other factors that are, in some cases, beyond our control and that could materially affect our actual results, levels of activity, performance or achievements.



Other factors that could materially affect actual results, levels of activity, performance or achievements can be found in MSCI's Annual Report on Form 10-K for the fiscal year ended December 31, 2017 filed with the Securities and Exchange Commission ("SEC") on February 26, 2018 and in quarterly reports on Form 10-Q and current reports on Form 8-K filed or furnished with the SEC (herein, referred to as "Public Filings"). If any of these risks or uncertainties materialize, or if our underlying assumptions prove to be incorrect, actual results may vary significantly from what MSCI projected. Any forward-looking statement in this earnings release reflects MSCI's current views with respect to future events and is subject to these and other risks, uncertainties and assumptions relating to MSCI's operations, results of operations, growth strategy and liquidity. MSCI assumes no obligation to publicly update or revise these forward-looking statements for any reason, whether as a result of new information, future events, or otherwise, except as required by law.

Website and Social Media Disclosure

MSCI uses its website and corporate Twitter account (@MSCI_Inc) as channels of distribution of company information. The information we post through these channels may be deemed material. Accordingly, investors should monitor these channels, in addition to following our press releases, SEC filings and public conference calls and webcasts. In addition, you may automatically receive email alerts and other information about MSCI when you enroll your email address by visiting the "Email Alerts Subscription" section of MSCI's Investor Relations homepage at http://ir.msci.com/alerts.cfm. The contents of MSCI's website and social media channels are not, however, incorporated by reference into this earnings release.

Notes Regarding the Use of Operating Metrics

MSCI has presented supplemental key operating metrics as part of this earnings release, including Run Rate, subscription sales and cancellations, non-recurring sales and Retention Rate.

Retention Rate for a period is calculated by annualizing the cancellations for which we have received a notice of termination or for which we believe there is an intention not to renew during the period, and we believe that such notice or intention evidences the client's final decision to terminate or not renew the applicable agreement, even though such notice is not effective until a later date. This annualized cancellation figure is then divided by the subscription Run Rate at the beginning of the year to calculate a cancellation rate. This cancellation rate is then subtracted from 100% to derive the annualized Retention Rate for the period.

Retention Rate is computed by segment on a product/service-by-product/service basis. In general, if a client reduces the number of products or services to which it subscribes within a segment, or switches between products or services within a segment, we treat it as a cancellation for reporting purposes, except in the case of a product or service switch that management considers to be a replacement product or service. In those replacement cases, only the net change to the client subscription, if a decrease, is reported as a cancel. In the Analytics and the ESG segments, substantially all product or service switches are treated as replacement products or services and netted in this manner, while in our Index and Real Estate segments, product or service switches that are treated as replacement products or services and receive netting treatment occur only in certain limited instances. In addition, we treat any reduction in fees resulting from a down-sale of the same product or service as a cancellation to the extent of the reduction.

This definition of Retention Rate was revised and was previously provided beginning with our earnings release, dated August 2, 2018, to describe our methodology for calculating cancellations. We believe this methodology has been applied in all material respects in calculating cancellation rates reported in the prior periods covered



in our Form 10-K for the year ended December 31, 2017 and in our Form 10-Q for the quarters ended March 31, 2018, June 30, 2018 and September 30, 2018, and accordingly, we do not believe changes to those previously reported cancellation rates are required. Beginning in second quarter 2018, "Aggregate Retention Rate" is referred to as "Retention Rate."

Run Rate estimates, at a particular point in time the annualized value of the recurring revenues under our client license agreements ("Client Contracts") for the next 12 months, assuming all Client Contracts that come up for renewal are renewed and assuming then-current currency exchange rates, subject to the adjustments and exclusions described elsewhere in our Public Filings. For any Client Contract where fees are linked to an investment product's assets or trading volume/fees, the Run Rate calculation reflects, for ETFs, the market value on the last trading day of the period, for futures and options, the most recent quarterly volumes and/or reported exchange fees, and for other non-ETF products, the most recent client reported assets. Run Rate does not include fees associated with "one-time" and other non-recurring transactions. In addition, we add to Run Rate the annualized fee value of recurring new sales, whether to existing or new clients, when we execute Client Contracts, even though the license start date, and associated revenue recognition, may not be effective until a later date. We remove from Run Rate the annualized fee value associated with products or services under any Client Contract with respect to which we have received a notice of termination or non-renewal during the period and have determined that such notice evidences the client's final decision to terminate or not renew the applicable products or services, even though such notice is not effective until a later date.

"Organic subscription Run Rate growth" is defined as the period over period Run Rate growth, excluding the impact of changes in foreign currency and the first year impact of any acquisitions. It is also adjusted for divestitures. Changes in foreign currency are calculated by applying the currency exchange rate from the comparable prior period to current period foreign currency denominated Run Rate.

Notes Regarding the Use of Non-GAAP Financial Measures

MSCI has presented supplemental non-GAAP financial measures as part of this earnings release. Reconciliations are provided in Tables 9 – 13 below that reconcile each non-GAAP financial measure with the most comparable GAAP measure. The non-GAAP financial measures presented in this earnings release should not be considered as alternative measures for the most directly comparable GAAP financial measures. The non-GAAP financial measures are used by management to monitor the financial performance of the business, inform business decision-making and forecast future results.

"Operating revenues ex-FX and ex-divestitures" is defined as operating revenues excluding the impact of foreign currency exchange and the operating revenues attributable to divested businesses for the comparable prior year period.

"Adjusted EBITDA" is defined as net income before (1) provision for income taxes, (2) other expense (income), net, (3) depreciation and amortization of property, equipment and leasehold improvements, (4) amortization of intangible assets and, at times, (5) certain other transactions or adjustments.

"Adjusted EBITDA expenses" is defined as operating expenses less depreciation and amortization of property, equipment and leasehold improvements and amortization of intangible assets and, at times, certain other transactions or adjustments.

"Adjusted net income" and "adjusted EPS" are defined as net income and diluted EPS, respectively, before the after-tax impact of the amortization of acquired intangible assets, the impact of divestitures, the impact of Tax



Reform adjustments (except for amounts associated with active tax planning implemented as a result of Tax Reform) and, at times, certain other transactions or adjustments.

"Adjusted tax rate" is defined as the effective tax rate excluding the impact of Tax Reform adjustments (except for amounts associated with active tax planning implemented as a result of Tax Reform).

"Capex" is defined as capital expenditures plus capitalized software development costs.

"Free cash flow" is defined as net cash provided by operating activities, less Capex.

We believe operating revenues ex-FX and ex-divestitures are meaningful measures of the operating performance of MSCI because they adjust for the impact of foreign currency exchange and exclude the impact of operating revenues attributable to divested businesses for the comparable prior year period, providing insight to our core operating performance for the period(s) presented.

We believe adjusted EBITDA and adjusted EBITDA expenses are meaningful measures of the operating performance of MSCI because they adjust for significant one-time, unusual or non-recurring items as well as eliminate the accounting effects of capital spending and acquisitions that do not directly affect what management considers to be our core operating performance in the period.

We believe adjusted net income and adjusted EPS are meaningful measures of the performance of MSCI because they adjust for the after-tax impact of significant one-time, unusual or non-recurring items as well as eliminate the accounting effects of acquisitions that do not directly affect what management considers to be our core performance in the period.

We believe that free cash flow is useful to investors because it relates the operating cash flow of MSCI to the capital that is spent to continue and improve business operations, such as investment in MSCI's existing products. Further, free cash flow indicates our ability to strengthen MSCI's balance sheet, repay our debt obligations, pay cash dividends and repurchase shares of our common stock.

We believe that adjusted tax rate is useful to investors because it increases the comparability of period-toperiod results by adjusting for the estimated net impact of Tax Reform.

We believe that the non-GAAP financial measures presented in this earnings release facilitate meaningful period-to-period comparisons and provide a baseline for the evaluation of future results.

Operating revenues ex-FX and ex-divestitures, adjusted EBITDA expenses, adjusted EBITDA, adjusted net income, adjusted EPS, adjusted tax rate, Capex and free cash flow are not defined in the same manner by all companies and may not be comparable to similarly-titled non-GAAP financial measures of other companies.

Notes Regarding Adjusting for the Impact of Foreign Currency Exchange Rate Fluctuations

Foreign currency exchange rate fluctuations reflect the difference between the current period results as reported compared to the current period results recalculated using the foreign currency exchange rates in effect for the comparable prior period. While operating revenues adjusted for the impact of foreign currency fluctuations includes asset-based fees that have been adjusted for the impact of foreign currency fluctuations, the underlying AUM, which is the primary component of asset-based fees, is not adjusted for foreign currency fluctuations. Approximately two-thirds of the AUM are invested in securities denominated in currencies other than the U.S. dollar, and accordingly, any such impact is excluded from the disclosed foreign currency adjusted variances.



Table 2: Condensed Consolidated Statements of Income (unaudited)

	Thr	ee Months Ende	ed		Year E		
	Dec. 31,	Dec. 31,	Sep. 30,	YoY %	Dec. 31,	Dec. 31,	YoY %
In thousands, except per share data	2018	2017(2)	2018	Change	2018	2017(2)	Change
Operating revenues	\$ 361,688	\$ 334,779	\$ 357,934	8.0%	\$1,433,984	\$1,274,172	12.5%
Operating expenses:							
Cost of revenues	73,757	69,247	70,906	6.5%	287,335	273,681	5.0%
Selling and marketing	52,949	47,726	46,149	10.9%	192,923	177,121	8.9%
Research and development	20,312	20,709	20,591	(1.9%)	81,411	75,849	7.3%
General and administrative	24,908	23,280	24,751	7.0%	99,882	87,764	13.8%
Amortization of intangible assets	11,633	11,560	11,681	0.6%	54,189	44,547	21.6%
Depreciation and amortization of property,							
equipment and leasehold improvements	8,311	8,118	7,453	2.4%	31,346	35,440	(11.6%)
Total operating expenses(1)	191,870	180,640	181,531	6.2%	747,086	694,402	7.6%
Operating income	169,818	154,139	176,403	10.2%	686,898	579,770	18.5%
Interest income	(6,096)	(2,237)	(6,522)	172.5%	(19,669)	(6,314)	211.5%
Interest expense	35,891	29,027	35,902	23.6%	133,114	116,098	14.7%
Other expense (income)	(47,266)	389	177	nm	(56,443)	3,087	nm
Other expenses (income), net	(17,471)	27,179	29,557	(164.3%)	57,002	112,871	(49.5%)
Income before provision for income taxes	187,289	126,960	146,846	47.5%	629,896	466,899	34.9%
Provision for income taxes	35,157	62,358	23,014	(43.6%)	122,011	162,927	(25.1%)
Net income	152,132	64,602	123,832	135.5%	507,885	303,972	67.1%
Earnings per basic common share	<u>\$ 1.75</u>	\$ 0.72	\$ 1.39	143.1%	\$ 5.83	\$ 3.36	73.5%
Earnings per diluted common share	\$ 1.70	\$ 0.70	\$ 1.36	142.9%	\$ 5.66	\$ 3.31	71.0%
Weighted average shares outstanding used in computing earnings per share:							
Basic	86,968	90,130	88,796	(3.5%)	87,179	90,336	(3.5%)
Diluted	89,495	92,467	91,372	(3.2%)	89,701	91,914	(2.4%)
				(=== /0)			(=

(1) Includes stock-based compensation expense of \$10.5 million, \$9.3 million and \$10.6 million for the three months ended Dec. 31, 2018, Dec. 31, 2017 and Sep. 30, 2018, respectively. Includes stock-based compensation expense of \$40.6 million and \$37.9 million for the years ended Dec. 31, 2018 and Dec. 31, 2017, respectively.

(2) As a result of the adoption of recent accounting guidance, the Company has restated its Condensed Consolidated Statements of Income by reclassifying \$0.2 million and \$0.6 million of non-service related pension costs from Operating Expenses and to Other expense (income) for the three months and full-year ended Dec.31, 2017, respectively.

nm: not meaningful



Table 3: Selected Balance Sheet Items (unaudited)

	As of										
	Dec. 31,	Dec. 31,	Sep. 30,								
In thousands	2018	2017	2018								
Cash and cash equivalents	\$904,176	\$889,502	\$1,398,398								
Accounts receivable, net of allowances(1)	\$473,433	\$327,597	\$378,705								
Deferred revenue(2)	\$537,977	\$374,365	\$441,884								
Long-term debt(3)	\$2,575,502	\$2,078,093	\$2,574,616								

(1) Accounts receivable, net of allowances would have been \$473.4 million at Dec. 31, 2017 under the new revenue standard.

(2) Deferred revenue would have been \$494.6 million at Dec. 31, 2017 under the new revenue standard.

(3) Consists of gross long-term debt, net of deferred financing fees. Gross long-term debt at Dec. 31, 2018, Dec. 31, 2017 and Sep. 30, 2018 was \$2.6 billion, \$2.1 billion and \$2.6 billion, respectively.

Table 4: Selected Cash Flow Items (unaudited)

31, Sep. 30,	YoY %	Dec. 31,	Dec. 31,	YoY %
7 2018	Change	2018	2017	Change
153 \$ 143,825	21.0%	\$ 612,762	\$ 404,158	51.6%
600) (13,097)	(294.4%)	34,874	(48,046)	(172.6%)
668) (97,758)	nm	(626,483)	(267,543)	134.2%
602 (2,168)	(122.0%)	(6,479)	9,099	(171.2%)
487 \$ 30,802	(646.2%)	\$ 14,674	\$ 97,668	(85.0%)
	ZO18 153 \$ 143,825 600) (13,097) 668) (97,758) 602 (2,168)	7 2018 Change 153 \$ 143,825 21.0% 600) (13,097) (294.4%) 668) (97,758) nm 602 (2,168) (122.0%)	7 2018 Change 2018 153 \$ 143,825 21.0% \$ 612,762 600) (13,097) (294.4%) 34,874 668) (97,758) nm (626,483) 602 (2,168) (122.0%) (6,479)	7 2018 Change 2018 2017 153 \$ 143,825 21.0% \$ 612,762 \$ 404,158 600) (13,097) (294.4%) 34,874 (48,046) 668) (97,758) nm (626,483) (267,543) 602 (2,168) (122.0%) (6,479) 9,099

nm: not meaningful



Table 5: Operating Results by Segment and Revenue Type (unaudited)

Index		ті	nree	Months Ende	ed			d			
	[Dec. 31,		Dec. 31,		Sep. 30,	YoY %	Dec. 31,		Dec. 31,	YoY %
In thousands		2018		2017		2018	Change	 2018		2017	Change
Operating revenues:											
Recurring subscriptions	\$	123,496	\$	111,503	\$	121,285	10.8%	\$ 477,612	\$	427,289	11.8%
Asset-based fees		81,439		78,493		82,007	3.8%	336,565		276,092	21.9%
Non-recurring		5,498		3,778		6,902	45.5%	21,298		15,578	36.7%
Total operating revenues		210,433		193,774		210,194	8.6%	835,475		718,959	16.2%
Adjusted EBITDA expenses		60,503		51,072		55,717	18.5%	227,622		196,718	15.7%
Adjusted EBITDA	\$	149,930	\$	142,702	\$	154,477	5.1%	\$ 607,853	\$	522,241	16.4%
Adjusted EBITDA margin %		71.2%		73.6%		73.5%		72.8%		72.6%	

Analytics	Tł	nree	Months Ende	ed			Year	Ende	d		
		Dec. 31,		Dec. 31,		Sep. 30,	YoY %	Dec. 31,		Dec. 31,	YoY %
In thousands		2018		2017		2018	Change	2018		2017	Change
Operating revenues:											
Recurring subscriptions	\$	119,705	\$	115,349	\$	118,857	3.8%	\$ 474,334	\$	452,253	4.9%
Non-recurring		2,230		2,161		1,041	3.2%	5,605		6,016	(6.8%)
Total operating revenues		121,935		117,510		119,898	3.8%	479,939		458,269	4.7%
Adjusted EBITDA expenses		85,256		86,369		82,852	(1.3%)	336,294		332,645	1.1%
Adjusted EBITDA	\$	36,679	\$	31,141	\$	37,046	17.8%	\$ 143,645	\$	125,624	14.3%
Adjusted EBITDA margin %		30.1%		26.5%		30.9%		 29.9%		27.4%	

All Other		Th	ree M	Months Ende	d		Year Ended							
	Dec. 31,		C	Dec. 31,		6ep. 30,	YoY %		Dec. 31,	I	Dec. 31,	YoY %		
In thousands		2018		2017		2018	Change		2018		2017	Change		
Operating revenues:														
Recurring subscriptions	\$	28,405	\$	22,225	\$	27,234	27.8%	\$	114,590	\$	93,481	22.6%		
Non-recurring		915		1,270		608	(28.0%)		3,980		3,463	14.9%		
Total operating revenues		29,320		23,495		27,842	24.8%		118,570		96,944	22.3%		
Adjusted EBITDA expenses		26,167		23,521		23,828	11.2%		97,635		85,052	14.8%		
Adjusted EBITDA	\$	3,153	\$	(26)	\$	4,014	nm	\$	20,935	\$	11,892	76.0%		
Adjusted EBITDA margin %		10.8%		(0.1%)		14.4%			17.7%		12.3%			

Consolidated		Tł	nree	Months Ende	d						
	C)ec. 31,	I	Dec. 31,	9	Sep. 30,	YoY %	Dec. 31,	l	Dec. 31,	YoY %
In thousands		2018		2017		2018	Change	2018		2017	Change
Operating revenues:											
Recurring subscriptions	\$	271,606	\$	249,077	\$	267,376	9.0%	\$ 1,066,536	\$	973,023	9.6%
Asset-based fees		81,439		78,493		82,007	3.8%	336,565		276,092	21.9%
Non-recurring		8,643		7,209		8,551	19.9%	 30,883		25,057	23.3%
Operating revenues total		361,688		334,779		357,934	8.0%	1,433,984		1,274,172	12.5%
Adjusted EBITDA expenses		171,926		160,962		162,397	6.8%	 661,551		614,415	7.7%
Adjusted EBITDA	\$	189,762	\$	173,817	\$	195,537	9.2%	\$ 772,433	\$	659,757	17.1%
Adjusted EBITDA margin %		52.5%	_	51.9%	-	54.6%		 53.9%	_	51.8%	
Operating margin %		47.0%		46.0%		49.3%		47.9%		45.5%	

nm: not meaningful



Table 6: Sales and Retention Rate by Segment (unaudited)

			Year I	Ided			
	Dec. 31,	Sep. 30,	June 30,	Mar. 31,	Dec. 31,	Dec. 31,	Dec. 31,
In thousands	2018	2018	2018	2018	2017	2018	2017
Index							
New recurring subscription sales	\$ 21,013	\$ 15,54		\$ 15,195	\$ 17,980	\$ 72,660	\$ 61,308
Subscription cancellations	(7,699)	(4,42		(4,115)	(6,180)	(20,819)	(16,995)
Net new recurring subscription sales	\$ <u>13,314</u>	<u>\$</u> 11,11		\$ 11,080	\$ 11,800	\$ 51,841	\$ 44,313
Non-recurring sales	\$ <u>6,845</u>	\$ <u>7,09</u>	7 <u>\$ 5,328</u>	\$ <u>3,459</u>	\$ <u>3,677</u>	\$ 22,729	\$ 16,310
Total gross sales(1)	\$ 27,858	\$ 22,64	3 \$ 26,234	\$ 18,654	\$ 21,657	\$ 95,389	\$ 77,618
Total Index net sales	\$ 20,159	\$ 18,21	5 \$ 21,657	\$ 14,539	\$ 15,477	\$ 74,570	\$ 60,623
Index Retention Rate(2)	93.2%	96.	1% 95.9%	96.4%	93.9%	95.4%	95.8%
Analytics							
New recurring subscription sales	\$ 19,438	\$ 16,79	7 \$ 17,395	\$ 11,356	\$ 25,217	\$ 64,986	\$ 64,177
Subscription cancellations	(8,524)	(7,11	7) (9,452)	(8,578)	(11,679)	(33,671)	(33,674)
Net new recurring subscription sales	\$ 10,914	\$ 9,68	0 \$ 7,943	\$ 2,778	\$ 13,538	\$ 31,315	\$ 30,503
Non-recurring sales	\$ 3,249	\$ 3,18	9 \$ 2,425	<u>\$ 1,346</u>	\$ 3,742	\$ 10,209	\$ 10,306
Total gross sales(1)	\$ 22,687	\$ 19,98	6 \$ 19,820	\$ 12,702	\$ 28,959	\$ 75,195	\$ 74,483
Total Analytics net sales	\$ 14,163	\$ 12,86	9 \$ 10,368	\$ 4,124	\$ 17,280	\$ 41,524	\$ 40,809
Analytics Retention Rate(2)	92.7%	94.	1% 92.1%	93.0%	89.7%	93.0%	92.5%
All Other							
New recurring subscription sales	\$ 7,596	\$ 6,45	9\$6,678	\$ 5,468	\$ 8,391	\$ 26,201	\$ 22,544
Subscription cancellations	(1,959)	(1,54	7) (1,384)	(1,531)	(1,954)	(6,421)	(7,717)
Net new recurring subscription sales	\$	\$ 4,91	2 \$ 5,294	\$ 3,937	\$ 6,437	\$ 19,780	\$ 14,827
Non-recurring sales	\$ 1,194	\$ 64	1 \$ 909	\$ 694	\$ 1,479	\$ 3,438	\$ 3,875
Total gross sales(1)	\$ 8,790	\$ 7,10	0 \$ 7,587	\$ 6,162	\$ 9,870	\$ 29,639	\$ 26,419
Total All Other net sales	\$ 6,831	\$ 5,55	3 \$ 6,203	\$ 4,631	\$ 7,916	\$ 23,218	\$ 18,702
All Other Estate Retention Rate(2)	92.8%	94.	3% 94.9%	94.4%	91.1%	94.1%	91.2%
Consolidated							
New recurring subscription sales	\$ 48,047	\$ 38,80	2 \$ 44,979	\$ 32,019	\$ 51,588	\$ 163,847	\$ 148,029
Subscription cancellations	(18,182)	(13,09	2) (15,413)	(14,224)	(19,813)	(60,911)	(58,386)
Net new recurring subscription sales	\$ 29,865	\$ 25,71	0 \$ 29,566	\$ 17,795	\$ 31,775	\$ 102,936	\$ 89,643
Non-recurring sales	\$ 11,288	\$ 10,92	7 \$ 8,662	\$ 5,499	<u>\$ 8,898</u>	\$ 36,376	\$ 30,491
Total gross sales(1)	\$ 59,335	\$ 49,72	9 \$ 53,641	\$ 37,518	\$ 60,486	\$ 200,223	\$ 178,520
Total net sales	\$ 41,153	\$ 36,63	7 \$ 38,228	\$ 23,294	\$ 40,673	\$ 139,312	\$ 120,134
Total Retention Rate(2)	92.9%	95.	0% 94.1%	94.6%	91.6%	94.1%	93.8%

(1) Total gross sales equal new recurring subscription sales plus non-recurring sales.

(2) See "Notes Regarding the Use of Operating Metrics" for details regarding the definition of Retention Rate.



Table 7: AUM in ETFs Linked to MSCI Indexes (unaudited)(1)(2)

					Year Ended										
In billions		Dec. 31, 2018		Sep. 30, 2018		June 30, 2018		Mar. 31, 2018		Dec. 31, 2017		Dec. 31, 2018		Dec. 31, 2017	
Beginning Period AUM in ETFs linked to	_														
MSCI Indexes	\$	765.5	\$	744.7	\$	764.9	\$	744.3	\$	674.3	\$	744.3	\$	481.4	
Market Appreciation/(Depreciation)		(94.7)		15.6		(19.4)		(11.7)		32.0		(110.2)		123.6	
Cash Inflows		24.8		5.2		(0.8)		32.3		38.0		61.5		139.3	
Period-End AUM in ETFs linked to MSCI Indexes	\$	695.6	\$	765.5	\$	744.7	\$	764.9	\$	744.3	\$	695.6	\$	744.3	
Period Average AUM in ETFs linked to MSCI Indexes	\$	717.1	\$	755.8	\$	776.5	\$	779.5	\$	712.3	\$	757.2	\$	621.4	
Avg. Basis Point Fee(3)		2.92		2.90		2.96		3.02		3.04		2.92		3.04	

Source: Bloomberg and MSCI

(1) ETF assets under management calculation methodology is ETF net asset value multiplied by shares outstanding.

(2) The AUM in ETFs numbers also include AUM in Exchange Traded Notes, the value of which is less than 1.0% of the AUM amounts presented.

(3) Based on period-end Run Rate for ETFs linked to MSCI indexes using period-end AUM.

AUM: assets under management.

Table 8: Run Rate by Segment and Type (unaudited)(1)

				As of				
		Dec. 31,		Dec. 31,		Sep. 30,	ΥοΥ %	
In thousands		2018		2017		2018	Change	
Index								
Recurring subscriptions	\$	502,665	\$	451,048	\$	489,515	11.4%	
Asset-based fees		311,908		316,812		326,148	(1.5%)	
Index Run Rate		814,573		767,860		815,663	6.1%	
Analytics Run Rate	÷	491,861		489,451		499,219	0.5%	
All Other Run Rate		124,886		108,413		120,419	15.2%	
Total Run Rate	<u>\$</u>	1,431,320	<u>\$</u>	1,365,724	<u>\$</u>	1,435,301	4.8%	
Total recurring subscriptions	\$	1,119,412	\$	1,048,912	\$	1,109,153	6.7%	
Total asset-based fees		311,908		316,812		326,148	(1.5%)	
Total Run Rate	\$	1,431,320	\$	1,365,724	\$	1,435,301	4.8%	

(1) See "Notes Regarding the Use of Operating Metrics" for details regarding the definition of Run Rate.



Table 9: Reconciliation of Adjusted EBITDA to Net Income (unaudited)

		т	Year Ended							
	Dec. 31, 2018		Dec. 31, 2017(1)		Sep. 30, 2018		Dec. 31, 2018		Dec. 31, 2017(1)	
In thousands										
Index adjusted EBITDA	\$	149,930	\$	142,702	\$	154,477	\$	607,853	\$	522,241
Analytics adjusted EBITDA		36,679		31,141		37,046		143,645		125,624
All Other adjusted EBITDA		3,153		(26)		4,014		20,935		11,892
Consolidated adjusted EBITDA		189,762		173,817		195,537		772,433		659,757
Amortization of intangible assets		11,633		11,560		11,681		54,189		44,547
Depreciation and amortization of property,										
equipment and leasehold improvements		8,311		8,118		7,453		31,346		35,440
Operating income		169,818		154,139		176,403		686,898		579,770
Other expense (income), net		(17,471)		27,179		29,557		57,002		112,871
Provision for income taxes		35,157		62,358		23,014		122,011		162,927
Net income	\$	152,132	\$	64,602	\$	123,832	\$	507,885	\$	303,972

(1) As a result of the adoption of recent accounting guidance, the Company has restated its adjusted EBITDA by excluding \$0.2 million and \$0.6 million of non-service related pension costs from adjusted EBITDA expenses for the three months and full-year ended Dec.31, 2017, respectively.

Table 10: Reconciliation of Net Income and Diluted EPS to Adjusted Net Income and Adjusted EPS (unaudited)

		TI	hree l	Year Ended						
	Dec. 31, 2018			Dec. 31,	Sep. 30,		Dec. 31,		Dec. 31,	
In thousands, except per share data			2017		2018		2018			2017
Net income	\$	152,132	\$	64,602	\$	123,832	\$	507,885	\$	303,972
Plus: Amortization of acquired intangible assets		8,746		9,238		8,999		43,981		39,157
Less: Gain on sale of Alacra (not tax-effected)		—		—		_		—		(771)
Less: Gain on sale of FEA (not tax-effected)		—		—		(10)		(10,646)		_
Less: Gain on sale of InvestorForce		(46,595)		-		_		(46,595)		_
Less: Valuation allowance released related to										
InvestorForce disposition		_		_		(7,758)		(7,758)		_
Less: Tax Reform adjustments		(6,671)		34,500		_		(8,272)		34,500
Less: Income tax effect		9,390		(1,922)		(1,884)		1,678		(10,772)
Adjusted net income	\$	117,002	\$	106,418	\$	123,179	\$	480,273	\$	366,086
Diluted EPS	\$	1.70	\$	0.70	\$	1.36	\$	5.66	\$	3.31
Plus: Amortization of acquired intangible assets		0.10		0.10		0.10		0.49		0.43
Less: Gain on sale of Alacra (not tax-effected)		-		-		-		-		(0.01)
Less: Gain on sale of FEA (not tax-effected)		-		-		-		(0.12)		-
Less: Gain on sale of InvestorForce		(0.52)		-		-		(0.52)		-
Less: Valuation allowance released related to										
InvestorForce disposition		-		-		(0.08)		(0.09)		-
Plus: Tax Reform adjustments		(0.07)		0.37		-		(0.09)		0.38
Less: Income tax effect		0.10		(0.02)		(0.03)		0.02		(0.13)
Adjusted EPS	Ś	1.31	ć	1.15	ć	1.35	ć	5.35	ć	3.98



Table 11: Reconciliation of Adjusted EBITDA Expenses to Operating Expenses (unaudited)

	Tł	ree Months End	led	Year Ended	Full-Year
	Dec. 31,	Dec. 31,	Sep. 30,	Dec. 31, Dec. 31,	2019
In thousands	2018	2017(1) 2018		2018 2017(1)	Outlook(2)
Index adjusted EBITDA expenses	\$ 60,503	\$ 51,072	\$ 55,717	\$ 227,622 \$ 196,718	
Analytics adjusted EBITDA expenses	85,256	86,369	82,852	336,294 332,645	
All Other adjusted EBITDA expenses	26,167	23,521	23,828	97,635 85,052	
Consolidated adjusted EBITDA expenses	171,926	160,962	162,397	661,551 614,415	\$685,000 - \$705,000
Payroll taxes from vesting of Multi-Year PSUs	-	-	-		12,000 - 15,000
Amortization of intangible assets	11,633	11,560	11,681	54,189 44,547	
Depreciation and amortization of property,					75,000 - 80,000
equipment and leasehold improvements	8,311	8,118	7,453	31,346 35,440	
Total operating expenses	\$ 191,870	\$ 180,640	\$ 181,531	\$ 747,086 \$ 694,402	\$772,000 - \$800,000

(1) As a result of the adoption of recent accounting guidance, the Company has restated its adjusted EBITDA by excluding \$0.2 million and \$0.6 million of non-service related pension costs from adjusted EBITDA expenses for the three months and full-year ended Dec.31, 2017, respectively.

(2) We have not provided a line-item reconciliation for adjusted EBITDA expenses to total operating expenses for this future period because we do not provide guidance on the individual reconciling items between total operating expenses and adjusted EBITDA expenses.

Table 12: Reconciliation of Net Cash Provided by Operating Activities to Free Cash Flow (unaudited)

	Three Months Ended							Year I	Ende	d	Full-Year
	I	Dec. 31,	I	Dec. 31,	:	Sep. 30,	Dec. 31, Dec. 31,		2019		
In thousands		2018		2017		2018		2018		2017	Outlook(1)
Net cash provided by operating activities	\$	173,175	\$	143,153	\$	143,825	\$	612,762	\$	404,158	\$600,000 - \$630,000
Capital expenditures		(17,188)		(15,736)		(8,590)		(30,257)		(33,177)	
Capitalized software development costs		(5,589)		(4,863)		(4,517)		(18,704)		(15,640)	
Capex		(22,777)		(20,599)		(13,107)		(48,961)		(48,817)	(55,000 - 45,000)
Free cash flow	\$	150,398	\$	122,554	\$	130,718	\$	563,801	\$	355,341	\$545,000 - \$585,000

(1) We have not provided a line-item reconciliation for free cash flow to net cash from operating activities for this future period because we do not provide guidance on the individual reconciling items between net cash from operating activities and free cash flow.

Table 13: Reconciliation of Effective Tax Rate to Adjusted Tax Rate (unaudited)

	Th	ree Months Ended	Year Ended				
	Dec. 31,	Dec. 31, Dec. 31,		Dec. 31,	Dec. 31,		
	2018	2017	2018	2018	2017		
Effective tax rate	18.77%	49.12%	15.67%	19.37%	34.90%		
Tax Reform impact on effective tax rate	3.56%	(27.18%)	—%	1.31%	(7.39%)		
Adjusted tax rate	22.33%	21.94%	15.67%	20.68%	27.51%		