

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

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

For the quarterly period ended September 30, 2019

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

For the transition period from _____ to _____
Commission File Number 001-34675



SS&C TECHNOLOGIES HOLDINGS, INC.

(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

71-0987913
(I.R.S. Employer
Identification No.)

80 Lambert Road
Windsor, CT 06095
(Address of principal executive offices, including zip code)

860-298-4500
(Registrant's telephone number, including area code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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

Large accelerated filer Accelerated filer
Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company
Emerging growth company

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

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

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

<u>Title of each class</u>	<u>Trading Symbol</u>	<u>Name of each exchange on which registered</u>
Common stock, par value \$0.01 per share	SSNC	The Nasdaq Global Select Market

There were 252,711,175 shares of the registrant's common stock outstanding as of October 29, 2019.

INDEX

	<u>Page Number</u>
<u>PART I. FINANCIAL INFORMATION</u>	
<u>Item 1. Financial Statements (unaudited)</u>	4
<u>Condensed Consolidated Balance Sheets at September 30, 2019 and December 31, 2018</u>	4
<u>Condensed Consolidated Statements of Comprehensive Income (Loss) for the three and nine months ended September 30, 2019 and 2018</u>	5
<u>Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2019 and 2018</u>	6
<u>Notes to Condensed Consolidated Financial Statements</u>	7
<u>Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	18
<u>Item 3. Quantitative and Qualitative Disclosures About Market Risk</u>	28
<u>Item 4. Controls and Procedures</u>	29
<u>PART II. OTHER INFORMATION</u>	
<u>Item 1. Legal Proceedings</u>	29
<u>Item 1A. Risk Factors</u>	30
<u>Item 2. Unregistered Sales of Equity Securities and Use of Proceeds</u>	30
<u>Item 6. Exhibits</u>	30
<u>EXHIBIT INDEX</u>	31
<u>SIGNATURE</u>	32

SS&C Technologies Holdings, Inc., or “SS&C Holdings,” is our top-level holding company. SS&C Technologies, Inc., or “SS&C,” is our primary operating company and a wholly-owned subsidiary of SS&C Technologies Holdings, Inc. “We,” “us,” “our” and the “Company” mean SS&C Technologies Holdings, Inc. and its consolidated subsidiaries, including SS&C.

This Quarterly Report on Form 10-Q may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, the words “believes,” “anticipates,” “plans,” “expects,” “estimates,” “projects,” “forecasts,” “may,” “assume,” “intend,” “will,” “continue,” “opportunity,” “predict,” “potential,” “future,” “guarantee,” “likely,” “target,” “indicate,” “would,” “could” and “should” and similar expressions are intended to identify forward-looking statements. The important factors discussed under the caption “Risk Factors” in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K for the year ended December 31, 2018, filed with the Securities and Exchange Commission on March 1, 2019, among others, could cause actual results to differ materially from those indicated by forward-looking statements made herein and presented elsewhere by management from time to time. We do not undertake an obligation to update its forward-looking statements to reflect future events or circumstances.

Item 1. Financial Statements

SS&C TECHNOLOGIES HOLDINGS, INC. AND SUBSIDIARIES

CONDENSED CONSOLIDATED BALANCE SHEETS

(In millions, except per share data) (Unaudited)

	September 30, 2019	December 31, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 157.5	\$ 166.7
Funds receivable and funds held on behalf of clients	1,045.7	1,014.7
Accounts receivable, net of allowance for doubtful accounts of \$11.7 and \$9.4, respectively	654.7	681.7
Contract asset	15.9	18.5
Prepaid expenses and other current assets	174.3	160.1
Restricted cash and cash equivalents	7.0	6.4
Total current assets	2,055.1	2,048.1
Property, plant and equipment, net (Note 2)	480.3	553.2
Operating lease right-of-use assets (Note 3)	371.2	—
Investments (Note 4)	175.8	190.5
Unconsolidated affiliates (Note 5)	232.2	239.3
Contract asset	61.9	31.5
Goodwill (Note 7)	7,825.7	7,858.0
Intangible and other assets, net of accumulated amortization of \$1,844.2 and \$1,360.2, respectively	4,735.4	5,186.9
Total assets	<u>\$ 15,937.6</u>	<u>\$ 16,107.5</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term debt (Note 8)	\$ 61.1	\$ 87.5
Client funds obligations	1,045.7	1,014.7
Accounts payable	54.3	41.4
Income taxes payable	—	11.1
Accrued employee compensation and benefits	234.6	322.0
Interest payable	0.1	0.2
Other accrued expenses	241.3	199.2
Deferred revenue	262.0	245.7
Total current liabilities	1,899.1	1,921.8
Long-term debt, net of current portion (Note 8)	7,571.3	8,168.5
Operating lease liabilities (Note 3)	347.9	—
Other long-term liabilities	205.2	235.5
Deferred income taxes	1,097.5	1,201.7
Total liabilities	11,121.0	11,527.5
Commitments and contingencies (Note 14)		
Stockholders' equity (Note 9):		
Preferred stock, \$0.01 par value per share, 5.0 million shares authorized; no shares issued	—	—
Class A non-voting common stock, \$0.01 par value per share, 5.0 million shares authorized; no shares issued	—	—
Common stock, \$0.01 par value per share, 400.0 million shares authorized; 255.6 million shares and 252.4 million shares issued, respectively, and 252.7 million shares and 250.8 million shares outstanding, respectively	2.6	2.5
Additional paid-in capital	4,202.4	4,091.4
Accumulated other comprehensive loss	(378.1)	(343.0)
Retained earnings	1,068.0	847.1
	4,894.9	4,598.0
Less: cost of common stock in treasury, 2.9 and 1.6 million shares, respectively	(78.3)	(18.0)
Total stockholders' equity	4,816.6	4,580.0
Total liabilities and stockholders' equity	<u>\$ 15,937.6</u>	<u>\$ 16,107.5</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

SS&C TECHNOLOGIES HOLDINGS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(In millions, except per share data) (Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Revenues:				
Software-enabled services	\$ 960.0	\$ 827.3	\$ 2,894.7	\$ 1,863.7
License, maintenance and related	184.2	165.1	534.7	446.4
Total revenues	1,144.2	992.4	3,429.4	2,310.1
Cost of revenues:				
Software-enabled services	567.9	502.7	1,727.9	1,193.1
License, maintenance and related	74.8	77.4	225.8	220.0
Total cost of revenues	642.7	580.1	1,953.7	1,413.1
Gross profit	501.5	412.3	1,475.7	897.0
Operating expenses:				
Selling and marketing	88.0	50.9	261.3	136.3
Research and development	94.9	85.7	283.3	214.2
General and administrative	91.0	93.2	278.0	233.4
Transaction expenses	—	1.9	—	96.4
Total operating expenses	273.9	231.7	822.6	680.3
Operating income	227.6	180.6	653.1	216.7
Interest expense, net	(98.5)	(78.1)	(304.4)	(173.7)
Other (expense) income, net	(10.3)	13.7	27.1	14.8
Equity in earnings of unconsolidated affiliates, net	(0.1)	1.7	2.1	2.8
Loss on extinguishment of debt	—	—	(7.1)	(44.4)
Income before income taxes	118.7	117.9	370.8	16.2
Provision (benefit) for income taxes	23.7	60.9	73.9	(28.3)
Net income	\$ 95.0	\$ 57.0	\$ 296.9	\$ 44.5
Basic earnings per share	\$ 0.38	\$ 0.24	\$ 1.17	\$ 0.20
Diluted earnings per share	\$ 0.36	\$ 0.23	\$ 1.12	\$ 0.19
Basic weighted average number of common shares outstanding	253.3	239.9	252.7	228.1
Diluted weighted average number of common and common equivalent shares outstanding	262.7	252.6	264.1	239.5
Net income	95.0	57.0	296.9	44.5
Other comprehensive loss, net of tax:				
Change in unrealized loss on interest rate swaps	(0.5)	—	(3.3)	—
Foreign currency exchange translation adjustment	(62.6)	(54.2)	(31.8)	(84.6)
Total other comprehensive loss, net of tax	(63.1)	(54.2)	(35.1)	(84.6)
Comprehensive income (loss)	\$ 31.9	\$ 2.8	\$ 261.8	\$ (40.1)

The accompanying notes are an integral part of these condensed consolidated financial statements.

SS&C TECHNOLOGIES HOLDINGS, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In millions) (Unaudited)

	Nine Months Ended September 30,	
	2019	2018
Cash flow from operating activities:		
Net income	\$ 296.9	\$ 44.5
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	582.8	342.9
Equity in earnings of unconsolidated affiliates, net	(2.1)	(2.8)
Net gains on investments	(26.7)	(10.6)
Stock-based compensation expense	55.7	76.1
Amortization and write-offs of loan origination costs and original issue discounts	13.3	9.5
Loss on extinguishment of debt	—	44.4
Loss on sale or disposition of property and equipment	3.1	0.3
Deferred income taxes	(73.6)	(105.9)
Provision for doubtful accounts	4.0	1.8
Changes in operating assets and liabilities, excluding effects from acquisitions:		
Accounts receivable	19.1	40.0
Prepaid expenses and other assets	24.7	23.9
Contract assets	(28.1)	(8.6)
Accounts payable	11.4	(86.8)
Accrued expenses	(121.3)	(11.2)
Income taxes prepaid and payable	(27.0)	(28.7)
Deferred revenue	22.8	(6.4)
Net cash provided by operating activities	<u>755.0</u>	<u>322.4</u>
Cash flow from investing activities:		
Additions to property and equipment	(48.0)	(28.5)
Proceeds from sale of property and equipment	—	9.6
Cash paid for business acquisitions, net of cash acquired	3.2	(4,633.6)
Additions to capitalized software	(51.1)	(29.3)
Investments in securities	(0.3)	(15.4)
Collection of other non-current receivables	7.7	—
Proceeds from sales / maturities of investments	46.1	28.1
Proceeds from unconsolidated affiliates	2.1	—
Net cash used in investing activities	<u>(40.3)</u>	<u>(4,669.1)</u>
Cash flow from financing activities:		
Cash received from debt borrowings	2,150.0	6,873.7
Repayments of debt	(2,779.1)	(2,856.1)
Net increase in client funds obligations	0.8	193.2
Proceeds from exercise of stock options	74.5	74.8
Withholding taxes paid related to equity award net share settlement	(19.2)	(12.7)
Fees paid for debt extinguishment and refinancing activities	(6.0)	(68.7)
Proceeds from common stock issuance, net	—	1,399.0
Purchase of common stock for treasury	(60.3)	—
Dividends paid on common stock	(76.0)	(50.7)
Net cash (used in) provided by financing activities	<u>(715.3)</u>	<u>5,552.5</u>
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(1.8)	2.5
Net (decrease) increase in cash, cash equivalents and restricted cash	(2.4)	1,208.3
Cash, cash equivalents and restricted cash, beginning of period	1,113.3	64.7
Cash, cash equivalents and restricted cash and cash equivalents, end of period	<u>\$ 1,110.9</u>	<u>\$ 1,273.0</u>
Reconciliation of cash, cash equivalents and restricted cash and cash equivalents:		
Cash and cash equivalents	\$ 157.5	\$ 732.2
Restricted cash and cash equivalents	7.0	13.8
Funds receivable and funds held on behalf of clients	946.4	527.0
	<u>\$ 1,110.9</u>	<u>\$ 1,273.0</u>

The accompanying notes are an integral part of these condensed consolidated financial statements.

SS&C TECHNOLOGIES HOLDINGS, INC. AND SUBSIDIARIES
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

Note 1—Basis of Presentation

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”). These accounting principles were applied on a basis consistent with those of the audited Consolidated Financial Statements contained in our Annual Report on Form 10-K for the year ended December 31, 2018, filed with the Securities and Exchange Commission (the “SEC”) on March 1, 2019 (the “2018 Form 10-K”). In the opinion of management, the accompanying unaudited Condensed Consolidated Financial Statements contain all adjustments (consisting of only normal recurring adjustments, except as noted elsewhere in the notes to the Condensed Consolidated Financial Statements) necessary for a fair statement of our financial position as of September 30, 2019, the results of our operations for the three and nine months ended September 30, 2019 and 2018, and our cash flows for the nine months ended September 30, 2019 and 2018. These statements do not include all of the information and footnotes required by GAAP for annual financial statements. The Condensed Consolidated Financial Statements contained herein should be read in conjunction with the audited Consolidated Financial Statements and footnotes as of and for the year ended December 31, 2018, which were included in the 2018 Form 10-K. The December 31, 2018 Consolidated Balance Sheet data were derived from audited financial statements but do not include all disclosures required by GAAP for annual financial statements. The results of operations for the three and nine months ended September 30, 2019 are not necessarily indicative of the expected results for any subsequent quarters or the full year.

Recently Adopted Accounting Pronouncements

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. ASU 2016-02 requires lessees to recognize the following for all leases (with the exception of short-term leases) at the commencement date: (i) a lease liability, which is a lessee’s obligation to make lease payments arising from a lease, measured on a discounted basis; and (ii) a right-of-use asset, which is an asset that represents the lessee’s right to use, or control the use of, a specified asset for the lease term. Lessor accounting is largely unchanged under the amendments of ASU 2016-02. Additional disclosures are required to allow the user to assess the amount, timing and uncertainty of cash flows arising from leasing activities. In July 2018, the FASB issued ASU 2018-11, *Leases (Topic 842): Targeted Improvements*, which provides another transition method no longer requiring application to previously reported periods.

We adopted ASU 2016-02 as of January 1, 2019. Prior period information was not restated and continues to be presented under ASC 840, *Leases*. We elected the package of practical expedients permitted under the transition guidance within the new standard, which among other things, allowed us to not reassess existing contracts to determine if they contain a lease and to carry forward their historical lease classification upon transition. In addition, we will not apply the guidance of ASC 842 to leases with an initial term of 12 months or less as allowed by the standard.

Our lease portfolio primarily consists of real estate office space with lease terms ranging from 1 to 15 years. Adoption of the new standard resulted in the recording of right-of-use assets and lease payment obligations for our real estate office leases of \$387.6 million and \$417.8 million, respectively, as of January 1, 2019. As of September 30, 2019, \$55.5 million of the lease liability was included in other accrued expenses on the Condensed Consolidated Balance Sheet. The standard did not materially impact our Condensed Consolidated Statement of Comprehensive Income (Loss) or Condensed Consolidated Statement of Cash Flows. See Note 3, “Leases” for further details.

Recent Accounting Pronouncements Not Yet Effective

In June 2016, the FASB issued ASU 2016-13, *Measurement of Credit Losses on Financial Instruments*. ASU 2016-13 requires companies to measure credit losses utilizing a methodology that reflects expected credit losses and requires a consideration of a broader range of reasonable and supportable information to inform credit loss estimates. ASU 2016-13 is effective for us in our first quarter of fiscal 2020. Application of the ASU is through a cumulative-effect adjustment to retained earnings as of the effective date. We are currently evaluating the impact of the pending adoption of ASU 2016-13 on our Condensed Consolidated Financial Statements. This ASU is not expected to have a material impact on our financial position, results of operations or cash flows.

Note 2—Property, Plant and equipment, net

Property, plant and equipment and the related accumulated depreciation are as follows (in millions):

	September 30, 2019	December 31, 2018
Land	\$ 39.3	\$ 54.8
Building and improvements	303.6	309.5
Equipment, furniture, and fixtures	417.4	384.7
	760.3	749.0
Less: accumulated depreciation and amortization	(280.0)	(195.8)
Total property, plant and equipment, net	<u>\$ 480.3</u>	<u>\$ 553.2</u>

Depreciation expense for the three and nine months ended September 30, 2019 was \$29.9 million and \$93.0 million, respectively. Depreciation expense for the three and nine months ended September 30, 2018 was \$31.7 million and \$67.0 million, respectively.

Note 3—Leases

We determine if our contractual agreements contain a lease at inception. A lease is identified when a contract allows us the right to control an identified asset for a period of time in exchange for consideration. Our lease agreements consist primarily of operating leases for office space.

Our operating leases are included on the Condensed Consolidated Balance Sheets as operating lease assets and operating lease liabilities. An operating lease asset represents our right to use an underlying asset over the term of a lease while an operating lease liability represents our obligation to make lease payments arising from the lease. Operating lease liabilities are recognized at the commencement date at the present value of the base minimum rent payments. Operating lease assets are also recognized at the commencement date as the total operating lease liability adjusted for prepaid rents, deferred rent liabilities and lease fair value adjustments that existed under ASC 840. As most of our leases do not provide an implicit rate, we use our estimated secured incremental borrowing rate within each of the significant geographic regions in which we operate based on the information available at lease commencement date in determining the present value of lease payments.

Our lease agreements typically do not contain variable lease payments, residual value guarantees, or restrictive covenants. Many of our leases include the option to renew, however we do not believe it is reasonably certain that we will exercise the options as each individual lease is evaluated and further negotiated prior to the end of the current lease terms.

Generally, our lease agreements include required separate payments for non-lease components (e.g. payments for common area maintenance, real estate taxes and/or utilities) which are expensed as incurred. We do have certain lease agreements that contain bundled minimum payments for lease components (e.g. payments for rent) and non-lease components. In these situations, we have applied the practical expedient available under ASC 842 to not separate the lease and non-lease components for purposes of the right-of-use asset and lease payment obligation calculations.

We have certain lease agreements with our unconsolidated real estate joint ventures. We recognized operating lease expense of \$0.7 million and \$2.1 million for the three and nine months ended September 30, 2019, respectively, related to these lease agreements.

Our total operating lease costs were \$19.8 million and \$59.5 million during the three and nine months ended September 30, 2019, respectively. Cash paid for amounts included in operating lease liabilities was \$18.5 million and \$54.9 million during the three and nine months ended September 30, 2019, respectively, and is included in operating cash flows. Total right-of-use assets obtained in exchange for operating lease liabilities was \$22.2 million for the three months ended September 30, 2019. Our weighted average remaining lease term and weighted average discount rates as of September 30, 2019 were 8.4 years and 5.0%, respectively.

Maturities of lease liabilities as of September 30, 2019 are as follows (in millions):

Maturity of Lease Liabilities	Operating Leases	
2019	\$	19.3
2020		75.7
2021		73.8
2022		64.6
2023		54.8
Thereafter		229.8
Total lease payments	\$	518.0
Less: Interest		(114.6)
Present value of lease liabilities	<u>\$</u>	<u>403.4</u>

Future minimum rental payments under our non-cancelable operating leases as of December 31, 2018, as measured under ASC 840, Leases, were as follows (in millions):

Future Minimum Lease Payments	Operating Leases	
2019	\$	83.8
2020		76.5
2021		71.2
2022		61.6
2023		53.5
Thereafter		204.3
Total lease payments	\$	<u>550.9</u>

We have certain sublease agreements in place with 3rd parties to lease portions of our office space. In addition, we serve as a lessor in other lease agreements for real estate and storage facilities. Total gross sublease and other rental income recognized during the three and nine months ended September 30, 2019 were approximately \$2.2 million and \$6.9 million, respectively.

Maturities of lease payments to be received as of September 30, 2019 are as follows (in millions):

Maturity of Lease Payments to be Received	Operating Leases	
2019	\$	2.2
2020		8.9
2021		7.3
2022		5.4
2023		5.1
Thereafter		11.9
Total lease payments	\$	<u>40.8</u>

Note 4—Investments

Investments are as follows (in millions):

	September 30, 2019		December 31, 2018	
Partnership interests in private equity funds	\$	95.0	\$	102.1
Marketable equity securities		35.2		32.6
Non-marketable equity securities		45.5		45.0
Seed capital investments		0.1		10.3
Other investments		—		0.5
Total investments	\$	<u>175.8</u>	\$	<u>190.5</u>

Realized and unrealized gains and losses for our equity securities are as follows (in millions):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Unrealized (losses) gains on equity securities held as of the end of the period	\$ (12.9)	\$ 10.2	\$ 24.6	\$ 11.0
Realized (losses) gains for equity securities sold during the period	(2.2)	1.7	4.1	1.7
Total (losses) gains recognized in other (expense) income, net	<u>\$ (15.1)</u>	<u>\$ 11.9</u>	<u>\$ 28.7</u>	<u>\$ 12.7</u>

Fair Value Measurement

Authoritative accounting guidance on fair value measurements establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value. These tiers include: Level 1, defined as observable inputs such as quoted prices in active markets; Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable; and Level 3, defined as unobservable inputs for which little or no market data exists, therefore requiring an entity to develop its own assumptions.

As of September 30, 2019 and December 31, 2018, we held certain investment assets and certain liabilities that are required to be measured at fair value on a recurring basis. These investments include money market funds, marketable equity securities and seed capital investments where fair value is determined using quoted prices in active markets. Accordingly, the fair value measurements of these investments have been classified as Level 1 in the tables below. Investments for which we elected net asset value as a practical expedient for fair value and investments measured using the fair value measurement alternative are excluded from the tables below. Fair value for deferred compensation liabilities that are credited with deemed gains or losses of the underlying hypothetical investments, primarily equity securities, have been classified as Level 1 in the tables below.

The following tables present assets and liabilities measured at fair value on a recurring basis (in millions):

	September 30, 2019	Fair Value Measurements at Reporting Date Using		
		Quoted prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Money market funds (1)	\$ 732.9	\$ 732.9	\$ —	\$ —
Marketable equity securities (2)	35.2	35.2	—	—
Seed capital investments (2)	0.1	0.1	—	—
Deferred compensation liabilities (3)	(22.6)	(22.6)	—	—
Total	\$ 745.6	\$ 745.6	\$ —	\$ —

(1) Included in Cash and cash equivalents and Funds receivable and funds held on behalf of clients on the Condensed Consolidated Balance Sheet.

(2) Included in Investments on the Condensed Consolidated Balance Sheet.

(3) Included in Other long-term liabilities on the Condensed Consolidated Balance Sheet.

	December 31, 2018	Fair Value Measurements at Reporting Date Using		
		Quoted prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Money market funds (1)	\$ 558.0	\$ 558.0	\$ —	\$ —
Marketable equity securities (2)	32.6	32.6	—	—
Seed capital investments (2)	10.3	10.3	—	—
Deferred compensation liabilities (3)	(23.3)	(23.3)	—	—
Derivative instruments (4)	(0.3)	—	(0.3)	—
Total	\$ 577.3	\$ 577.6	\$ (0.3)	\$ —

(1) Included in Cash and cash equivalents and Funds receivable and funds held on behalf of clients on the Condensed Consolidated Balance Sheet.

(2) Included in Investments on the Condensed Consolidated Balance Sheet.

(3) Included in Other long-term liabilities on the Condensed Consolidated Balance Sheet.

(4) Included in Other accrued expenses on the Condensed Consolidated Balance Sheet.

During the nine months ended September 30, 2019, the fair value of our non-marketable equity securities was adjusted upward by \$0.5 million.

We have partnership interests in various private equity funds that are not included in the tables above. Our investments in private equity funds were \$95.0 million at September 30, 2019, of which \$90.3 million were measured using net asset value as a practical expedient for fair value and \$4.7 million were accounted for under the equity method of accounting. The investments in private equity funds represent underlying investments in domestic and international markets across various industry sectors. One of our investments in private equity funds as of September 30, 2019, represented 80% of the value of the private equity fund investment portfolio. We have no management rights associated with our partnership interests in this fund and withdrawals from this fund are subject to general partner consent. This fund has a termination date in 2020 with an optional one-year extension at the discretion of the general partner. We expect to receive distributions from this fund upon liquidation of the underlying investments over the next several years, however the exact timing of the distributions is unknown. We have no unfunded commitments related to this fund.

Future capital commitments related to our other private equity fund investments were approximately \$1.7 million as of September 30, 2019.

Generally, our investments in private equity funds are non-transferable or are subject to long holding periods, and withdrawals from the private equity firm partnerships are typically not permitted. Even when transfer restrictions do not apply, there is generally no public market for the securities. Therefore, we may not be able to sell the securities at a time when we desire to do so. We may not always be able to sell those investments at the same or higher prices than we paid for them. As of September 30, 2019, we did not have plans to sell any of these investments. The maximum risk of loss related to our private equity fund investments is limited to the carrying value of its investments in the entities plus any future capital commitments, which include future commitments that we believe are unlikely to be called by the general partner.

Note 5—Unconsolidated affiliates

Investments in unconsolidated affiliates are as follows (in millions):

	Ownership Percentage	Carrying Value September 30, 2019	Excess carrying value of investment over proportionate share of net assets September 30, 2019
International Financial Data Services L.P.	50%	\$ 94.8	\$ 45.8
Pershing Road Development Company, LLC	50%	75.9	75.8
Broadway Square Partners, LLP	50%	50.4	32.8
Other unconsolidated affiliates		11.1	—
Total		\$ 232.2	\$ 154.4

Investments in unconsolidated affiliates are accounted for under the equity method of accounting. We record our proportionate share of the results of the unconsolidated affiliates and amortization expense related to basis differences in Equity in earnings of unconsolidated affiliates, net on the Condensed Consolidated Statement of Comprehensive Income (Loss). One of the unconsolidated affiliates is a party to an interest rate swap agreement. We record our proportionate share of the change in value of the interest rate swap agreement in accumulated other comprehensive income (loss). Amounts reclassified from accumulated other comprehensive income (loss) to net income are recorded in equity in earnings of unconsolidated affiliates, net on the Condensed Consolidated Statement of Comprehensive Income (Loss).

Equity in earnings of unconsolidated affiliates are as follows (in millions):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
International Financial Data Services L.P.	\$ 0.3	\$ 0.8	\$ 2.0	\$ 2.0
Pershing Road Development Company, LLC	0.7	0.5	1.3	(0.1)
Broadway Square Partners, LLP	0.4	0.2	0.9	0.2
Other unconsolidated affiliates	(1.5)	0.2	(2.1)	0.7
Total	\$ (0.1)	\$ 1.7	\$ 2.1	\$ 2.8

Note 6—Acquisitions

The following unaudited pro forma information is provided for illustrative purposes only and assumes that the acquisitions of DST Systems, Inc. (“DST”), CACEIS North America, Eze Software Group, LLC and Intralinks Holdings, Inc. occurred on January 1, 2017, after giving effect to certain adjustments, including amortization of intangibles, interest, transaction costs and tax effects. This unaudited pro forma information (in millions, except per share data) should not be relied upon as being indicative of the historical results that would have been obtained if the acquisitions had actually occurred on that date, nor of the results that may be obtained in the future.

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Revenues	\$ 1,146.8	\$ 1,148.9	\$ 3,444.6	\$ 3,458.8
Net income	\$ 96.8	\$ 16.0	\$ 308.1	\$ 53.7

Note 7—Goodwill

The change in carrying value of goodwill as of and for the nine months ended September 30, 2019 is as follows (in millions):

Balance at December 31, 2018	\$ 7,858.0
Adjustments to prior acquisitions	(26.1)
Effect of foreign currency translation	(6.2)
Balance at September 30, 2019	<u>\$ 7,825.7</u>

Note 8—Debt

At September 30, 2019 and December 31, 2018, debt consisted of the following (in millions):

	September 30, 2019	December 31, 2018
Senior secured credit facilities, weighted-average interest rate of 4.29% and 4.77%, respectively	\$ 5,692.0	\$ 8,319.1
5.5% senior notes due 2027	2,000.0	—
Other indebtedness	25.4	28.2
Unamortized original issue discount and debt issuance costs	(85.0)	(91.3)
	<u>7,632.4</u>	<u>8,256.0</u>
Less current portion of long-term debt	61.1	87.5
Long-term debt	<u>\$ 7,571.3</u>	<u>\$ 8,168.5</u>

Senior Notes

On March 28, 2019, SS&C issued \$2.0 billion aggregate principal amount of 5.5% Senior Notes due 2027 (“Senior Notes”), the proceeds of which were used to repay a portion of the outstanding Term B-3 Loan under our existing senior secured credit facilities. The Senior Notes are guaranteed, jointly and severally, by SS&C Holdings and all of its existing and future domestic restricted subsidiaries that guarantee our existing senior secured credit facilities or certain other indebtedness. The Senior Notes are unsecured senior obligations that are equal in right of payment to all of our existing and future senior unsecured indebtedness. Interest on the Senior Notes is payable on March 30 and September 30 of each year.

At any time prior to March 30, 2022, we may, at our option, redeem the Senior Notes, in whole or in part, at a price equal to 100% of the principal amount of the Senior Notes, plus an applicable “make-whole” premium, plus accrued and unpaid interest to the redemption date. At any time on or after March 30, 2022, we may redeem some or all of the Senior Notes, in whole or in part, at the redemption prices set forth in the indenture governing the Senior Notes plus accrued and unpaid interest to the redemption date. In addition, at any time on or before March 30, 2022, we may redeem up to 40% of the aggregate principal amount of the Senior Notes at a redemption price equal to 105.5% of the principal amount thereof, plus accrued and unpaid interest to the redemption date, with the net proceeds of one or more equity offerings.

The indenture governing the Senior Notes contains a number of covenants that restrict, subject to certain thresholds and exceptions, our ability and the ability of our domestic restricted subsidiaries to incur debt or liens, make certain investments, pay dividends, dispose of certain assets, or enter into transactions with its affiliates. Any event of default under the Credit Agreement that leads to an acceleration of those amounts due also results in a default under the indenture governing the Senior Notes.

Debt issuance costs and loss on extinguishment of debt

We evaluated the issuance of our Senior Notes and repayment of a portion of our Term B-3 Loan, in accordance with FASB Accounting Standards Codification 470-50, *Debt-Modifications and Extinguishments*, for modification and extinguishment accounting. We accounted for the refinancing as a debt modification with respect to amounts that remained obligations of the same lender with minor changes in cash flows and as a debt extinguishment with respect to amounts that were obligations of lenders which remained but experienced a change in cash flows of greater than 10%. As a result, we capitalized an aggregate of \$6.1 million in financing costs during the nine months ended September 30, 2019. Other costs incurred by us in connection with the Senior Notes, of \$7.1 million, which did not meet the criteria for capitalization, are included in Loss on extinguishment of debt in the Condensed Consolidated Statement of Comprehensive Income (Loss) during the nine months ended September 30, 2019.

Fair value of debt. The carrying amounts and fair values of financial instruments are as follows (in millions):

	September 30, 2019		December 31, 2018	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Financial liabilities:				
Senior secured credit facilities	\$ 5,692.0	\$ 5,708.2	\$ 8,319.1	\$ 7,847.4
5.5% senior notes due 2027	2,000.0	2,090.1	—	—
Other indebtedness	25.4	25.7	28.2	28.3

The above fair values, which are Level 2 liabilities, were computed based on comparable quoted market prices. The fair values of cash, accounts receivable, net, short-term borrowings, and accounts payable approximate the carrying amounts due to the short-term maturities of these instruments.

Note 9—Stockholders' equity

Changes in stockholders' equity for the three and nine months ended September 30, 2019 were as follows (in millions, except per share data):

	Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive (Loss) Income	Treasury Stock	Total Stockholders' Equity
	Number of Issued Shares	Amount					
Balance, at December 31, 2018	252.4	\$ 2.5	\$ 4,091.4	\$ 847.1	\$ (343.0)	\$ (18.0)	\$ 4,580.0
Net income	—	—	—	80.8	—	—	80.8
Foreign exchange translation adjustment	—	—	—	—	41.8	—	41.8
Stock-based compensation expense	—	—	20.4	—	—	—	20.4
Exercise of options, net of withholding taxes	2.0	—	35.6	—	—	—	35.6
Cash dividends declared - \$0.10 per share	—	—	—	(25.2)	—	—	(25.2)
Other	—	—	—	0.1	—	—	0.1
Balance, at March 31, 2019	254.4	\$ 2.5	\$ 4,147.4	\$ 902.8	\$ (301.2)	\$ (18.0)	\$ 4,733.5
Net income	—	—	—	121.1	—	—	121.1
Foreign exchange translation adjustment	—	—	—	—	(11.0)	—	(11.0)
Net change in interest rate swaps	—	—	—	—	(2.8)	—	(2.8)
Stock-based compensation expense	—	—	18.2	—	—	—	18.2
Exercise of options, net of withholding taxes	0.9	—	12.0	—	—	—	12.0
Cash dividends declared - \$0.10 per share	—	—	—	(25.4)	—	—	(25.4)
Other	—	—	—	(0.1)	—	—	(0.1)
Balance, at June 30, 2019	255.3	\$ 2.5	\$ 4,177.6	\$ 998.4	\$ (315.0)	\$ (18.0)	\$ 4,845.5
Net income	—	—	—	95.0	—	—	95.0
Foreign exchange translation adjustment	—	—	—	—	(62.6)	—	(62.6)
Net change in interest rate swaps	—	—	—	—	(0.5)	—	(0.5)
Stock-based compensation expense	—	—	17.1	—	—	—	17.1
Exercise of options, net of withholding taxes	0.3	0.1	7.6	—	—	—	7.7
Cash dividends declared - \$0.10 per share	—	—	—	(25.4)	—	—	(25.4)
Purchases of common stock	—	—	—	—	—	(60.3)	(60.3)
Other	—	—	0.1	—	—	—	0.1
Balance, at September 30, 2019	255.6	\$ 2.6	\$ 4,202.4	\$ 1,068.0	\$ (378.1)	\$ (78.3)	\$ 4,816.6

Changes in stockholders' equity for the three and nine months ended September 30, 2018 were as follows (in millions, except per share data):

	Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive (Loss) Income	Treasury Stock	Total Stockholders' Equity
	Number of Issued Shares	Amount					
Balance, at December 31, 2017	208.1	\$ 2.1	\$ 2,018.1	\$ 766.9	\$ (82.7)	\$ (18.0)	\$ 2,686.4
Net income	—	—	—	51.3	—	—	51.3
Foreign exchange translation adjustment	—	—	—	—	5.3	—	5.3
Stock-based compensation expense	—	—	12.7	—	—	—	12.7
Exercise of options, net of withholding taxes	1.3	—	27.0	—	—	—	27.0
Cumulative effect of accounting change	—	—	—	47.9	—	—	47.9
Cash dividends declared - \$0.07 per share	—	—	—	(14.5)	—	—	(14.5)
Other	—	—	—	(0.1)	—	—	(0.1)
Balance, at March 31, 2018	209.4	\$ 2.1	\$ 2,057.8	\$ 851.5	\$ (77.4)	\$ (18.0)	\$ 2,816.0
Net loss	—	—	—	(63.7)	—	—	(63.7)
Foreign exchange translation adjustment	—	—	—	—	(35.7)	—	(35.7)
Stock-based compensation expense	—	—	39.1	—	—	—	39.1
Exercise of options, net of withholding taxes	1.5	—	17.7	—	—	—	17.7
Non-cash purchase price consideration	—	—	48.1	—	—	—	48.1
Issuance of common stock	30.3	0.3	1,398.8	—	—	—	1,399.1
Cash dividends declared - \$0.07 per share	—	—	—	(16.9)	—	—	(16.9)
Balance, at June 30, 2018	241.2	\$ 2.4	\$ 3,561.5	\$ 770.9	\$ (113.1)	\$ (18.0)	\$ 4,203.7
Net income	—	—	—	57.0	—	—	57.0
Foreign exchange translation adjustment	—	—	—	—	(54.2)	—	(54.2)
Stock-based compensation expense	—	—	18.4	—	—	—	18.4
Exercise of options, net of withholding taxes	0.8	—	17.4	—	—	—	17.4
Cash dividends declared - \$0.08 per share	—	—	—	(19.3)	—	—	(19.3)
Other	—	—	0.1	(0.1)	—	—	—
Balance, at September 30, 2018	242.0	\$ 2.4	\$ 3,597.4	\$ 808.5	\$ (167.3)	\$ (18.0)	\$ 4,223.0

Stock repurchase program. In August 2019, our Board of Directors authorized the repurchase of up to \$500 million of our common stock on the open market or in privately negotiated transactions. During the three months ended September 30, 2019, we repurchased 1.3 million shares of common stock for approximately \$60.3 million. We use the cost method to account for treasury stock purchases. Under the cost method, the price paid for the stock is charged to the treasury stock account.

Dividends. In 2019, we paid a quarterly cash dividend of \$0.10 per share of common stock totaling \$76.0 million in the aggregate. In 2018, we paid a quarterly cash dividend of \$0.07 per share of common stock in March and June of 2018 and \$0.08 per share of common stock in September of 2018 totaling \$50.7 million in the aggregate.

Accumulated other comprehensive (loss) income. Accumulated other comprehensive (loss) income balances, net of tax consist of the following (in millions):

	Interest Rate Swap	Foreign Currency Translation	Accumulated Other Comprehensive (Loss) Income
Balance, December 31, 2018	\$ —	\$ (343.0)	\$ (343.0)
Net current period other comprehensive (loss) income	(3.3)	(31.8)	(35.1)
Balance, September 30, 2019	\$ (3.3)	\$ (374.8)	\$ (378.1)

Adjustments to accumulated other comprehensive (loss) income are as follows (in millions):

	Three Months Ended September 30,				Nine Months Ended September 30,			
	2019		2018		2019		2018	
	Pretax	Tax Effect	Pretax	Tax Effect	Pretax	Tax Effect	Pretax	Tax Effect
Interest Rate Swap								
Unrealized losses on interest rate swaps	\$ (1.3)	\$ 0.2	\$ —	\$ —	\$ (5.6)	\$ 1.2	\$ —	\$ —
Reclassification of losses into net earnings on interest rate swaps	0.6	—	—	—	1.1	—	—	—
Net change in cash flow hedges	(0.7)	0.2	—	—	(4.5)	1.2	—	—
Foreign Currency Translation								
Current period translation adjustments	(62.7)	0.1	(54.1)	(0.1)	(31.6)	(0.2)	(84.8)	0.2
Net cumulative translation adjustments	(62.7)	0.1	(54.1)	(0.1)	(31.6)	(0.2)	(84.8)	0.2
Total other comprehensive (loss) income	\$ (63.4)	\$ 0.3	\$ (54.1)	\$ (0.1)	\$ (36.1)	\$ 1.0	\$ (84.8)	\$ 0.2

Note 10—Revenues

We generate revenues primarily through our software-enabled services. Our software-enabled services are generally provided under contracts with initial terms of one to five years that require monthly or quarterly payments and are subject to automatic annual renewal at the end of the initial term unless terminated by either party. We also generate revenues by licensing our software to clients through either perpetual or term licenses and by selling maintenance services. We classify license revenues related to sales-based royalty arrangements as term license revenue. Maintenance services are generally provided under annually renewable contracts. Our pricing typically scales as a function of our clients' assets under management, the complexity of asset classes managed, the volume of transactions, and the level of service the client requires. Revenues from professional services consist mostly of services provided on a time and materials basis.

Deferred revenues primarily represent unrecognized fees billed or collected for maintenance and professional services. Deferred revenues are recognized as (or when) we perform under the contract. Deferred revenues are recorded on a net basis with contract assets at the contract level. Accordingly, as of September 30, 2019 and December 31, 2018, approximately \$42.2 million and \$32.4 million, respectively, of deferred revenue is presented net within contract assets arising from the same contracts. The amount of revenues recognized in the period that was included in the opening deferred revenues balance was \$38.0 million and \$184.4 million for the three and nine months ended September 30, 2019, respectively. The amount of revenues recognized in the period that was included in the opening deferred revenues balance was \$33.1 million and \$164.1 million for the three and nine months ended September 30, 2018, respectively.

As of September 30, 2019, revenue of approximately \$601.7 million is expected to be recognized from remaining performance obligations for license, maintenance and related revenues, of which \$288.4 million is expected to be recognized over the next twelve months.

We record revenue net of any taxes assessed by governmental authorities.

Revenue Disaggregation

The following table disaggregates our revenues by geography (in millions):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
United States	\$ 843.1	\$ 718.7	\$ 2,513.3	\$ 1,667.4
United Kingdom	160.3	161.8	491.5	338.5
Europe (excluding United Kingdom), Middle East and Africa	51.5	33.7	149.0	96.5
Asia-Pacific and Japan	45.8	38.1	145.8	102.5
Canada	26.9	28.7	81.5	69.8
Americas, excluding United States and Canada	16.6	11.4	48.3	35.4
Total	\$ 1,144.2	\$ 992.4	\$ 3,429.4	\$ 2,310.1

The following table disaggregates our revenues by source (in millions):

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
Software-enabled services	\$ 960.0	\$ 827.3	\$ 2,894.7	\$ 1,863.7
Maintenance and term licenses	157.9	131.7	443.9	362.6
Professional services	22.0	23.3	63.0	60.9
Perpetual licenses	4.3	10.1	27.8	22.9
Total	<u>\$ 1,144.2</u>	<u>\$ 992.4</u>	<u>\$ 3,429.4</u>	<u>\$ 2,310.1</u>

Note 11—Stock Based Compensation

Total stock options, SARs, RSUs and RSAs. The amount of stock-based compensation expense recognized in our Condensed Consolidated Statements of Comprehensive Income for the three and nine months ended September 30, 2019 and 2018 was as follows (in millions):

<u>Condensed Consolidated Statements of Comprehensive Income (Loss) Classification</u>	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
Cost of software-enabled services	\$ 6.8	\$ 8.0	\$ 22.4	\$ 29.4
Cost of license, maintenance and other related	1.2	1.1	3.8	3.4
Total cost of revenues	<u>8.0</u>	<u>9.1</u>	<u>26.2</u>	<u>32.8</u>
Selling and marketing	2.7	2.1	8.7	8.9
Research and development	2.2	2.0	7.2	6.7
General and administrative	4.2	5.2	13.6	27.7
Total operating expenses	<u>9.1</u>	<u>9.3</u>	<u>29.5</u>	<u>43.3</u>
Total stock-based compensation expense	<u>\$ 17.1</u>	<u>\$ 18.4</u>	<u>\$ 55.7</u>	<u>\$ 76.1</u>

The following table summarizes stock option and stock appreciation rights (“SARs”) activity as of and for the nine months ended September 30, 2019 (shares in millions):

	<u>Shares</u>
Outstanding at December 31, 2018	39.8
Granted	0.3
Cancelled/forfeited	(1.2)
Exercised	(3.0)
Outstanding at September 30, 2019	<u>35.9</u>

The following table summarizes restricted stock unit (“RSUs”) activity as of and for the nine months ended September 30, 2019 (shares in millions):

	<u>Shares</u>
Outstanding at December 31, 2018	1.4
Cancelled/forfeited	(0.1)
Vested	(0.7)
Outstanding at September 30, 2019	<u>0.6</u>

Note 12—Income Taxes

The effective tax rate was 20.0% and 51.7% for the three months ended September 30, 2019 and 2018, respectively and 19.9% and (174.7)% for the nine months ended September 30, 2019 and 2018, respectively. The change in the effective tax rate for the three and nine months ended September 30, 2019 compared to the respective prior year periods was primarily due to the acquisition of DST during the nine months ended September 30, 2018 and the relative impact of permanent book to tax differences on reduced pre-tax book income in 2018 that occurred as a result.

Note 13—Earnings per Share

Earnings per share (“EPS”) is calculated in accordance with the relevant standards. Basic EPS includes no dilution and is computed by dividing net income available to our common stockholders by the weighted average number of common shares outstanding during the period. Diluted EPS is computed by dividing net income by the weighted average number of common and common equivalent shares outstanding during the period. Common equivalent shares consist of stock options, SARs, RSUs and restricted stock awards (“RSAs”) using the treasury stock method. Common equivalent shares are excluded from the computation of diluted earnings per share if the effect of including such common equivalent shares is anti-dilutive because their total assumed proceeds exceed the average fair value of common stock for the period.

The following table sets forth the computation of basic and diluted EPS (in millions, except per share amounts):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Net income	\$ 95.0	\$ 57.0	\$ 296.9	\$ 44.5
Shares:				
Weighted average common shares outstanding — used in calculation of basic EPS	253.3	239.9	252.7	228.1
Weighted average common stock equivalents — options and restricted shares	9.4	12.7	11.4	11.4
Weighted average common and common equivalent shares outstanding — used in calculation of diluted EPS	262.7	252.6	264.1	239.5
Earnings per share - Basic	\$ 0.38	\$ 0.24	\$ 1.17	\$ 0.20
Earnings per share - Diluted	\$ 0.36	\$ 0.23	\$ 1.12	\$ 0.19

Stock options and SARs representing 9.5 and 11.5 million shares were outstanding for the three and nine months ended September 30, 2019, respectively, but were not included in the computation of diluted EPS because the effect of including them would be anti-dilutive. Stock options and SARs representing 4.4 and 5.2 million shares were outstanding for the three and nine months ended September 30, 2018, respectively, but were not included in the computation of diluted EPS because the effect of including them would be anti-dilutive.

Note 14—Commitments and Contingencies

From time to time, we are subject to legal proceedings and claims. In the opinion of management, we are not involved in any litigation or proceedings that would have a material adverse effect on us or our business.

Legal Proceedings

A putative class action suit was filed against DST, the Compensation Committee of DST’s Board of Directors, the Advisory Committee of DST Systems, Inc. 401(k) Profit Sharing Plan (the “Plan”) and certain of DST’s present and/or former officers and directors, alleging breach of fiduciary duties and other violations of the Employee Retirement Income Security Act (“ERISA”). On September 1, 2017, a complaint was filed purportedly on behalf of the Plan in the United States District Court for the Southern District of New York, captioned Ferguson, et al v. Ruane Cunniff & Goldfarb Inc., et al., naming as defendants DST, the Compensation Committee of DST’s Board of Directors, the Advisory Committee of the Plan and certain of DST’s present and/or former officers and directors (collectively the “DST Defendants”). On September 18, 2019, the United States District Court for the Southern District of New York granted a partial dismissal related to certain claims against the DST Defendants concerning the 401(k) portion of the Plan.

On September 28, 2018, a complaint was filed in the United States District Court for the Southern District of New York captioned Robert Canfield, et al. v. SS&C Technologies Holdings, Inc., et al., on behalf of five individual plaintiffs. On November 5, 2018, a similar complaint was filed in the United States District Court for the Southern District of New York captioned Mark Mendon, et al. v. SS&C Technologies Holdings, Inc., et al., on behalf of two individual plaintiffs. These complaints name as defendants SS&C, DST, the Advisory Committee of the Plan, the Compensation Committee of DST’s Board of Directors, and Ruane, Cunniff & Goldfarb, Inc. The underlying claim in each complaint is the same as in the above-described Ferguson matter, with the exception that these are individual actions and not putative class actions.

DST, the Advisory Committee of the Plan, and the Compensation Committee of DST’s Board of Directors have been named in 406 substantially similar individual demands for arbitration through November 6, 2019, by former and current DST employees

demanding arbitration under the DST Employee Arbitration Program and Agreement. The underlying claim in each is the same as in the above-described Ferguson matter, with the exception that each is an individual claim and not a putative class action. As of November 6, 2019, the parties have jointly submitted 315 of the demands for arbitration to the American Arbitration Association. The remaining demands for arbitration have not yet been submitted.

On October 8, 2019, a substantially similar action to the above-described Ferguson, Canfield, Mendon and arbitration matters captioned *Scalia v. Ruane, Cunniff & Goldfarb Inc.* was filed by the U.S. Department of Labor (“DOL”) in the United States District Court for the Southern District of New York naming as defendants DST, the Advisory Committee of the Plan, the Compensation Committee of DST’s Board of Directors and certain of DST’s former officers and directors (“DST DOL Defendants”), and alleging that the DST DOL Defendants breached fiduciary duties in violation of ERISA in connection with the Plan. The complaint also names as defendants Ruane, Cunniff & Goldfarb, Inc. and its former Chairman and Chief Executive Officer Robert D. Goldfarb. In the complaint, the DOL seeks disgorgement, damages and any other appropriate injunctive or equitable relief.

We continue to vigorously defend these matters. The amount of any potential loss, if any at all, cannot be reasonably estimated at this time.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

This Management’s Discussion and Analysis of Financial Condition and Results of Operations, or MD&A, is intended to provide readers of our Condensed Consolidated Financial Statements with the perspectives of management. It presents, in narrative form, information regarding our financial condition, results of operations, liquidity and certain other factors that may affect our future results. It should be read in conjunction with our 2018 Form 10-K and the Condensed Consolidated Financial Statements included in this Form 10-Q.

Critical Accounting Policies

Certain of our accounting policies require the application of significant judgment by our management, and such judgments are reflected in the amounts reported in our Condensed Consolidated Financial Statements. In applying these policies, our management uses its judgment to determine the appropriate assumptions to be used in the determination of estimates. Those estimates are based on our historical experience, terms of existing contracts, management’s observation of trends in the industry, information provided by our clients and information available from other outside sources, as appropriate. Actual results may differ significantly from the estimates contained in our Condensed Consolidated Financial Statements. There have been no material changes to our critical accounting estimates and assumptions or the judgments affecting the application of those estimates and assumptions since the filing of our 2018 Form 10-K. Our critical accounting policies are described in the 2018 Form 10-K and include:

- Investments
- Long-Lived Assets, Intangible Assets and Goodwill
- Software Capitalization
- Acquisition Accounting
- Revenue Recognition
- Depreciation of Fixed Assets
- Stock-based Compensation
- Income Taxes

Results of Operations

We derive our revenues from two sources: software-enabled services revenues and license, maintenance and related revenues. As a general matter, fluctuations in our software-enabled services revenues are attributable to the number of new software-enabled services clients as well as total assets under management in our clients’ portfolios and the number of outsourced transactions provided to our existing clients. Software-enabled services revenues also fluctuate as a result of reimbursements received for “out-of-pocket” expenses, such as postage and telecommunications charges, which are recorded as revenues on an accrual basis. Because these additional revenues are offset by the reimbursable expenses incurred, there is no impact on gross profit, operating income and net income, however the reimbursements billed and expenses incurred can lead to fluctuations in revenues, cost of revenues and gross margin percentage each period. License, maintenance and related revenues consist primarily of term and perpetual license fees, maintenance fees and professional services. Maintenance revenues vary based on customer retention and on the annual increases in fees, which are generally tied to the consumer price index. License and professional services revenues tend to fluctuate based on the number of new licensing clients, the timing and terms of contract renewals and demand for consulting services.

Revenues

The following table sets forth the percentage of our total revenues represented by each of the following sources of revenues for the periods indicated:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Software-enabled services	83.9%	83.4%	84.4%	80.7%
License, maintenance and related	16.1%	16.6%	15.6%	19.3%
Total revenues	100.0%	100.0%	100.0%	100.0%

The following table sets forth revenues (dollars in millions) and percent change in revenues for the periods indicated:

	Three Months Ended September 30,		Percent Change from Prior Period	Nine Months Ended September 30,		Percent Change from Prior Period
	2019	2018		2019	2018	
Software-enabled services	\$ 960.0	\$ 827.3	16.0%	\$ 2,894.7	\$ 1,863.7	55.3%
License, maintenance and related	184.2	165.1	11.6%	534.7	446.4	19.8%
Total revenues	\$ 1,144.2	\$ 992.4	15.3%	\$ 3,429.4	\$ 2,310.1	48.5%

Three Months Ended September 30, 2019 and 2018. Our revenues increased \$151.8 million, or 15.3%, primarily due to our acquisitions, which included Eze Software Group, LLC (“Eze”) and Intralinks Holdings, Inc. (“Intralinks”) in the fourth quarter of 2018, which, combined, contributed \$147.8 million in revenues. Excluding the impact of acquisitions, revenues increased due to an increase in revenues for institutional and investment management products, advisory and wealth management products and our fund administration services. These increases were partially offset by decreased revenues within the DST business and the unfavorable impact from foreign currency translation, which reduced revenues by \$9.0 million. Software-enabled services revenues increased \$132.7 million, or 16.0%, primarily due to the acquisitions, which added revenues of \$146.9 million, as well as from a continued increase in demand for our fund administration services and services for advisory and wealth managers. These increases were partially offset by a decrease in software-enabled services revenues within the DST business and the unfavorable impact from foreign currency translation of \$7.9 million. License, maintenance and related revenues increased \$19.1 million, or 11.6%, primarily due to increased license revenues for institutional and investment management products, as well as the acquisitions, which added revenues of \$0.9 million. The unfavorable impact from foreign currency translation was \$1.1 million.

Nine Months Ended September 30, 2019 and 2018. Our revenues increased \$1,119.3 million, or 48.5%, primarily due to our acquisitions, which partially included DST and CACEIS in the second quarter of 2018 and Eze and Intralinks in the fourth quarter of 2018, which, combined, contributed \$1,092.8 million to the increase in revenues. Excluding the impact of acquisitions, revenues increased primarily due to an increase in revenues for institutional and investment management products, advisory and wealth management products and our fund administration services, partially offset by decreased revenues within the DST business and the unfavorable impact from foreign currency translation, which reduced revenues by \$20.8 million. Software-enabled services revenues increased \$1,031.0 million, or 55.3%, primarily due to the acquisitions, which contributed \$1,051.7 million to the increase in revenues, as well as from a continued increase in demand for our fund administration services and services for advisory and wealth managers. These increases were partially offset by a decrease in software-enabled services revenues within the DST business and the unfavorable impact from foreign currency translation of \$16.5 million. License, maintenance and related revenues increased \$88.3 million, or 19.8%, primarily due to increased license revenues for institutional and investment management products and advisory and wealth management products, as well as the acquisitions, which contributed \$41.1 million to the increase in revenues. The unfavorable impact from foreign currency translation was \$4.3 million.

Cost of Revenues

Cost of software-enabled services revenues consists primarily of costs related to personnel utilized in providing our software-enabled services and amortization of intangible assets. Cost of license, maintenance and other related revenues consists primarily of the costs related to personnel utilized in servicing our maintenance contracts and to provide implementation, conversion and training services to our software licensees, as well as system integration and custom programming consulting services and amortization of intangible assets.

The following tables set forth each of the following cost of revenues as a percentage of their respective revenue source for the periods indicated:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Cost of software-enabled services	59.2%	60.8%	59.7%	64.0%
Cost of license, maintenance and related	40.6%	46.9%	42.2%	49.3%
Total cost of revenues	56.2%	58.5%	57.0%	61.2%
Gross margin percentage	43.8%	41.5%	43.0%	38.8%

The following table sets forth cost of revenues (dollars in millions) and percent change in cost of revenues for the periods indicated:

	Three Months Ended September 30,		Percent Change from Prior Period	Nine Months Ended September 30,		Percent Change from Prior Period
	2019	2018		2019	2018	
Cost of software-enabled services	\$ 567.9	\$ 502.7	13.0%	\$ 1,727.9	\$ 1,193.1	44.8%
Cost of license, maintenance and related	74.8	77.4	(3.4)%	225.8	220.0	2.6%
Total cost of revenues	\$ 642.7	\$ 580.1	10.8%	\$ 1,953.7	\$ 1,413.1	38.3%

Three Months Ended September 30, 2019 and 2018. Our total cost of revenues increased \$62.6 million, or 10.8%, primarily due to our acquisitions of Eze and Intralinks, which added \$63.5 million in costs, partially offset by a decrease in cost of revenues within the DST business, a result of the elimination of redundant positions and other cost saving measures enacted during 2018 and 2019. The favorable impact from foreign currency translation reduced costs by \$5.8 million. Total costs of revenues excluding the impact of acquisitions and the decreases in costs within the DST business increased due to higher personnel-related costs to support revenue growth, partially offset by lower amortization of intangible assets. Cost of software-enabled services revenues increased \$65.2 million, or 13.0%, primarily due to our acquisitions, which added \$63.4 million in costs, partially offset by a decrease in costs of software-enabled services revenues within the DST business. The favorable impact from foreign currency translation reduced costs by \$5.1 million. Cost of license, maintenance and related revenues decreased \$2.6 million, or 3.4%, primarily due to a decrease in amortization of intangible assets, partially offset by our acquisitions, which added \$0.1 million in costs. The favorable impact from foreign currency translation reduced costs by \$0.7 million.

Nine Months Ended September 30, 2019 and 2018. Our total cost of revenues increased \$540.6 million, or 38.3%, primarily due to our acquisitions of DST, CACEIS, Eze and Intralinks, which contributed \$614.5 million to the increase in costs, partially offset by a decrease in cost of revenues within the DST business, a result of the elimination of redundant positions and other cost saving measures enacted during 2018 and 2019. The favorable impact from foreign currency translation reduced costs by \$15.7 million. Cost of software-enabled services revenues increased \$534.8 million, or 44.8%, primarily due to our acquisitions, which contributed \$596.9 million to the increase in costs, partially offset by a decrease in costs of software-enabled services revenues within the DST business. The favorable impact from foreign currency translation reduced costs by \$13.4 million. Cost of license, maintenance and related revenues increased \$5.8 million, or 2.6%, primarily due to our acquisitions, which contributed \$17.6 million to the increase in costs, partially offset by a decrease in costs within the DST business and lower amortization of intangible assets. The favorable impact from foreign currency translation reduced costs by \$2.3 million.

Operating Expenses

Selling and marketing expenses consist primarily of the personnel costs associated with the selling and marketing of our products, including salaries, commissions and travel and entertainment. Such expenses also include amortization of intangible assets, the cost of branch sales offices, trade shows and marketing and promotional materials. Research and development expenses consist primarily of personnel costs attributable to the enhancement of existing products and the development of new software products. General and administrative expenses consist primarily of personnel costs related to management, accounting and finance, information management, human resources and administration and associated overhead costs, as well as fees for professional services. Transaction expenses consist of certain costs associated with our acquisition of DST, including costs to enter into our Credit Agreement, investment banker advisory fees, legal and other professional fees.

The following table sets forth the percentage of our total revenues represented by each of the following operating expenses for the periods indicated:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2019	2018	2019	2018
Selling and marketing	7.7%	5.1%	7.6%	5.8%
Research and development	8.3%	8.6%	8.3%	9.3%
General and administrative	7.9%	9.4%	8.1%	10.1%
Transaction expenses	—	0.2%	—	4.2%
Total operating expenses	23.9%	23.3%	24.0%	29.4%

The following table sets forth operating expenses (dollars in millions) and percent change in operating expenses for the periods indicated:

	Three Months Ended September 30,		Percent Change from Prior Period	Nine Months Ended September 30,		Percent Change from Prior Period
	2019	2018		2019	2018	
Selling and marketing	\$ 88.0	\$ 50.9	72.9%	\$ 261.3	\$ 136.3	91.7%
Research and development	94.9	85.7	10.7%	283.3	214.2	32.3%
General and administrative	91.0	93.2	(2.4)%	278.0	233.4	19.1%
Transaction expenses	—	1.9	—	—	96.4	—
Total operating expenses	\$ 273.9	\$ 231.7	18.2%	\$ 822.6	\$ 680.3	20.9%

Three Months Ended September 30, 2019 and 2018. Operating expenses increased \$42.2 million, or 18.2%, primarily due to our acquisitions of Eze and Intralinks, which added \$69.4 million in expenses, partially offset by a decrease in costs with the DST business, a result of the elimination of redundant positions and other cost saving measures enacted during 2018 and 2019. The impact from foreign currency translation reduced costs by \$2.9 million. Total operating expenses excluding the impact of acquisitions and the decreases in expenses within the DST business decreased due to decreased stock-based compensation expense and legal expenses, partially offset by increases in personnel-related expenses and marketing expenses, primarily associated with our annual user conference.

Nine Months Ended September 30, 2019 and 2018. Operating expenses increased \$142.3 million, or 20.9%, primarily due to our acquisitions of DST, CACEIS, Eze and Intralinks, which contributed \$325.8 million to the increase in expenses, partially offset by the absence of transaction expenses in 2019 and a decrease in expenses within the DST business, a result of the elimination of redundant positions and other cost saving measures enacted during 2018 and 2019. Total operating expenses excluding the impact of acquisitions and the decreases in expenses with the DST business increased due to increased personnel-related and legal expenses, partially offset by a decrease in stock-based compensation expense. The favorable impact from foreign currency translation reduced costs by \$7.5 million.

Comparison of the Three and Nine Months Ended September 30, 2019 and 2018 for Interest, Taxes and Other

Interest expense, net. We had net interest expense of \$98.5 million and \$304.4 million for the three and nine months ended September 30, 2019, respectively, compared to \$78.1 million and \$173.7 million for the three and nine months ended September 30, 2018, respectively. The increase in interest expense, net for 2019 as compared to 2018 relates primarily to increased borrowings in connection with our acquisitions of DST, Eze and Intralinks and, to a lesser extent, higher average interest rates. These facilities are discussed further in “Liquidity and Capital Resources”.

Other (expense) income, net. We had other expense, net of \$10.3 million and other income, net of \$27.1 million for the three and nine months ended September 30, 2019, respectively. During the three months ended September 30, 2019, other expense, net included investment losses and dividend income of \$10.1 million. The remaining portion of other expense, net consisted primarily of foreign currency transaction losses. During the nine months ended September 30, 2019, other income, net included investment gains and dividend income of \$27.8 million. The remaining portion of other income, net consisted primarily of foreign currency transaction losses. We had other income, net of \$13.7 million and \$14.8 million for the three and nine months ended September 30, 2018, respectively. During the three and nine months ended September 30, 2018, other income, net included investment gains and dividend income of \$12.1 million and \$13.4 million, respectively. The remaining portion of other income, net consists primarily of foreign currency transaction gains and losses.

Equity in earnings of unconsolidated affiliates, net. We had equity in earnings of unconsolidated affiliates, net of \$(0.1) million and \$2.1 million for the three and nine months ended September 30, 2019, respectively, compared to \$1.7 million and \$2.8 million for the three and nine months ended September 30, 2018, respectively. This is primarily related to our joint venture International Financial Data Services L.P. (“IFDS L.P.”) and represents our proportionate share of IFDS L.P.’s net income or loss, offset by the amortization of basis differences.

Loss on extinguishment of debt. We recorded a \$7.1 million loss on extinguishment of debt in the nine months ended September 30, 2019 in connection with the repayment of a portion of our Term Loans with the proceeds from the issuance of our Senior Notes. The loss on extinguishment of debt includes costs incurred by us which did not meet the criteria for capitalization. The Senior Notes are discussed further in “Liquidity and Capital Resources.” We recorded a \$44.4 million loss on extinguishment of debt in the nine months ended September 30, 2018 in connection with the amendment and restatement of our credit agreement. The loss on extinguishment of debt includes the write-off of a portion of the unamortized capitalized financing fees and unamortized original issue discount related to the Prior Credit Agreement and Prior Senior Notes for amounts accounted for as a debt extinguishment and a make-whole premium paid in connection with the redemption of the Prior Senior Notes.

Provision (benefit) for income taxes. The following table sets forth the provision for income taxes (dollars in millions) and effective tax rates for the periods indicated:

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
Provision (benefit) for income taxes	\$ 23.7	\$ 60.9	\$ 73.9	\$ (28.3)
Effective tax rate	20.0%	51.7%	19.9%	(174.7)%

Our effective tax rates for the three and nine months ended September 30, 2019 differ from the statutory rate of 21.0% primarily due to the composition of income before income taxes from foreign and domestic tax jurisdictions, foreign income that is being taxed in the U.S. offset by foreign tax credits that are being limited, and the recognition of windfall tax benefits from stock awards. The change in the effective tax rate for the nine months ended September 30, 2019 compared to the prior year was primarily due to our acquisition of DST in April 2018 and the relative impact of permanent book to tax differences on reduced pre-tax book income in 2018 that occurred as a result. While we have income from multiple foreign sources, the majority of our non-U.S. operations are in the U.K. and India, where we anticipate the statutory tax rates to be 19.0% and 29.1%, respectively, in 2019. A future change in the composition of income before income taxes from foreign and domestic tax jurisdictions could impact our periodic effective tax rate.

Liquidity and Capital Resources

Our principal cash requirements are to finance the costs of our operations pending the billing and collection of client receivables, to fund payments with respect to our indebtedness, to invest in research and development, to acquire complementary businesses or assets and to pay dividends on our common stock. We expect our cash on hand, cash flows from operations, and cash available under our Credit Agreement to provide sufficient liquidity to fund our current obligations, projected working capital requirements and capital spending for at least the next twelve months.

During the nine months ended September 30, 2019, we paid quarterly cash dividends of \$0.10 per share of common stock for each quarter totaling \$76.0 million in the aggregate. During the nine months ended September 30, 2018, we paid quarterly cash dividends of \$0.07 per share of common stock in March and June of 2018 and \$0.08 per share of common stock in September of 2018 totaling \$50.7 million in the aggregate.

Our cash, cash equivalents and restricted cash and cash equivalents, including amounts held on behalf of clients, were \$1,110.9 million at September 30, 2019, a decrease of \$2.4 million from \$1,113.3 million at December 31, 2018.

Client funds obligations include our transfer agency client balances invested overnight as well as our contractual obligations to remit funds to satisfy client pharmacy claim obligations and are recorded on the Condensed Consolidated Balance Sheet when incurred, generally after a claim has been processed by us. Our contractual obligations to remit funds to satisfy client obligations are primarily sourced by funds held on behalf of clients. We had \$1,045.7 million of client funds obligations at September 30, 2019.

Cash flows from operating, investing and financing activities, as reflected in our Condensed Consolidated Statements of Cash Flows, are summarized in the following table (in millions):

Net cash, cash equivalents and restricted cash provided by (used in):	Nine Months Ended September 30,		Change from Prior Year
	2019	2018	
Operating activities	\$ 755.0	\$ 322.4	\$ 432.6
Investing activities	(40.3)	(4,669.1)	4,628.8
Financing activities	(715.3)	5,552.5	(6,267.8)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(1.8)	2.5	(4.3)
Net (decrease) increase in cash, cash equivalents and restricted cash	\$ (2.4)	\$ 1,208.3	\$ (1,210.7)

Net cash provided by operating activities was \$755.0 million for the nine months ended September 30, 2019. Cash provided by operating activities primarily resulted from net income of \$296.9 million adjusted for non-cash items of \$556.5 million, partially offset by changes in our working capital accounts (excluding the effect of acquisitions) totaling \$98.4 million. The changes in our working capital accounts were driven by a decrease in accrued expenses, an increase in contract assets and changes in income taxes prepaid and payable, partially offset by decreases in prepaid expenses and other assets, increase in deferred revenues, a decrease in accounts receivable and an increase in accounts payable. The decrease in accrued expenses was primarily due to the payment of annual employee bonuses in the first quarter of 2019. The increase in contract assets was primarily due to new term license deals. The decrease in accounts receivable was primarily due to a decrease in days' sales outstanding. The decrease in prepaid expenses and other assets and the increase in accounts payable were primarily due to the timing of payments. The increase in deferred revenues is related to a multi-year \$250.0 million license agreement signed in the third quarter of 2019 with an up-front payment of \$48.0 million, which we received in the three months ended September 30, 2019 and an additional \$202.0 million due in the three months ending December 31, 2019. We recognized \$15.0 million related to this agreement in the three months ended September 30, 2019. The license revenue is expected to be recognized over approximately four years.

Investing activities used net cash of \$40.3 million for the nine months ended September 30, 2019, primarily related to \$51.1 million in capitalized software development costs and \$48.0 million in capital expenditures, partially offset by proceeds from sales and maturities of investments of \$46.1 million, the collection of other non-current receivables of \$7.7 million, cash received of \$3.2 million related to purchase price adjustments for prior acquisitions and \$2.1 million in proceeds from unconsolidated affiliates.

Financing activities used net cash of \$715.3 million for the nine months ended September 30, 2019, representing net repayments of debt totaling \$629.1 million, \$76.0 million in quarterly dividends paid, \$60.3 million in treasury stock repurchases, \$19.2 million in withholding taxes paid related to equity award net share settlements and the payment of \$6.0 million in fees related to debt extinguishment and refinancing activities. These payments were partially offset by proceeds of \$74.5 million from stock option exercises and a net increase in client funds obligations of \$0.8 million.

Our cash, cash equivalents and restricted cash and cash equivalents, including amounts held on behalf of clients, were \$1,273.0 million at September 30, 2018, an increase of \$1,208.3 million from \$64.7 million at December 31, 2017. The increase in cash, cash equivalents and restricted cash and cash equivalents is primarily due to proceeds received from our borrowings and common stock offering, the impact of restricted cash and cash equivalents held by DST as well as cash provided by operations and proceeds from stock option exercises. These increases were partially offset by cash used for acquisitions, repayments of debt, payment of dividends and capital expenditures.

Net cash provided by operating activities was \$322.4 million for the nine months ended September 30, 2018. Cash provided by operating activities primarily resulted from net income of \$44.5 million adjusted for non-cash items of \$355.7 million, partially offset by changes in our working capital accounts (excluding the effect of acquisitions) totaling \$77.8 million. The changes in our working capital accounts were driven by decreases in accounts payable and accrued expenses and changes in income taxes prepaid and payable, partially offset by decreases in accounts receivable and prepaid expenses and other assets. Cash provided by operating activities was negatively affected by \$210.0 million of costs related to the DST acquisition, including transaction, severance and other such items. The decrease in accounts payable was primarily due to the timing of payments. The decrease in accrued expenses was primarily due to the payment of annual employee bonuses in the first quarter of 2018. The decrease in accounts receivable was primarily due to an overall decrease in days' sales outstanding, excluding the effect of acquisitions, as well as an improvement in the average days' sales outstanding associated with businesses acquired in 2018 since the date of those acquisitions. The decrease in prepaid expenses and other assets was primarily due to the timing of payments, particularly as a result of the mid-month acquisition of DST.

Investing activities used net cash of \$4,669.1 million for the nine months ended September 30, 2018, primarily related to cash paid for business acquisitions (net of cash acquired) of \$4,633.6 million, \$29.3 million in capitalized software development costs, \$28.5 million in capital expenditures and \$15.4 million in investments in securities, partially offset by proceeds from sales and

maturities of investments of \$28.1 million and proceeds from the sale of property and equipment of \$9.6 million.

Financing activities provided net cash of \$5,552.5 million for the nine months ended September 30, 2018, representing \$6,873.7 million received from debt borrowings, net of original issue discount, net proceeds of \$1,399.0 million from common stock issuance, net increase in client funds obligations of \$193.2 million and proceeds of \$74.8 million from stock option exercises. These proceeds were partially offset by repayments of debt totaling \$2,856.1 million, the payment of \$68.7 million in fees related to debt extinguishment and refinancing activities, \$50.7 million in quarterly dividends paid and \$12.7 million in withholding taxes paid related to equity award net share settlements.

We have made a permanent reinvestment determination in certain non-U.S. operations that have historically generated positive operating cash flows. At September 30, 2019, we held approximately \$93.1 million in cash and cash equivalents at non-U.S. subsidiaries where we had made such a determination and in turn, no provision for foreign withholding, foreign local, or U.S. state income taxes had been made. At September 30, 2019, we held approximately \$71.1 million in cash that was available to our foreign borrowers under our senior secured credit facility and will be used to facilitate debt servicing of those entities.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

Senior Secured Credit Facilities

On April 16, 2018, in connection with our acquisition of DST, we entered into an amended and restated credit agreement with SS&C Technologies, Inc. (“SS&C”), SS&C European Holdings SARL, an indirect wholly-owned subsidiary of SS&C (“SS&C SARL”) and SS&C Technologies Holdings Europe SARL, an indirect wholly-owned subsidiary of SS&C (“SS&C Tech SARL”) as the borrowers (“Credit Agreement”).

The Credit Agreement initially included four tranches of term loans (together the “Initial Term Loans”): (i) a \$518.6 million term B-1 facility which matures on July 8, 2022 for SS&C (“Term B-1 Loan”); (ii) a \$5.9 million term B-2 facility which matures on July 8, 2022 for SS&C SARL (“Term B-2 Loan”); (iii) a new \$5.046 billion term B-3 facility, which matures on April 16, 2025 for SS&C (the “Term B-3 Loan”); and (iv) a new \$1.8 billion term B-4 facility, which matures on April 16, 2025 for SS&C SARL (the “Term B-4 Loan”). In addition, the Credit Agreement has a revolving credit facility with a five-year term available for borrowings by SS&C with \$250 million in available commitments (“Revolving Credit Facility”), of which \$245.4 million was available as of September 30, 2019. The Revolving Credit Facility also contains a \$25 million letter of credit sub-facility, of which \$4.6 million was drawn as of September 30, 2019.

The majority of the initial proceeds from the Initial Term Loans was used to fund our acquisition of DST, repay certain amounts outstanding under our then-existing credit agreement (“Prior Credit Agreement”), repay all of the outstanding principal amount of our 5.875% Senior Notes due 2023 (“Prior Senior Notes”) and repay acquired debt associated with DST.

On October 1, 2018, in connection with our acquisition of Eze, we entered into an amendment (the “Commitment Increase Amendment”) to the Credit Agreement. Pursuant to the Commitment Increase Amendment, a new \$875.0 million senior secured term B-5 facility (“Term B-5 Loan”, and together with the Initial Term Loans, the “Term Loans”) was made available to us, the proceeds of which were used to finance, in part, the Eze acquisition.

On November 16, 2018, in connection with our acquisition of Intralinks, we entered into an amendment (the “Incremental Term Loan Amendment”) to the Credit Agreement. Pursuant to the Incremental Term Loan Amendment, an additional \$1.0 billion under the Term B-5 Loan was made available to us, the proceeds of which were used to finance, in part, the Intralinks acquisition.

The Term Loans and Revolving Credit Facility bear interest, at the election of the borrowers, at the base rate (as defined in the Credit Agreement) or LIBOR, plus the applicable interest rate margin for the credit facility. Amounts drawn on the Revolving Credit Facility initially bear interest at either LIBOR plus 2.25% or at the base rate plus 1.25%, subject to a step-down at any time our consolidated net secured leverage ratio is less than 4.75 times, to 2.0% in the case of the LIBOR margin and 1.0% in the case of the base rate margin. The Term B-1 Loan and Term B-2 Loan bear interest at either LIBOR plus 2.25% or at the base rate plus 1.25%. The Term B-3 Loan, Term B-4 Loan and Term B-5 Loan initially bear interest at either LIBOR plus 2.50% or at the base rate plus 1.50%, and are subject to a step-down at any time our consolidated net secured leverage ratio is less than 4.75 times, to 2.25% in the case of the LIBOR margin and 1.25% in the case of the base rate margin.

As of September 30, 2019, there was \$201.2 million in principal amount outstanding under the Term Loan B-1, \$2,194.9 million in principal amount outstanding under the Term Loan B-3, \$1,449.8 million in principal amount outstanding under the Term Loan B-4 and \$1,846.1 million in principal amount outstanding under the Term B-5 Loan. As of September 30, 2019, there was no amount outstanding under the Term Loan B-2 or the Revolving Credit Facility.

SS&C and SS&C SARL are required to make scheduled quarterly payments of approximately 0.25% of the remaining principal amount of the Term B-1 Loan with the balance due and payable on July 8, 2022. SS&C and SS&C SARL are required to make scheduled quarterly payments of 0.25% of the original principal amount of the Term B-3 Loan, Term B-4 Loan and Term B-5 Loan, with the balance due and payable on April 16, 2025. No amortization is required under the Revolving Credit Facility.

SS&C's and SS&C SARL's obligations under the Term Loans are guaranteed by (i) our existing and future U.S. wholly-owned restricted subsidiaries, in the case of the Term B-1 Loan, Term B-3 Loan, Term B-5 Loan and the Revolving Credit Facility and (ii) our existing and future wholly-owned restricted subsidiaries, in the case of the Term B-4 Loan.

The obligations of the U.S. loan parties under the Credit Agreement are secured by substantially all of the assets of such persons (subject to customary exceptions and limitations), including a pledge of all of the capital stock of substantially all of the U.S. wholly-owned restricted subsidiaries of such persons (with customary exceptions and limitations) and 65% of the capital stock of certain foreign restricted subsidiaries of such persons (with customary exceptions and limitations). All obligations of the non-U.S. loan parties under the Credit Agreement are secured by substantially all of our and the other guarantors' assets (subject to customary exceptions and limitations), including a pledge of all of the capital stock of substantially all of our wholly-owned restricted subsidiaries (with customary exceptions and limitations).

The Credit Agreement includes negative covenants that, among other things and subject to certain thresholds and exceptions, limit our ability and the ability of our restricted subsidiaries to incur debt or liens, make investments (including in the form of loans and acquisitions), merge, liquidate or dissolve, sell property and assets, including capital stock of our subsidiaries, pay dividends on our capital stock or redeem, repurchase or retire our capital stock, alter the business we conduct, amend, prepay, redeem or purchase subordinated debt, or engage in transactions with our affiliates. The Credit Agreement also contains customary representations and warranties, affirmative covenants and events of default, subject to customary thresholds and exceptions. In addition, the Credit Agreement contains a financial covenant for the benefit of the Revolving Credit Facility requiring us to maintain a minimum consolidated net secured leverage ratio. In addition, under the Credit Agreement, certain defaults under agreements governing other material indebtedness could result in an event of default under the Credit Agreement, in which case the lenders could elect to accelerate payments under the Credit Agreement and terminate any commitments they have to provide future borrowings.

Senior Notes

On March 28, 2019, we issued \$2.0 billion aggregate principal amount of 5.5% Senior Notes due 2027 ("Senior Notes"), the proceeds of which were used to repay a portion of the outstanding Term B-3 Loan under our existing senior secured credit facilities. The Senior Notes are guaranteed, jointly and severally, by SS&C Holdings and all of its existing and future domestic restricted subsidiaries that guarantee our existing senior secured credit facilities or certain other indebtedness. The Senior Notes are unsecured senior obligations that are equal in right of payment to all of our existing and future senior unsecured indebtedness. Interest on the Senior Notes is payable on March 30 and September 30 of each year.

At any time prior to March 30, 2022, we may, at our option, redeem the Senior Notes, in whole or in part, at a price equal to 100% of the principal amount of the Senior Notes, plus an applicable "make-whole" premium, plus accrued and unpaid interest to the redemption date. At any time on or after March 30, 2022, we may redeem some or all of the Senior Notes, in whole or in part, at the redemption prices set forth in the indenture governing the Senior Notes plus accrued and unpaid interest to the redemption date. In addition, at any time on or before March 30, 2022, we may to redeem up to 40% of the aggregate principal amount of the Senior Notes at a redemption price equal to 105.5% of the principal amount thereof, plus accrued and unpaid interest to the redemption date, with the net proceeds of one or more equity offerings. We may also, from time to time in our sole discretion, purchase, redeem, or retire our existing senior notes, through tender offers, in privately negotiated or open market transactions, or otherwise.

The indenture governing the Senior Notes contains a number of covenants that restrict, subject to certain thresholds and exceptions, our ability and the ability of our domestic restricted subsidiaries to incur debt or liens, make certain investments, pay dividends, dispose of certain assets, or enter into transactions with its affiliates. Any event of default under the Credit Agreement that leads to an acceleration of those amounts due also results in a default under the indenture governing the Senior Notes.

As of September 30, 2019, there was \$2.0 billion in principal amount of Senior Notes outstanding.

Other Indebtedness

In connection with the acquisition of DST, we assumed a mortgage with a principal amount of £21.0 million, which matures in October 2020 (“U.K. Mortgage”) and a \$4.1 million mortgage on property in the U.S. The outstanding amount under the U.K. Mortgage was \$22.1 million at September 30, 2019 with a fixed interest rate of 3.1%. Principal payments of £1.0 million are payable semi-annually in April and October of each year and accrued interest payable quarterly, with the outstanding balance due at maturity.

Covenant Compliance

Under the Revolving Credit Facility portion of the Credit Agreement, we are required to satisfy and maintain a specified financial ratio at the end of each fiscal quarter if the sum of (i) outstanding amount of all loans under the Revolving Credit Facility and (ii) all non-cash collateralized letters of credit issued under the Revolving Credit Facility in excess of \$20 million is equal to or greater than 30% of the total commitments under the Revolving Credit Facility. Our financial ratio became effective with the period ended September 30, 2018. Our ability to meet this financial ratio can be affected by events beyond our control, and we cannot assure you that we will meet this ratio. Any breach of this covenant could result in an event of default under the Credit Agreement. Upon the occurrence of any event of default under the Credit Agreement, the lenders could elect to declare all amounts outstanding under the Credit Agreement to be immediately due and payable and terminate all commitments to extend further credit. Any default and subsequent acceleration of payments under the Credit Agreement would have a material adverse effect on our results of operations, financial position and cash flows. Additionally, under the Credit Agreement, our ability to engage in activities such as incurring additional indebtedness, making investments and paying dividends is also tied to baskets and ratios based on Consolidated EBITDA.

Consolidated EBITDA is a non-GAAP financial measure used in key financial covenants contained in the Credit Agreement, which is the material facility supporting our capital structure and providing liquidity to our business. Consolidated EBITDA is defined as earnings before interest, taxes, depreciation and amortization (“EBITDA”), further adjusted to exclude unusual items and other adjustments permitted in calculating covenant compliance under the Credit Agreement. We believe that the inclusion of supplementary adjustments to EBITDA applied in presenting Consolidated EBITDA is appropriate to provide additional information to investors to demonstrate compliance with the specified financial ratio and other financial condition tests contained in the Credit Agreement.

Management uses Consolidated EBITDA to gauge the costs of our capital structure on a day-to-day basis when full financial statements are unavailable. Management further believes that providing this information allows our investors greater transparency and a better understanding of our ability to meet our debt service obligations and make capital expenditures.

Consolidated EBITDA does not represent net income or cash flow from operations as those terms are defined by generally accepted accounting principles, or GAAP, and does not necessarily indicate whether cash flows will be sufficient to fund cash needs. Further, the Credit Agreement requires that Consolidated EBITDA be calculated for the most recent four fiscal quarters. As a result, the measure can be disproportionately affected by a particularly strong or weak quarter. Further, it may not be comparable to the measure for any subsequent four-quarter period or any complete fiscal year.

Consolidated EBITDA is not a recognized measurement under GAAP and investors should not consider Consolidated EBITDA as a substitute for measures of our financial performance and liquidity as determined in accordance with GAAP, such as net (loss) income, operating (loss) income or net cash provided by operating activities. Because other companies may calculate Consolidated EBITDA differently than we do, Consolidated EBITDA may not be comparable to similarly titled measures reported by other companies. Consolidated EBITDA has other limitations as an analytical tool, when compared to the use of net income, which is the most directly comparable GAAP financial measure, including:

- Consolidated EBITDA does not reflect the significant interest expense we incur as a result of our debt leverage;
- Consolidated EBITDA does not reflect the provision of income tax expense in our various jurisdictions;
- Consolidated EBITDA does not reflect any attribution of costs to our operations related to our investments and capital expenditures through depreciation and amortization charges;
- Consolidated EBITDA does not reflect the cost of compensation we provide to our employees in the form of stock-based awards;
- Consolidated EBITDA does not reflect the equity in earnings of unconsolidated affiliates; and
- Consolidated EBITDA excludes expenses and income that are permitted to be excluded per the terms of our Credit Agreement, but which others may believe are normal expenses for the operation of a business.

The following is a reconciliation of net income to Consolidated EBITDA as defined in our Credit Agreement.

(in millions)	Three Months Ended September 30,		Nine Months Ended September 30,		Twelve Months Ended September 30,
	2019	2018	2019	2018	2019
Net income	\$ 95.0	\$ 57.0	\$ 296.9	\$ 44.5	\$ 355.6
Interest expense, net	98.5	78.1	304.4	173.7	401.6
Provision (benefit) for income taxes	23.7	60.9	73.9	(28.3)	124.1
Depreciation and amortization	190.1	146.2	582.8	342.9	758.5
EBITDA	407.3	342.2	1,258.0	532.8	1,639.8
Stock-based compensation	17.1	18.4	55.7	76.1	76.4
Acquired EBITDA and cost savings (1)	5.5	9.8	39.8	272.7	85.8
Non-cash portion of straight-line rent expense	(0.1)	(0.1)	0.3	(0.2)	0.4
Loss on extinguishment of debt	—	—	7.1	44.4	6.0
Equity in earnings of unconsolidated affiliates, net	0.1	(1.7)	(2.1)	(2.8)	(1.4)
Purchase accounting adjustments (2)	1.9	3.2	12.4	8.0	22.2
ASC 606 adoption impact	4.1	7.2	12.3	28.8	23.7
Other (3)	15.4	(3.3)	(6.3)	149.3	15.1
Consolidated EBITDA	\$ 451.3	\$ 375.7	\$ 1,377.2	\$ 1,109.1	\$ 1,868.0

- (1) Acquired EBITDA reflects the EBITDA impact of significant businesses that were acquired during the period as if the acquisition occurred at the beginning of the period, as well as cost savings enacted in connection with acquisitions.
- (2) Purchase accounting adjustments include (a) an adjustment to increase revenues by the amount that would have been recognized if deferred revenue were not adjusted to fair value at the date of acquisitions, (b) an adjustment to increase personnel and commissions expense by the amount that would have been recognized if prepaid commissions and deferred personnel costs were not adjusted to fair value at the date of the acquisitions, and (c) an adjustment to increase rent expense by the amount that would have been recognized if lease obligations were not adjusted to fair value at the date of acquisitions.
- (3) Other includes expenses and income that are permitted to be excluded per the terms of our Credit Agreement from Consolidated EBITDA, a financial measure used in calculating our covenant compliance. These include expenses and income related to foreign currency transactions, investment gains and losses, facilities and workforce restructuring, legal settlements, business acquisitions and other items.

Our covenant requirement for consolidated net secured leverage ratio and the actual ratio as of September 30, 2019 are as follows:

	Covenant Requirement	Actual Ratio
Maximum consolidated net secured leverage to Consolidated EBITDA ratio ⁽¹⁾	7.25x	2.98x

- (1) Calculated as the ratio of consolidated net secured funded indebtedness, net of cash and cash equivalents, to Consolidated EBITDA, as defined by the Credit Agreement, for the period of four consecutive fiscal quarters ended on the measurement date. Consolidated net secured funded indebtedness is comprised of indebtedness for borrowed money, letters of credit, deferred purchase price obligations and capital lease obligations, all of which is secured by liens on our property.

Recently Adopted Accounting Pronouncements

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. ASU 2016-02 requires lessees to recognize the following for all leases (with the exception of short-term leases) at the commencement date: (i) a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and (ii) a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. Lessor accounting is largely unchanged under the amendments of ASU 2016-02. Additional disclosures are required to allow the user to assess the amount, timing and uncertainty of cash flows arising from leasing activities. A modified retrospective transition approach is required for leases existing at the time of adoption. In July 2018, the FASB issued ASU 2018-11, *Leases (Topic 842): Targeted Improvements*, which provides another transition method no longer requiring application to previously reported periods.

We adopted ASU 2016-02 as of January 1, 2019. Prior period information was not restated and continues to be presented under ASC 840, *Leases*. We elected the package of practical expedients permitted under the transition guidance within the new standard,

which among other things, allowed us to not reassess existing contracts to determine if they contain a lease and to carry forward their historical lease classification upon transition. In addition, we will not apply the guidance of ASC 842 to leases with an initial term of 12 months or less as allowed by the standard.

Our lease portfolio primarily consists of real estate office space with lease terms ranging from 1 to 15 years. Adoption of the new standard resulted in the recording of right-of-use assets and lease payment obligations for our real estate office leases of \$387.6 million and \$417.8 million, respectively, as of January 1, 2019. As of September 30, 2019, \$55.5 million of the lease liability was included in other accrued expenses on the Condensed Consolidated Balance Sheet. The standard did not materially impact our Condensed Consolidated Statement of Comprehensive Income (Loss) or Condensed Consolidated Statement of Cash Flows. See Note 3, "Leases" for further details.

Recent Accounting Pronouncements Not Yet Effective

In June 2016, the FASB issued ASU 2016-13, *Measurement of Credit Losses on Financial Instruments*. ASU 2016-13 requires companies to measure credit losses utilizing a methodology that reflects expected credit losses and requires a consideration of a broader range of reasonable and supportable information to inform credit loss estimates. ASU 2016-13 is effective for us for our first quarter of fiscal 2020 and earlier adoption is permitted beginning in the first quarter of fiscal 2019. Application of the ASU is through a cumulative-effect adjustment to retained earnings as of the effective date. We are currently evaluating the impact of the pending adoption of ASU 2016-13 on our Condensed Consolidated Financial Statements. This ASU is not expected to have a material impact on our financial position, results of operations or cash flows.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We do not use derivative financial instruments for trading or speculative purposes. We have generally invested our available cash in short-term, highly liquid financial instruments, having initial maturities of three months or less. When necessary, we have borrowed to fund acquisitions.

Interest rate risk

We derive service revenues from investment earnings related to cash balances maintained in bank accounts on which we are the agent for clients. The balances maintained in the bank accounts will fluctuate. For the nine months ended September 30, 2019, we had average daily cash balances of approximately \$2.3 billion maintained in such accounts. We estimate that a 100 basis point change in the interest earnings rate would equal approximately \$9.0 million of net income on an annual basis. The effect of changes in interest rates attributable to earnings derived from cash balances we hold for clients is offset by changes in interest rates on our variable debt.

At September 30, 2019, we had total variable interest rate debt of approximately \$5.7 billion. As of September 30, 2019, a 1% increase in interest rates would result in an increase in interest expense of approximately \$56.9 million per year.

Equity price risk

We have exposure to equity price risk as a result of our investments in equity securities. Equity price risk results from changes in the level or volatility of equity prices which affect the value of equity securities or instruments that derive their value from such securities or indexes. The fair value of our investments that are subject to equity price risk as of September 30, 2019 was approximately \$120.5 million. The impact of a 10% change in fair value of these investments would have been approximately \$9.0 million to net income. Changes in equity values of our investments could have a material effect on our results of operations and our financial position.

Foreign currency exchange rate risk

During the nine months ended September 30, 2019, approximately 27% of our revenues were from clients located outside the United States. A portion of the revenues from clients located outside the United States is denominated in foreign currencies, the majority being the British pound. While revenues and expenses of our foreign operations are primarily denominated in their respective local currencies, some subsidiaries do enter into certain transactions in currencies that are different from their local currency. These transactions consist primarily of cross-currency intercompany balances and trade receivables and payables. As a result of these transactions, we have exposure to changes in foreign currency exchange rates that result in foreign currency transaction gains and losses, which we report in other income (expense). These amounts were not material for the nine months ended September 30, 2019. The amount of these balances can fluctuate in the future as we bill customers and buy products or services in currencies other than our functional currency, which could increase our exposure to foreign currency exchange rates. We continue to

monitor our exposure to foreign exchange rates because of our acquisitions and changes in our operations. We do not enter into any market risk sensitive instruments for trading purposes.

The foregoing risk management discussion and the effect thereof are forward-looking statements. Actual results in the future may differ materially from these projected results due to actual developments in global financial markets. The analytical methods used by us to assess and minimize risk discussed above should not be considered projections of future events or losses.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer (our principal executive officer and principal financial officer, respectively), evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2019. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the rules and forms of the Securities and Exchange Commission. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of September 30, 2019, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There have not been any changes in our internal control over financial reporting that occurred during the fiscal quarter ended September 30, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. We implemented changes to internal controls due to the adoption of Accounting Standard Update No. 2016-02, Leases (Accounting Standard Codification Topic 842) effective January 1, 2019. These changes included new lease accounting processes to evaluate and account for contracts under the new accounting standard. There were no significant changes to our internal control over financial reporting due to the adoption of the new standard.

Except as disclosed above, there have not been any changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the fiscal quarter ended September 30, 2019, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

The information regarding certain legal proceedings in which we are involved as set forth in Note 14 – Commitments and Contingencies of the Notes to the Condensed Consolidated Financial Statements (Part I, Item 1 of this Quarterly Report on Form 10-Q) is incorporated by reference into this Item 1.

In addition, we are involved in various other legal proceedings arising in the normal course of our businesses. At this time, we do not believe any material losses under these claims to be probable. While the ultimate outcome of such legal proceedings cannot be predicted with certainty, it is in the opinion of management, after consultation with legal counsel, that the final outcome in such proceedings, in the aggregate, would not have a material adverse effect on our consolidated financial condition, results of operations or cash flows.

Item 1A. Risk Factors

In addition to the other information set forth in this report, you should carefully consider the factors discussed in Item 1A. “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2018. If any of these risks occur, it could materially affect our business, operating results, cash flows and financial condition and possibly lead to a decline in our stock price. The risks and uncertainties that we have disclosed are those that we have identified as material, but are not the only risks and uncertainties facing us. Our business is also subject to general risks and uncertainties that affect many other companies. Additional risks and

uncertainties not currently known to us or that we currently believe are not material may also impair our business, operating results, cash flows and financial condition.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

The following is a summary of the repurchases of our common stock in the third quarter of 2019 (in millions, except average price per share):

<u>Period (1)</u>	<u>(a) Total Number of Shares Purchased (2)</u>	<u>(b) Average Price Paid per Share</u>	<u>(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs (3)</u>	<u>(d) Maximum Number (or Approximate Dollar Value) of Shares that May Yet be Purchased Under Plans or Programs (3)</u>
July 1, 2019 – July 31, 2019	—	\$ —	—	\$ 500.0
August 1, 2019 – August 31, 2019	1.2	\$ 44.80	1.2	\$ 446.9
September 1, 2019 – September 30, 2019	0.1	\$ 46.56	0.1	\$ 439.7
Total	<u>1.3</u>		<u>1.3</u>	

- (1) Information is based on trade dates of repurchase transactions.
- (2) Represents shares repurchased in open market transactions pursuant to the Common Stock Repurchase Program
- (3) Share repurchases were made pursuant to our Common Stock Repurchase Program authorized by our Board of Directors on August 8, 2019. The program allows for the purchase of up to \$500 million of outstanding common stock in one or more transactions on the open market or in privately negotiated purchases.

Item 6. Exhibits

The exhibits listed in the Exhibit Index immediately preceding such exhibits are filed as part of this Report.

EXHIBIT INDEX

Exhibit Number	Description of Exhibit
31.1	Certification of the Registrant's Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of the Registrant's Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32	Certification of the Registrant's Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished and not filed for purposes of sections 11 or 12 of the Securities Act and section 18 of the Exchange Act)
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.*
101.SCH	XBRL Taxonomy Extension Schema Document.*
101.CAL	XBRL Taxonomy Calculation Linkbase Document.*
101.LAB	XBRL Taxonomy Label Linkbase Document.*
101.PRE	XBRL Taxonomy Presentation Linkbase Document.*
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.*
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).*

* Filed herewith.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

SS&C TECHNOLOGIES HOLDINGS, INC.

By: /s/ Patrick J. Pedonti
Patrick J. Pedonti
Senior Vice President and Chief Financial Officer
(Duly Authorized Officer, Principal Financial and Accounting
Officer)

Date: November 7, 2019

CERTIFICATION

I, William C. Stone, certify that:

1. I have reviewed this quarterly report on Form 10-Q of SS&C Technologies Holdings, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) 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(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2019

/s/ William C. Stone

William C. Stone
Chairman of the Board and Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION

I, Patrick J. Pedonti, certify that:

1. I have reviewed this quarterly report on Form 10-Q of SS&C Technologies Holdings, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) 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(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 7, 2019

/s/ Patrick J. Pedonti

Patrick J. Pedonti
Senior Vice President and Chief Financial Officer
(Principal Financial Officer)

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the quarterly report on Form 10-Q of SS&C Technologies Holdings, Inc. (the "Company") for the period ended September 30, 2019 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned officers of the Company hereby certify to their knowledge, pursuant to 18 U.S.C. Section 1350, that:

- (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 7, 2019

By: /s/ William C. Stone
William C. Stone
Chairman of the Board and Chief Executive Officer
(Principal Executive Officer)

Date: November 7, 2019

By: /s/ Patrick J. Pedonti
Patrick J. Pedonti
Senior Vice President and Chief Financial Officer
(Principal Financial Officer)