UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-Q

(Mark One)

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

For the quarterly period ended March 31, 2020

- OR -

☐ **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:
001-37470

TransUnion
(Exact name of registrant as specified in its charter)

Delaware	**61-1678417**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**
555 West Adams, Chicago, Illinois	**60661**
(Address of principal executive offices)	**(Zip code)**

312-985-2000
(Registrants' telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.01 par value	TRU	New York Stock Exchange

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

☒ Yes ☐ No

Table of Contents

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

☒ Large Accelerated Filer	☐ Accelerated Filer
☐ Non-Accelerated Filer	☐ Smaller Reporting Company
	☐ Emerging Growth Company

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

☐ Yes	☒ No

As of March 31, 2020, there were 189.8 million shares of TransUnion common stock outstanding.

TRANSUNION
QUARTERLY REPORT ON FORM 10-Q
QUARTER ENDED MARCH 31, 2020
TABLE OF CONTENTS

	Page
PART I. FINANCIAL INFORMATION	**4**
ITEM 1. UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS	**4**
Consolidated Balance Sheets	**4**
Consolidated Statements of Income	**5**
Consolidated Statements of Comprehensive Income (Loss)	**6**
Consolidated Statements of Cash Flows	**7**
Consolidated Statements of Stockholders' Equity	**8**
Notes to Unaudited Consolidated Financial Statements	**9**
ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	**24**
ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	**40**
ITEM 4. CONTROLS AND PROCEDURES	**41**
PART II. OTHER INFORMATION	**42**
ITEM 1. LEGAL PROCEEDINGS	**42**
ITEM 1A. RISK FACTORS	**42**
ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS	**43**
ITEM 6. EXHIBITS	**43**
SIGNATURES	**44**

PART I. FINANCIAL INFORMATION

ITEM 1. UNAUDITED CONSOLIDATED FINANCIAL STATEMENTS

TRANSUNION AND SUBSIDIARIES
Consolidated Balance Sheets (Unaudited)
(in millions, except per share data)

	March 31, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 305.7	$ 274.1
Trade accounts receivable, net of allowance of $23.2 and $19.0	468.0	443.9
Other current assets	151.1	170.2
Total current assets	924.8	888.2
Property, plant and equipment, net of accumulated depreciation and amortization of $471.0 and $454.4	210.0	219.0
Goodwill	3,277.6	3,377.8
Other intangibles, net of accumulated amortization of $1,524.3 and $1,482.1	2,287.1	2,391.9
Other assets	233.4	236.3
Total assets	$ 6,932.9	$ 7,113.2
Liabilities and stockholders' equity		
Current liabilities:		
Trade accounts payable	$ 187.1	$ 176.2
Short-term debt and current portion of long-term debt	58.6	58.7
Other current liabilities	309.8	336.5
Total current liabilities	555.5	571.4
Long-term debt	3,585.6	3,598.3
Deferred taxes	415.9	439.1
Other liabilities	211.7	165.0
Total liabilities	4,768.7	4,773.8
Stockholders' equity:		
Common stock, $0.01 par value; 1.0 billion shares authorized at March 31, 2020 and December 31, 2019, 195.0 million and 193.5 million shares issued at March 31, 2020 and December 31, 2019, respectively, and 189.8 million shares and 188.7 million shares outstanding as of March 31, 2020 and December 31, 2019, respectively	1.9	1.9
Additional paid-in capital	2,038.1	2,022.3
Treasury stock at cost; 5.2 million and 4.8 million shares at March 31, 2020 and December 31, 2019, respectively	(211.8)	(179.2)
Retained earnings	707.7	652.0
Accumulated other comprehensive loss	(468.2)	(251.6)
Total TransUnion stockholders' equity	2,067.7	2,245.4
Noncontrolling interests	96.5	94.0
Total stockholders' equity	2,164.2	2,339.4
Total liabilities and stockholders' equity	$ 6,932.9	$ 7,113.2

See accompanying notes to unaudited consolidated financial statements.

TRANSUNION AND SUBSIDIARIES
Consolidated Statements of Income (Unaudited)
(in millions, except per share data)

	Three Months Ended March 31,	
	2020	2019
Revenue	$ 687.6	$ 619.3
Operating expenses		
Cost of services (exclusive of depreciation and amortization below)	225.1	208.1
Selling, general and administrative	235.4	195.7
Depreciation and amortization	90.3	93.5
Total operating expenses	550.8	497.2
Operating income	136.8	122.1
Non-operating income and (expense)		
Interest expense	(37.7)	(45.0)
Interest income	1.9	1.5
Earnings from equity method investments	2.6	3.8
Other income and (expense), net	(7.0)	(6.8)
Total non-operating income and (expense)	(40.2)	(46.5)
Income from continuing operations before income taxes	96.6	75.5
Provision for income taxes	(22.3)	(0.6)
Income from continuing operations	74.3	74.9
Discontinued operations, net of tax	—	(1.6)
Net income	74.3	73.4
Less: net income attributable to the noncontrolling interests	(4.1)	(2.4)
Net income attributable to TransUnion	$ 70.2	$ 70.9
Income from continuing operations	$ 74.3	$ 74.9
Less: net income from continuing operations attributable to noncontrolling interests	(4.1)	(2.4)
Income from continuing operations attributable to TransUnion	70.2	72.5
Discontinued operations, net of tax	—	(1.6)
Net income attributable to TransUnion	$ 70.2	$ 70.9
Basic earnings per common share from:		
Income from continuing operations attributable to TransUnion	$ 0.37	$ 0.39
Discontinued operations, net of tax	—	(0.01)
Net Income attributable to TransUnion	$ 0.37	$ 0.38
Diluted earnings per common share from:		
Income from continuing operations attributable to TransUnion	$ 0.37	$ 0.38
Discontinued operations, net of tax	—	(0.01)
Net Income attributable to TransUnion	$ 0.37	$ 0.37
Weighted-average shares outstanding:		
Basic	189.2	186.6
Diluted	192.2	191.0

As a result of displaying amounts in millions, rounding differences may exist in the table above.

See accompanying notes to unaudited consolidated financial statements.

TRANSUNION AND SUBSIDIARIES
Consolidated Statements of Comprehensive Income (Loss) (Unaudited)
(in millions)

	Three Months Ended March 31,	
	2020	2019
Net income	$ 74.3	$ 73.4
Other comprehensive income (loss):		
Foreign currency translation:		
Foreign currency translation adjustment	(183.0)	66.3
Benefit (expense) for income taxes	0.4	(0.2)
Foreign currency translation, net	(182.6)	66.1
Hedge instruments:		
Net change on interest rate cap	(0.5)	(4.6)
Net change on interest rate swap	(46.9)	(13.8)
Cumulative effect of adopting ASU 2017-12	—	1.0
Benefit for income taxes	11.7	4.6
Hedge instruments, net	(35.7)	(12.8)
Available-for-sale debt securities:		
Net unrealized loss	—	—
Benefit for income taxes	—	—
Available-for-sale debt securities, net	—	—
Total other comprehensive (loss) income, net of tax	(218.3)	53.3
Comprehensive income	(144.0)	126.7
Less: comprehensive income attributable to noncontrolling interests	(2.4)	(2.5)
Comprehensive (loss) income attributable to TransUnion	$ (146.4)	$ 124.2

See accompanying notes to unaudited consolidated financial statements.

TRANSUNION AND SUBSIDIARIES
Consolidated Statements of Cash Flows (Unaudited)
(in millions)

	Three Months Ended March 31,	
	2020	2019
Cash flows from operating activities:		
Net income	$ 74.3	$ 73.4
Add: loss from discontinued operations, net of tax	—	1.6
Income from continuing operations	74.3	74.9
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	90.3	93.5
Net (gain) on assets-held-for sale and impairment of investments in affiliated companies	(1.8)	5.3
Equity in net income of affiliates, net of dividends	(2.0)	(3.3)
Deferred taxes	(0.6)	(0.2)
Amortization of discount and deferred financing fees	1.0	1.6
Stock-based compensation	4.9	9.9
Provision for losses on trade accounts receivable	6.2	1.8
Other	2.3	(0.3)
Changes in assets and liabilities:		
Trade accounts receivable	(40.6)	(11.4)
Other current and long-term assets	(0.5)	(16.1)
Trade accounts payable	12.3	—
Other current and long-term liabilities	(20.3)	(29.5)
Cash provided by operating activities of continuing operations	125.5	126.2
Cash used in operating activities of discontinued operations	—	(2.4)
Cash provided by operating activities	125.5	123.8
Cash flows from investing activities:		
Capital expenditures	(42.0)	(41.9)
Proceeds from sale/maturity of other investments	19.4	6.8
Purchases of other investments	(0.2)	(14.4)
Investment in non-consolidated affiliate	(5.2)	—
Proceeds from disposals of assets held for sale	1.6	0.8
Other	0.9	(2.2)
Cash used in investing activities of continuing operations	(25.5)	(50.9)
Cash used in investing activities of discontinued operations	—	—
Cash used in investing activities	(25.5)	(50.9)
Cash flows from financing activities:		
Repayments of debt	(13.8)	(18.8)
Proceeds from issuance of common stock and exercise of stock options	10.9	10.1
Dividends to shareholders	(14.7)	(14.4)
Employee taxes paid on restricted stock units recorded as treasury stock	(32.1)	(36.8)
Cash used in financing activities	(49.7)	(59.9)
Effect of exchange rate changes on cash and cash equivalents	(18.7)	0.5
Net change in cash and cash equivalents	31.6	13.5
Cash and cash equivalents, beginning of period	274.1	187.4
Cash and cash equivalents, end of period	$ 305.7	$ 200.9

As a result of displaying amounts in millions, rounding differences may exist in the table above.

See accompanying notes to unaudited consolidated financial statements.

TRANSUNION AND SUBSIDIARIES
Consolidated Statements of Stockholders' Equity (Unaudited)
(in millions)

	Common Stock		Paid-In Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Loss	Noncontrolling Interests	Total
	Shares	Amount						
Balance, December 31, 2018	185.7	$ 1.9	$ 1,947.3	$ (139.9)	$ 363.1	$ (282.7)	$ 92.5	$ 1,982.2
Net income	—	—	—	—	70.9	—	2.4	73.4
Other comprehensive income	—	—	—	—	—	53.2	0.1	53.3
Stock-based compensation	—	—	9.2	—	—	—	—	9.2
Employee share purchase plan	0.1	—	6.9	—	—	—	—	6.9
Exercise of stock options	0.5	—	4.2	—	—	—	—	4.2
Vesting of restricted stock units	1.6	—	—	—	—	—	—	—
Treasury stock purchased	(0.6)	—	—	(37.1)	—	—	—	(37.1)
Dividends to shareholders	—	—	—	—	(14.2)	—	—	(14.2)
Cumulative effect of adopting ASU 2017-12	—	—	—	—	(1.0)	—	—	(1.0)
Balance, March 31, 2019	187.3	$ 1.9	$ 1,967.6	$ (177.0)	$ 418.8	$ (229.4)	$ 95.0	$ 2,076.9

As a result of displaying amounts in millions, rounding differences may exist in the table above.

See accompanying notes to unaudited consolidated financial statements.

	Common Stock		Paid-In Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Loss	Noncontrolling Interests	Total
	Shares	Amount						
Balance, December 31, 2019	188.7	$ 1.9	$ 2,022.3	$ (179.2)	$ 652.0	$ (251.6)	$ 94.0	$ 2,339.4
Net income	—	—	—	—	70.2	—	4.1	74.3
Other comprehensive income	—	—	—	—	—	(216.6)	(1.7)	(218.3)
Stock-based compensation	—	—	4.1	—	—	—	—	4.1
Employee share purchase plan	0.1	—	8.9	—	—	—	—	8.9
Exercise of stock options	0.4	—	2.8	—	—	—	—	2.8
Vesting of restricted stock units	0.9	—	—	—	—	—	—	—
Treasury stock purchased	(0.3)	—	—	(32.6)	—	—	—	(32.6)
Dividends to shareholders	—	—	—	—	(14.4)	—	—	(14.4)
Other	—	—	—	—	(0.1)	—	0.1	—
Balance, March 31, 2020	189.8	$ 1.9	$ 2,038.1	$ (211.8)	$ 707.7	$ (468.2)	$ 96.5	$ 2,164.2

As a result of displaying amounts in millions, rounding differences may exist in the table above.

See accompanying notes to unaudited consolidated financial statements.

TRANSUNION AND SUBSIDIARIES
Notes to Unaudited Consolidated Financial Statements

1. Significant Accounting and Reporting Policies

Basis of Presentation

Unless the context indicates otherwise, any reference in this report to the "Company," "we," "our," "us," and "its" refers to TransUnion and its consolidated subsidiaries, collectively.

The accompanying unaudited Condensed Consolidated Financial Statements have been prepared in accordance with instructions to Form 10-Q and Rule 10-01 of Regulation S-X and do not include all the information required by accounting principles generally accepted in the United States of America ("U.S. GAAP") for complete financial statements. In the opinion of management, all adjustments, including normal recurring adjustments, considered necessary for a fair statement have been included. All significant intercompany transactions and balances have been eliminated. The operating results of TransUnion for the periods presented are not necessarily indicative of the results that may be expected for the full year ending December 31, 2020. The Company's year end Consolidated Balance Sheet data was derived from audited financial statements. Therefore, these unaudited consolidated financial statements should be read in conjunction with our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the Securities and Exchange Commission ("SEC") on February 18, 2020.

Principles of Consolidation

The consolidated financial statements of TransUnion include the accounts of TransUnion and all of its controlled subsidiaries. Investments in nonmarketable unconsolidated entities in which the Company is able to exercise significant influence are accounted for using the equity method. Investments in nonmarketable unconsolidated entities in which the Company is not able to exercise significant influence, our "Cost Method Investments," are accounted for at our initial cost, minus any impairment, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer.

Impact of coronavirus ("COVID-19") On Our Financial Statements

The global spread and unprecedented impact of COVID-19 is complex and rapidly-evolving. On March 11, 2020, the World Health Organization declared COVID-19 a global pandemic and recommended extensive containment and mitigation measures worldwide. The outbreak has reached all of the regions in which we do business, and governmental authorities around the world have implemented numerous measures attempting to contain and mitigate the effects of the virus, including travel bans and restrictions, border closings, quarantines, shelter-in-place orders, shutdowns, limitations or closures of non-essential businesses, school closures, and social distancing requirements. The global spread of COVID-19 and actions taken in response to the virus have negatively affected workforces, customers, consumer confidence, financial markets, employment rates, consumer spending, credit markets and housing demand, caused significant economic and business disruption, volatility and financial uncertainty, and led to a significant economic downturn, including in the markets where we operate.

We have assessed various accounting estimates and other matters, including those that require consideration of forecasted financial information, in context of the unknown future impacts of COVID-19 using information that is reasonably available to us at this time. The accounting estimates and other matters we have assessed include, but were not limited to, our allowance for doubtful accounts, stock-based compensation, goodwill and other long-lived assets, financial assets, valuation allowances for tax assets and revenue recognition. While based on our current assessment of these estimates there was not a material impact to our consolidated financial statements as of and for the quarter ended March 31, 2020, as additional information becomes available to us, our future assessment of these estimates, including our expectations at the time regarding the duration, scope and severity of the pandemic, as well as other factors, could materially and adversely impact our consolidated financial statements in future reporting periods.

Trade Accounts Receivable

We base our allowance for doubtful accounts estimate on our historical write-off experience, current conditions, an analysis of the aging of outstanding receivables and customer payment patterns, and specific reserves for customers in adverse financial condition or for existing contractual disputes. Beginning January 1, 2020, we also considered our current expectations of future economic conditions, including the impact of COVID-19, when estimating our allowance for doubtful accounts. We made an immaterial increase to our allowance for doubtful accounts as a result of our current estimate of the impact COVID-19 will have on the collectability of our accounts receivable. As additional information becomes available to us, our future assessment of our allowance for doubtful accounts could materially and adversely impact our consolidated financial statements in future reporting periods.

The following is a rollforward of the allowance for doubtful accounts for the periods presented:

	Three Months Ended March 31,	
	2020	2019
Beginning Balance	$ 19.0	$ 13.5
Provision for losses on trade accounts receivable	6.2	1.8
Write-offs, net of recovered accounts	(2.0)	(1.2)
Ending balance	$ 23.2	$ 14.1

Long-Lived Assets and Goodwill

We review long-lived asset groups that are subject to amortization for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset group may not be recoverable. We test goodwill for impairment on an annual basis, in the fourth quarter, or on an interim basis if there is an indicator of impairment. As additional information becomes available to us, our future assessment of impairments to long-lived assets and goodwill could materially and adversely impact our consolidated financial statements in future reporting periods.

The decrease in other intangibles, net of accumulated amortization, as of March 31, 2020, compared with December 31, 2019, includes a decrease of $63.6 million due to the translation adjustment of our foreign entities long-lived assets, net of accumulated amortization, resulting from changes to foreign exchange rates between periods. The decrease in goodwill as of March 31, 2020, compared with December 31, 2019, is due to a $100.2 million translation adjustment of our foreign entities goodwill resulting from changes to foreign exchange rates between periods. The offset to these translation adjustments are included in accumulated other comprehensive loss on our balance sheet.

Recently Adopted Accounting Pronouncements

On June 16, 2016, the FASB issued Accounting Standards Update ("ASU") No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments.* This ASU amends the accounting for credit losses on available-for-sale debt securities and purchased financial assets with credit deterioration. In addition, these amendments require the measurement of all expected credit losses for financial assets, including trade accounts receivable, held at the reporting date based on historical experience, current conditions, and current expectations of future economic conditions based on reasonable and supportable forecasts. We adopted this guidance on January 1, 2020. Upon adoption and at March 31, 2020, this new guidance did not have a material impact on our consolidated financial statements.

Recent Accounting Pronouncements Not Yet Adopted

On December 18, 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes.* This ASU removes specific exceptions to the general principles in Topic 740. Among other things it eliminates the need for organizations to analyze whether the following apply in a given period: an exception to the incremental approach for intra-period tax allocation; exceptions to accounting for basis differences when there are ownership changes in foreign investments; and an exception in interim period income tax accounting for year-to-date losses that exceed anticipated losses. This amendment also improves financial statement preparers' application of income tax-related guidance and simplifies GAAP for: franchise taxes that are partially based on income; transactions with a government that result in a step up in the tax basis of goodwill; separate financial statements of legal entities that are not subject to tax; and enacted changes in tax laws in interim periods. This guidance is effective for annual reporting periods beginning after December 15, 2020, including interim periods therein. We are assessing the impact this guidance will have on our consolidated financial statements.

On January 16, 2020, the FASB issued ASU 2020-01, *Investments-Equity Securities (Topic 321), Investments-Equity Method and Joint Ventures (Topic 323), and Derivatives and Hedging (Topic 815)-Clarifying the Interactions between Topic 321, Topic 323, and Topic 815.* This amendment, among other things, clarifies that a company should consider observable transactions that require a company to either apply or discontinue the equity method of accounting under Topic 323, Investments-Equity Method and Joint Ventures, for the purposes of applying the measurement alternative in accordance with Topic 321 immediately before applying or upon discontinuing the equity method. This amendment also clarifies that, when determining the accounting for certain forward contracts and purchased options a company should not consider, whether upon settlement or exercise, if the underlying securities would be accounted for under the equity method or fair value option. This guidance is effective for annual reporting periods beginning after December 15, 2020, including interim periods therein. We are assessing the impact this guidance will have on our consolidated financial statements. We do not believe the impact will be material.

In March 2020, the FASB issued ASU 2020-4, *Reference Rate Reform (Topic 848), Facilitation of the Effects of Reference Rate Reform on Financial Reporting.* In response to concerns about structural risks of interbank offered rates including the risk of cessation of the London Interbank Offered Rate (LIBOR), regulators in several jurisdictions around the world have undertaken reference rate reform initiatives to identify alternative reference rates that are more observable and less susceptible to manipulation. The provisions of this ASU are elective and apply to all entities, subject to meeting certain criteria, that have debt or hedging contracts, among other contracts, that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. This ASU, among other things, provides optional expedients and exceptions for a limited period of time for applying U.S. GAAP to these contracts if certain criteria are met to ease the potential burden in accounting for or recognizing the effects of reference rate reform on financial reporting. ASU 2020-04 is effective for all entities as of March 12, 2020 through December 31, 2022. We are still evaluating the impact, but do not expect the adoption of the standard to have a material impact on our Consolidated Financial Statements.

2. Fair Value

The following table summarizes financial instruments measured at fair value, on a recurring basis, as of March 31, 2020:

(in millions)	Total	Level 1	Level 2	Level 3
Assets				
Available-for-sale debt securities (Note 3)	$ 2.8	$ —	$ 2.8	$ —
Total	$ 2.8	$ —	$ 2.8	$ —
Liabilities				
Interest rate swaps and caps (Notes 7 and 8)	$ 95.9	$ —	$ 95.9	$ —
Contingent consideration (Note 6)	7.5	—	—	7.5
Total	$ 103.4	$ —	$ 95.9	$ 7.5

Level 2 instruments consist of foreign exchange-traded corporate bonds, interest rate caps, and interest rate swaps. Foreign exchange-traded corporate bonds are available-for-sale securities valued at their current quoted prices. These securities mature between 2027 and 2033. The interest rate caps fair values are determined using the market standard methodology of discounting the future expected cash receipts that would occur if variable interest rates rise above the strike rate of the caps in conjunction with the cash payments related to financing the premium of the interest rate caps. The interest rate swaps fair values are determined using the market standard methodology of discounting the future expected net cash receipts or payments that would occur if variable interest rates rise above or fall below the fixed rates of the swaps. The variable interest rates used in the calculations of projected receipts on both the caps and swaps are based on an expectation of future interest rates derived from observable market interest rate curves and volatilities.

Unrealized gains and losses on available-for-sale debt securities are included in other comprehensive income. There were no significant realized or unrealized gains or losses on any of our securities for any of the periods presented.

Level 3 instruments consist of contingent consideration obligations related to companies we have acquired with remaining maximum payouts totaling $7.5 million. These obligations are contingent upon meeting certain quantitative or qualitative performance metrics through 2019, and are included in other current liabilities on our balance sheet. The fair values of the obligations are determined based on an income approach, using our expectations of the future expected earnings of the acquired entities. We assess the fair value of these obligations each reporting period with any changes reflected as gains or losses in selling, general and administrative expenses in the consolidated statements of income. During the three months ended March 31, 2020, we recorded additional expense of $0.3 million as a result of changes to the fair value of these obligations.

3. Other Current Assets

Other current assets consisted of the following:

(in millions)	March 31, 2020	December 31, 2019
Prepaid expenses	$ 83.4	$ 84.1
Other receivables	18.9	15.2
Income taxes receivable	17.7	19.0
Other investments	10.4	30.7
Marketable securities (Note 2)	2.8	2.9
Contract assets	1.5	1.4
Deferred financing fees (Note 10)	0.5	0.5
Other	15.9	16.4
Total other current assets	$ 151.1	$ 170.2

Other receivables primarily include amounts recoverable under insurance policies for certain litigation costs. Other investments include non-negotiable certificates of deposit that are recorded at their carrying value which approximates fair value. The decrease in these investments is due to non-negotiable certificates of deposit that matured and converted to cash equivalents.

4. Other Assets

Other assets consisted of the following:

(in millions)	March 31, 2020	December 31, 2019
Investments in nonconsolidated affiliates (Note 5)	$ 132.3	$ 133.7
Right-of-use lease assets	71.1	71.2
Non-qualified employee benefit plan assets	10.7	12.7
Deposits	4.5	4.1
Notes receivable from affiliated companies	4.0	4.0
Deferred financing fees	1.8	1.9
Other	9.0	8.7
Total other assets	$ 233.4	$ 236.3

5. Investments in Affiliated Companies

Investments in affiliated companies represent our investment in non-consolidated domestic and foreign entities. These entities are in businesses similar to ours, such as credit reporting, credit-scoring and credit-monitoring services.

We use the equity method to account for investments in affiliates where we are able to exercise significant influence. For these investments, we adjust the carrying value for our proportionate share of the affiliates' earnings, losses and distributions, as well as for purchases and sales of our ownership interest.

We account for nonmarketable investments in equity securities in which we are not able to exercise significant influence, our "Cost Method Investments", at our initial cost, minus any impairment, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. For these investments, we adjust the carrying value for any purchases or sales of our ownership interests. We record any dividends received from these investments as other income in non-operating income and expense.

There was a $5.3 million loss on the impairment of an investment in one of our affiliated companies during the three months ended March 31, 2019. The loss was included in other income and expense in the consolidated statements of income.

Investments in affiliated companies consisted of the following:

(in millions)	March 31, 2020	December 31, 2019
Equity Method investments	$ 42.4	$ 49.0
Cost Method investments	89.9	84.7
Total investments in affiliated companies (Note 4)	$ 132.3	$ 133.7

These balances are included in other assets in the consolidated balance sheets. The increase in cost method investments is due to a new investment in our U.S. Markets segment.

Earnings from equity method investments, which are included in other non-operating income and expense, and dividends received from equity method investments consisted of the following:

	Three Months Ended March 31,	
(in millions)	2020	2019
Earnings from equity method investments (Note 13)	$ 2.6	$ 3.8
Dividends received from equity method investments	$ 0.6	$ 0.5

6. Other Current Liabilities

Other current liabilities consisted of the following

(in millions)	March 31, 2020	December 31, 2019
Deferred revenue (Note 10)	$ 90.3	$ 82.8
Accrued legal and regulatory (Note 14)	60.0	30.4
Accrued payroll	55.0	110.6
Income taxes payable	25.6	14.9
Accrued employee benefits	23.4	35.4
Operating lease liabilities	18.7	19.9
Contingent consideration (Note 2)	7.5	7.2
Accrued interest	4.0	4.0
Other	25.3	31.3
Total other current liabilities	$ 309.8	$ 336.5

The decrease in accrued payroll was due primarily to the payment of accrued bonuses during the first quarter of 2020 that were earned in 2019. Accrued legal and regulatory increased due primarily to an additional accrual related to the Ramirez litigation.

7. Other Liabilities

Other liabilities consisted of the following:

(in millions)	March 31, 2020	December 31, 2019
Interest rate swaps and caps (Notes 2 and 8)	$ 95.9	$ 46.6
Operating lease liabilities	58.1	57.2
Unrecognized tax benefits	32.4	32.8
Deferred revenue (Note 10)	12.5	15.7
Non-qualified and other employee benefit plan liabilities	9.2	11.6
Other	3.6	1.1
Total other liabilities	$ 211.7	$ 165.0

The increase in the interest rate swaps and caps liability was due primarily to changes to the fair value of these instruments due to the forward LIBOR curve during the quarter.

8. Debt

Debt outstanding consisted of the following:

(in millions)	March 31, 2020	December 31, 2019
Senior Secured Term Loan B-5, payable in quarterly installments through November 15, 2026, with periodic variable interest at LIBOR or alternate base rate, plus applicable margin (2.74% at March 31, 2020, and 3.55% at December 31, 2019), net of original issue discount and deferred financing fees of $4.7 million and $11.3 million, respectively, at March 31, 2020, and original issue discount and deferred financing fees of $4.8 million and $11.7 million, respectively, at December 31, 2019	$ 2,502.5	$ 2,508.5
Senior Secured Term Loan A-3, payable in quarterly installments through December 10, 2024, with periodic variable interest at LIBOR or alternate base rate, plus applicable margin (2.49% at March 31, 2020, and 3.30% at December 31, 2019), net of original issue discount and deferred financing fees of $3.1 million and $1.9 million, respectively, at March 31, 2020, and original issue discount and deferred financing fees of $3.3 million and $2.2 million, respectively, at December 31, 2019	1,137.8	1,144.5
Senior Secured Revolving Credit Facility	—	—
Other notes payable	3.7	3.7
Finance leases	0.2	0.3
Total debt	3,644.2	3,657.0
Less short-term debt and current portion of long-term debt	(58.6)	(58.7)
Total long-term debt	$ 3,585.6	$ 3,598.3

Senior Secured Credit Facility

On June 15, 2010, we entered into a Senior Secured Credit Facility with various lenders. This facility has been amended several times and currently consists of the Senior Secured Term Loan B-5 and the Senior Secured Term Loan A-3 (collectively, the "Senior Secured Term Loans"), and the Senior Secured Revolving Credit Facility.

As of March 31, 2020, we had no outstanding balance under the Senior Secured Revolving Credit Facility, $0.1 million of outstanding letters of credit, and could have borrowed up to the remaining $299.9 million available.

TransUnion also has the ability to request incremental loans on the same terms under the Senior Secured Credit Facility up to the greater of $1,000.0 million and 100% of consolidated EBITDA for the four quarters preceding such request date, and may incur additional incremental loans so long as the senior secured net leverage ratio does not exceed 4.25-to-1, subject to certain additional conditions and commitments by existing or new lenders to fund any additional borrowings.

With certain exceptions, the Senior Secured Credit Facility obligations are secured by a first-priority security interest in substantially all of the assets of Trans Union LLC, including its investment in subsidiaries. The Senior Secured Credit Facility contains various

restrictions and nonfinancial covenants, along with a senior secured net leverage ratio test. The nonfinancial covenants include restrictions on dividends, investments, dispositions, future borrowings and other specified payments, as well as additional reporting and disclosure requirements. The senior secured net leverage test must be met as a condition to incur additional indebtedness, make certain investments, and may be required to make certain restricted payments. The senior secured net leverage ratio must not exceed 5.5-to-1 at any such measurement date. Under the terms of the Senior Secured Credit Facility, TransUnion may make dividend payments up to the greater of $75 million or 7.5% of Consolidated EBITDA per year, or an unlimited amount provided that no default or event of default exists and so long as the total net leverage ratio does not exceed 4.75-to-1. As of March 31, 2020, we were in compliance with all debt covenants.

On March 10, 2020, we entered into two tranches of interest rate swap agreements with various counter-parties that effectively fix our LIBOR exposure on a portion of our Senior Secured Term Loans or similar replacement debt. The first tranche commences on June 30, 2020 and expires on June 30, 2022 with an initial notional amount of $1,150.0 million that amortizes each quarter. The first tranche requires TransUnion to pay fixed rates varying between 0.5200% and 0.5295% in exchange for receiving a variable rate that matches the variable rate on our loans. The second tranche commences on June 30, 2022 and expires on June 30, 2025 with an initial notional amount of $1,110.0 million that amortizes each quarter. The second tranche requires TransUnion to pay fixed rates varying between 0.9125% and 0.9280% in exchange for receiving a variable rate that matches the variable rate on our loans. We have designated these swap agreements as cash flow hedges.

On December 17, 2018, we entered into interest rate swap agreements with various counter-parties that effectively fix our LIBOR exposure on a portion of our Senior Secured Term Loans or similar replacement debt, which is currently fixed at 2.702% and 2.706%. We have designated these swap agreements as cash flow hedges. The current aggregate notional amount under these agreements is $1,425.0 million, decreasing each quarter until the second agreement terminates on December 30, 2022.

On December 18, 2015, we entered into interest rate cap agreements with various counter-parties that effectively cap our LIBOR exposure on a portion of our Senior Secured Term Loans or similar replacement debt at 0.75% beginning June 30, 2016. We have designated these cap agreements as cash flow hedges. The current aggregate notional amount under these agreements is $1,246.9 million and will continue to decrease each quarter until the agreement terminates on June 30, 2020. We began to pay the various counter-parties a fixed rate on the outstanding notional amounts of between 0.98% and 0.994% and receive payments to the extent LIBOR exceeds 0.75%.

Based on how the fair value of interest rate caps are determined, the earlier interest periods have lower fair values at inception than the later interest periods, resulting in less interest expense being recognized in the earlier periods compared with the later periods. Any payments we receive to the extent LIBOR exceeds 0.75% is also reclassified from other comprehensive income to interest expense in the period received.

The change in the fair value of our hedging instruments, included in our assessment of hedge effectiveness, is recorded in other comprehensive income, and reclassified to interest expense when the corresponding hedged debt affects earnings.

The change in the fair value of the swaps resulted in an unrealized loss of $46.9 million ($35.3 million, net of tax) and $13.8 million ($10.4 million, net of tax) for the three months ended March 31, 2020, and 2019 recorded in other comprehensive income. Interest expense on the swaps in the three months ended March 31, 2020 and 2019 was expense of $3.7 million ($3.1 million, net of tax) and $0.5 million ($0.3 million, net of tax). We expect to recognize a loss of approximately $35.9 million as interest expense due to our expectation that LIBOR will exceed the fixed rates of interest over the next twelve months.

The change in the fair value of the caps resulted in an unrealized loss of $0.5 million ($0.3 million, net of tax) and $4.6 million ($3.4 million, net of tax) for the three months ended March 31, 2020, and 2019, recorded in other comprehensive income. Interest expense reclassified from other comprehensive income to interest expense related to the fair value of the portion of the caps expiring in the three months ended March 31, 2020, and 2019 was expense of $2.1 million ($1.8 million, net of tax) and income of $1.6 million ($1.0 million, net of tax), respectively. We expect to reclassify a loss of approximately $4.5 million from other comprehensive income to interest expense related to the fair value of the portion of the caps expiring and payments received to the extent LIBOR exceeds 0.75% in the next twelve months.

Fair Value of Debt

As of March 31, 2020, the fair value of our variable-rate Senior Secured Term Loan A-3, excluding original issue discounts and deferred fees was approximately $1,057.1 million. As of March 31, 2020, the fair value of our Senior Secured Term Loan B-5, excluding original issue discounts and deferred fees, was approximately $2,398.9 million. The fair values of our variable-rate term loans are determined using Level 2 inputs, based on quoted market prices for the publicly traded instruments.

9. Stockholders' Equity

Common Stock Dividends

On February 28, 2020, the board of directors declared a dividend of $0.075 per share to holders of record as of the close of business on March 13, 2020. The total dividend declared was $14.4 million, of which $14.2 million was paid on March 30, 2020, with the remainder due as dividend equivalents to employees who hold restricted stock units when and if those units vest. An additional $0.5 million of dividend equivalents were paid to employees whose restricted stock units vested in the first quarter of 2020.

Any determination to pay dividends in the future will be at the discretion of our board of directors and will depend upon results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law and other factors our board of directors deems relevant. We currently have capacity and intend to continue to pay a quarterly dividend, subject to approval by our board. While we are comfortable paying the dividend at this time, if circumstances further deteriorate, we would consider recommending that our board temporarily reduce or suspend our dividend.

Treasury Stock

On February 13, 2017, our board of directors authorized the repurchase of up to $300.0 million of our common stock over the next 3 years. Our board of directors removed the three-year time limitation on February 8, 2018. To date, we have repurchased $133.5 million of our common stock and have the ability to repurchase the remaining $166.5 million.

We have no obligation to repurchase additional shares, and the timing, actual number and value of the shares that are repurchased, if any, will be at the discretion of management and will depend on a number of factors, including market conditions, the cost of repurchasing shares, the availability of alternative investment opportunities, liquidity, and other factors deemed appropriate. Repurchases may be suspended, terminated or modified at any time for any reason. Any repurchased shares will have the status of treasury shares and may be used, if and when needed, for general corporate purposes. While the existing share repurchase program remains authorized by the board of directors, given the uncertainties arising from the COVID-19 pandemic, we do not intend to repurchase additional shares in the short term. We may resume share repurchases in the future at any time, depending upon market conditions, our capital needs and other factors.

During the first quarter of 2020, 0.9 million outstanding employee restricted stock units vested and became taxable to the employees. The employees used 0.3 million shares of the vested stock to satisfy their payroll tax withholding obligations in a net share settlement arrangement whereby the employees received 0.6 million of the shares and gave TransUnion the remaining 0.3 million shares that we have recorded as treasury stock. We remitted cash equivalent to the $32.1 million vest date value of the treasury stock to the respective governmental agencies in settlement of the employee withholding tax obligations.

Preferred Stock

As of March 31, 2020 and December 31, 2019, we had 100.0 million shares of preferred stock authorized, and no preferred stock issued or outstanding.

10. Revenue

All of our revenue is derived from contracts with customers and is reported as revenue in the consolidated statements of income generally as, or at the point in time, the performance obligation is satisfied. A performance obligation is a promise in a contract to transfer a distinct good or service to a customer. We have contracts with two general groups of performance obligations: those that require us to stand ready to provide goods and services to a customer to use as and when requested ("Stand Ready Performance Obligations") and those that do not require us to stand ready ("Other Performance Obligations"). Our Stand Ready Performance Obligations include obligations to stand ready to provide data, process transactions, access our databases, software-as-a-service and direct-to-consumer products, provide rights to use our intellectual property and other services. Our Other Performance Obligations include the sale of certain batch data sets and various professional and other services.

Most of our Stand Ready Performance Obligations consist of a series of distinct goods and services that are substantially the same and have the same monthly pattern of transfer to our customers. We consider each month of service in this time series to be a distinct performance obligation and, accordingly, recognize revenue over time. For a majority of these Stand Ready Performance Obligations the total contractual price is variable because our obligation is to process an unknown quantity of transactions, as and when requested by our customers, over the contract period. We allocate the variable price to each month of service using the time-series concept and recognize revenue based on the most likely amount of consideration to which we will be entitled**,** which is generally the amount we have the right to invoice. This monthly amount can be based on the actual volume of units delivered or a guaranteed minimum, if higher. Occasionally we have contracts pursuant to which the amount we will be entitled to for the transactions processed is uncertain, in which case we estimate the revenue based on what we consider to be the most likely amount of consideration to which we will be entitled, and adjust any estimates as facts and circumstances evolve.

Certain Stand Ready Performance Obligation fees result from contingent fee based contracts that require us to provide services before we have an enforceable right to payment. For these performance obligations, we recognize revenue at the point in time the contingency is met and we have an enforceable contract and right to payment.

For all contracts that include a Stand Ready Performance Obligation with variable pricing, we are unable to estimate the variable price attributable to future performance obligations because the number of units to be purchased is not known. As a result, we use the exception available to forgo disclosures about revenue attributable to the future performance obligations where we recognize revenue using the time-series concept as discussed above, including those qualifying for the right to invoice practical expedient. We also use the exception available to forgo disclosures about revenue attributable to contracts with expected durations of one year or less.

Certain of our Other Performance Obligations, including certain batch data sets and certain professional and other services, are delivered at a point in time. Accordingly, we recognize revenue upon delivery, once we have satisfied that obligation. For certain Other Performance Obligations, including certain professional and other services, we recognize revenue over time, based on an estimate of progress towards completion of that obligation. These contracts are not material.

In certain circumstances we apply the revenue recognition guidance to a portfolio of contracts with similar characteristics. We use estimates and assumptions when accounting for a portfolio that reflect the size and composition of the portfolio of contracts.

Our contracts include standard commercial payment terms generally acceptable in each region, and do not include financing with extended payment terms. We have no significant obligations for refunds, warranties, or similar obligations. Our revenue does not include taxes collected from our customers.

Accounts receivable are shown separately on our balance sheet. Contract assets and liabilities result due to the timing of revenue recognition, billings and cash collections. Contract assets include our right to payment for goods and services already transferred to a customer when the right to payment is conditional on something other than the passage of time, for example, contracts pursuant to which we recognize revenue over time but do not have a contractual right to payment until we complete the contract. Contract assets are included in our other current assets and are not material as of March 31, 2020.

As our other contracts with customers generally have a duration of one year or less, our contract liabilities consist of deferred revenue that is primarily short-term in nature. Contract liabilities include current and long-term deferred revenue that are included in other current liabilities and other liabilities. We expect to recognize the December 31, 2019, current deferred revenue balance as revenue during 2020. Our long-term deferred revenue, which is not material, is expected to be recognized in approximately two years.

For additional disclosures about the disaggregation of our revenue see Note 13, “Reportable Segments.”

11. Earnings Per Share

Basic earnings per share represents income available to common stockholders divided by the weighted-average number of common shares outstanding during the reported period. Diluted earnings per share reflects the effect of the increase in shares outstanding determined by using the treasury stock method for awards issued under our incentive stock plans.

As of March 31, 2020 and March 31, 2019, there were 0.2 million anti-dilutive weighted stock-based awards outstanding and 1.3 million contingently-issuable performance-based stock awards outstanding that were excluded from the diluted earnings per share calculation because the contingencies had not been met.

Basic and diluted weighted average shares outstanding and earnings per share were as follows:

(in millions, except per share data)	Three Months Ended March 31, 2020	2019
Income from continuing operations	$ 74.3	$ 74.9
Less: net income from continuing operations attributable to noncontrolling interests	(4.1)	(2.4)
Income from continuing operations attributable to TransUnion	70.2	72.5
Discontinued operations, net of tax	—	(1.6)
Net income attributable to TransUnion	$ 70.2	$ 70.9
Basic earnings per common share from:		
Income from continuing operations attributable to TransUnion	$ 0.37	$ 0.39
Discontinued operations, net of tax	—	(0.01)
Net Income attributable to TransUnion	$ 0.37	$ 0.38
Diluted earnings per common share from:		
Income from continuing operations attributable to TransUnion	$ 0.37	$ 0.38
Discontinued operations, net of tax	—	(0.01)
Net Income attributable to TransUnion	$ 0.37	$ 0.37
Weighted-average shares outstanding:		
Basic	189.2	186.6
Dilutive impact of stock based awards	3.0	4.4
Diluted	192.2	191.0

12. Income Taxes

For the three months ended March 31, 2020, we reported an effective tax rate of 23.1%, which was higher than the 21.0% U.S. federal statutory rate due primarily to $16.2 million of various foreign, federal and state tax impacts and $2.1 million valuation allowance for foreign tax credit reserves due to decreased foreign source income, partially offset by $16.2 million of excess tax benefits on stock-based compensation. We periodically assess the recoverability of our deferred tax assets, and a valuation allowance is recorded against deferred tax assets if it is more likely than not that some portion of the deferred tax assets will not be realized. COVID-19 had no material impact on our assessment of the recoverability of our deferred tax assets at March 31, 2020. As additional information becomes available to us, our future assessment of the recoverability of our deferred tax assets could materially and adversely impact our consolidated financial statements in future reporting periods.

For the three months ended March 31, 2019, we reported an effective tax rate of 0.8%, which was lower than the 21.0% U.S. federal statutory rate due primarily to $21.0 million of excess tax benefits on stock-based compensation and $7.9 million of valuation allowance releases on foreign tax credit carryforwards, partially offset by $13.7 million of various foreign, state and federal tax impacts.

The total amount of unrecognized tax benefits was $34.7 million as of March 31, 2020, and $32.8 million as of December 31, 2019. The amounts that would affect the effective tax rate if recognized are $14.1 million and $13.6 million, respectively. We classify interest and penalties, which are not significant, as income tax expense in the consolidated statements of income and their associated liabilities, which are also not significant, as other liabilities in the consolidated balance sheets. We are regularly audited by federal, state and foreign taxing authorities. Given the uncertainties inherent in the audit process, it is reasonably possible that certain audits could result in a significant increase or decrease in the total amounts of unrecognized tax benefits. An estimate of the range of the increase or decrease in unrecognized tax benefits due to audit results cannot be made at this time. Generally, tax years 2010 and forward remain open for examination in some foreign jurisdictions, 2011 and forward in some state jurisdictions, and tax years 2012 and forward remain open for examination for U.S. federal income tax purposes.

13. Reportable Segments

We have three reportable segments, U.S. Markets, International, and Consumer Interactive, and the Corporate unit, which provides support services to each of the segments. Our chief operating decision maker ("CODM") uses the profit measure of Adjusted EBITDA, on both a consolidated and segment basis, to allocate resources and assess performance of our businesses. We use Adjusted EBITDA as our profit measure because it eliminates the impact of certain items that we do not consider indicative of operating performance, which is useful to compare operating results between periods. Our board of directors and executive management team also use Adjusted EBITDA as a compensation measure for both segment and corporate management under our incentive compensation plans. Adjusted EBITDA is also a measure frequently used by securities analysts, investors and other interested parties in their evaluation of the operating performance of companies similar to ours.

We define Adjusted EBITDA as net income (loss) attributable to each segment plus (less) loss (income) from discontinued operations, plus net interest expense, plus (less) provision (benefit) for income taxes, plus depreciation and amortization, plus (less) certain deferred revenue acquisition-revenue related adjustments, plus stock-based compensation, plus mergers, acquisitions, divestitures and business optimization-related expenses including Callcredit integration-related expenses, plus certain expenses associated with our accelerated technology investment, plus (less) certain other expenses (income).

The segment financial information below aligns with how we report information to our CODM to assess operating performance and how we manage the business. The accounting policies of the segments are the same as described in Note 1, "Significant Accounting and Reporting Policies" and Note 10, "Revenue."

The following is a more detailed description of our three reportable segments and the Corporate unit, which provides support services to each segment:

U.S. Markets

The U.S. Markets segment provides consumer reports, actionable insights and analytics such as credit and other scores, and decisioning capabilities to businesses. These businesses use our services to acquire new customers, assess consumers' ability to pay for services, identify cross-selling opportunities, measure and manage debt portfolio risk, collect debt, verify consumer identities and investigate potential fraud. The core capabilities and delivery methods in our U.S. Markets segment allow us to serve a broad set of customers across industries. We report disaggregated revenue of our U.S. Markets segment for Financial Services and Emerging Verticals:

- ***Financial Services:*** The Financial Services vertical consists of our consumer lending, mortgage, auto, and cards and payments lines of business. Our Financial Services clients consist of most banks, credit unions, finance companies, auto

lenders, mortgage lenders, online-only lenders (FinTech), and other consumer lenders in the United States. We also distribute our solutions through most major resellers, secondary market players and sales agents. Beyond traditional lenders, we work with a variety of credit arrangers, such as auto dealers and peer-to-peer lenders. We provide solutions across every aspect of the lending lifecycle; customer acquisition and engagement, fraud and ID management, retention and recovery. Our products are focused on mitigating risk and include credit reporting, credit marketing, analytics and consulting, identity verification and authentication and debt recovery solutions.

- ***Emerging Verticals:*** Emerging Verticals include Healthcare, Insurance, Tenant and Employment, Collections, Public Sector, Media, Diversified Markets and other verticals. Our solutions in these verticals are also data-driven and address the entire customer lifecycle. We offer onboarding and transaction processing products, scoring and analytic products, marketing solutions, fraud and identity management solutions, and customer retention solutions.

International

The International segment provides services similar to our U.S. Markets segment to businesses in select regions outside the United States. Depending on the maturity of the credit economy in each country, services may include credit reports, analytics and decisioning services and other value-added risk management services. In addition, we have insurance, business and automotive databases in select geographies. These services are offered to customers in a number of industries including financial services, insurance, automotive, collections, and communications, and are delivered through both direct and indirect channels. The International segment also provides consumer services similar to those offered by our Consumer Interactive segment that help consumers proactively manage their personal finances and take precautions against identity theft.

We report disaggregated revenue of our International segment for the following regions: Canada, Latin America, the United Kingdom, Africa, India and Asia Pacific.

Consumer Interactive

The Consumer Interactive segment provides solutions that help consumers manage their personal finances and take precautions against identity theft. Services in this segment include credit reports and scores, credit monitoring, fraud protection and resolution, and financial management for consumers. The segment also provides solutions that help businesses respond to data breach events. Our products are provided through user-friendly online and mobile interfaces and are supported by educational content and customer support. Our Consumer Interactive segment serves consumers through both direct and indirect channels.

Corporate

Corporate provides support services for each of the segments, holds investments, and conducts enterprise functions. Certain costs incurred in Corporate that are not directly attributable to one or more of the segments remain in Corporate. These costs are typically enterprise-level costs and are primarily administrative in nature.

Selected segment financial information and disaggregated revenue consisted of the following:

(in millions)	Three Months Ended March 31, 2020	2019
Gross Revenue:		
U.S. Markets:		
Financial Services	$ 230.4	$ 189.1
Emerging Verticals	191.5	179.7
Total U.S. Markets	421.9	368.8
International:		
Canada	26.5	23.0
Latin America	24.3	25.3
United Kingdom	48.8	42.2
Africa	14.3	15.0
India	30.8	27.7
Asia Pacific	13.0	12.8
Total International	157.7	146.0
Total Consumer Interactive	126.7	123.4
Total revenue, gross	$ 706.3	$ 638.2
Intersegment revenue eliminations:		
U.S. Markets	$ (17.1)	$ (17.5)
International	(1.3)	(1.2)
Consumer Interactive	(0.4)	(0.2)
Total intersegment eliminations	(18.7)	(18.9)
Total revenue as reported	$ 687.6	$ 619.3

As a result of displaying amounts in millions, rounding differences may exist in the table above.

A reconciliation of Segment Adjusted EBITDA to income from continuing operations before taxes for the periods presented is as follows:

(in millions)	Three Months Ended March 31, 2020	2019
U.S. Markets Adjusted EBITDA	$ 171.5	$ 142.0
International Adjusted EBITDA	60.2	65.0
Consumer Interactive Adjusted EBITDA	57.4	60.2
Total	289.1	267.2
Adjustments to reconcile to income from continuing operations before income taxes:		
Corporate expenses[(1)]	(25.8)	(28.3)
Net interest expense	(35.8)	(43.5)
Depreciation and amortization	(90.3)	(93.5)
Acquisition-related revenue adjustments[(2)]	—	(4.2)
Stock-based compensation[(3)]	(2.3)	(12.7)
Mergers and acquisitions, divestitures and business optimization[(4)]	(4.3)	(11.3)
Accelerated technology investment[(5)]	(2.5)	—
Other[(6)]	(35.7)	(0.7)
Net income attributable to non-controlling interests	4.1	2.4
Total adjustments	(192.5)	(191.7)
Income from continuing operations before income taxes	$ 96.6	$ 75.5

As a result of displaying amounts in millions, rounding differences may exist in the table above.

(1) Certain costs that are not directly attributable to one or more of the segments remain in Corporate. These costs are typically enterprise-level costs and are primarily administrative in nature.

(2) This adjustment represents certain non-cash adjustments related to acquired entities, predominantly adjustments to increase revenue resulting from purchase accounting reductions to deferred revenue we record on the opening balance sheets of acquired entities. Deferred revenue results when a company receives payment in advance of fulfilling their performance obligations under contracts. Business combination accounting rules require us to record deferred revenue of acquired entities at fair value if we are obligated to perform any future services under these contracts. The fair value of this deferred revenue is determined based on the direct and indirect incremental costs of fulfilling our performance obligations under these contracts, plus a normal profit margin. Generally, this fair value calculation results in a reduction to the purchased deferred revenue balance. The above adjustment includes an estimate for the increase in revenue equal to the difference between what the acquired entities would have recorded as revenue and the lower revenue we record as a result of the reduced deferred revenue balance. This increase is partially offset by an estimated decrease to revenue for certain acquired non-core customer contracts that are not classified as discontinued operations that will expire within approximately one year from the date of acquisition. Beginning in the third quarter of 2019, we no longer have these adjustments to revenue.

(3) Consisted of stock-based compensation and cash-settled stock-based compensation.

(4) For the three months ended March 31, 2020, consisted of the following adjustments: $3.8 million of Callcredit integration costs; $2.1 million of acquisition expenses; $0.3 million of adjustments to contingent consideration expense from previous acquisitions; a ($1.8) million gain on the disposal of assets of a small business in our United Kingdom region that are classified as held-for-sale; and a ($0.1) million reimbursement for transition services provided to the buyers of certain of our discontinued operations.

For the three months ended March 31, 2019, consisted of the following adjustments: a $5.3 million loss on the impairment of an investment in a nonconsolidated affiliate; $4.2 million of Callcredit integration costs; a $0.9 million adjustment to contingent consideration expense from previous acquisitions; and $0.9 million of acquisition expenses.

(5) Represents expenses associated with our accelerated technology investment.

(6) For the three months ended March 31, 2020, consisted of the following adjustments: $30.5 million of expense incurred in connection with the *Ramirez* litigation, as discussed in footnote 14, “Contingencies”; a $4.9 million loss from currency remeasurement of our foreign operations; $0.4 million of loan fees; $0.2 million of fees related to our new swap agreements; $0.2 million of administrative expenses associated with the Fraud Incident; and a ($0.5) million reimbursement of fees associated with the refinancing of our Senior Secured Credit Facility.

For the three months ended March 31, 2019, consisted of the following adjustments: a $0.3 million loss from currency remeasurement of our foreign operations; and $0.4 million of loan fees.

Earnings from equity method investments included in non-operating income and expense was as follows:

	Three Months Ended March 31,	
(in millions)	2020	2019
U.S. Markets	$ 0.6	$ 0.6
International	1.9	3.2
Total	$ 2.6	$ 3.8

14. Contingencies

Litigation

The following discussion describes material developments in previously disclosed material legal proceedings that occurred in the three months ended March 31, 2020. Refer to Part II, Item 8, Footnote 21, “Contingencies” of our Annual Report on Form 10-K for the year ended December 31, 2019, for a full description of our material pending legal proceedings at that time.

Ramirez v. Trans Union LLC

On February 27, 2020, the United States Court of Appeals for the Ninth Circuit issued its opinion in *Ramirez v. Trans Union LLC*, (No. 3:12-cv-00632-JSC, United States District Court for the Northern District of California), which affirmed in part and reversed and vacated in part the trial court’s judgment, holding that the punitive damages award was excessive in violation of constitutional due process. The appeals court remanded the case to the trial court with instructions to reduce the punitive damages award from approximately $52.0 million ($6,353.08 per class member) to approximately $32.0 million ($3,936.88 per class member). On April 8, 2020, the Ninth Circuit denied our petition for rehearing en banc. We determined that punitive damages were probable and reasonably estimable and recorded an estimated liability at March 31, 2020, in an amount equal to the portion of the punitive damages award affirmed by the Ninth Circuit and a partially offsetting insurance receivable, with expense of $30.5 million recorded in selling, general and administrative expense. We also recorded a related tax benefit of $7.6 million in our provision for income taxes.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of TransUnion's financial condition and results of operations is provided as a supplement to, and should be read in conjunction with, TransUnion's audited consolidated financial statements, the accompanying notes, "Risk Factors," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Annual Report on Form 10-K for the year ended December 31, 2019, as well as the unaudited consolidated financial statements and the related notes presented in Part I, Item 1, of this Quarterly Report on Form 10-Q.

In addition to historical data, this discussion contains forward-looking statements about our business, operations and financial performance based on current expectations that involve risks, uncertainties and assumptions. Our actual results may differ materially from those discussed in the forward-looking statements as a result of various factors, including but not limited to those discussed below in "Cautionary Notice Regarding Forward-Looking Statements," and Part II, Item 1A, "Risk Factors."

References in this discussion and analysis to "the Company," "we," "us" and "our" refer to TransUnion and its direct and indirect subsidiaries, collectively.

Overview

TransUnion is a leading global information and insights company that strives to make trust possible between businesses and consumers, working to ensure that each person is reliably and safely represented in the marketplace. At TransUnion, we find innovative ways to leverage data and information to help businesses and consumers transact with confidence and achieve great things. We call this Information for Good.

Grounded in our legacy as a credit reporting agency, we have built a robust and accurate database of information for a large portion of the adult population in the markets we serve. We use our data fusion methodology to link and match an increasing set of other disparate data to further enrich our database. We use this enriched data, combined with our expertise, to continuously develop more powerful and useful solutions for our customers, all in accordance with global laws and regulations. Because of our work, organizations can better understand consumers in order to make more informed decisions, and earn consumer trust through effective, personalized experiences, and the proactive extension of the right opportunities, tools and offers.

We provide consumer reports, actionable insights and analytics such as credit and other scores, and decisioning capabilities to businesses. Businesses embed our solutions into their process workflows to acquire new customers, assess consumer ability to pay for services, identify cross-selling opportunities, measure and manage debt portfolio risk, collect debt, verify consumer identities and investigate potential fraud. Consumers use our solutions to view their credit profiles and access analytical tools that help them understand and manage their personal information and take precautions against identity theft. We have deep domain expertise across a number of attractive industries, which we also refer to as verticals, including Financial Services, Healthcare, Insurance and the other markets we serve. We have a global presence in over 30 countries and territories across North America, Latin America, Europe, Africa, India, and Asia Pacific.

Our solutions are based on a foundation of financial, credit, alternative credit, identity, bankruptcy, lien, judgment, healthcare, insurance claims, automotive and other relevant information obtained from thousands of sources including financial institutions, private databases, public records repositories, and other data sources. We refine, standardize and enhance this data using sophisticated algorithms to create proprietary databases. Our technology infrastructure allows us to efficiently integrate our data with our analytics and decisioning capabilities to create and deliver innovative solutions to our customers and to quickly adapt to changing customer needs. Our deep analytics resources, including our people and tools driving predictive modeling and scoring, customer segmentation, benchmarking and forecasting, enable us to provide businesses and consumers with better insights into their data. Our decisioning capabilities, which are generally delivered on a software-as-a-service platform, allow businesses to interpret data and apply their specific qualifying criteria to make decisions and take actions. Collectively, our data, analytics and decisioning capabilities allow businesses to authenticate the identity of consumers, effectively determine the most relevant products for consumers, retain and cross-sell to existing consumers, identify and acquire new consumers and reduce loss from fraud and data breaches. Similarly, our capabilities allow consumers to see how their credit profiles have changed over time, understand the impact of financial decisions on their credit scores, manage their personal information and take precautions against identity theft.

Segments

We manage our business and report disaggregated revenue and financial results in three reportable segments: U.S. Markets, International and Consumer Interactive.

- The U.S. Markets segment provides consumer reports, actionable insights and analytics such as credit and other scores, and decisioning capabilities to businesses. These businesses use our services to acquire new customers, assess consumers' ability to pay for services, identify cross-selling opportunities, measure and manage debt portfolio risk, collect debt, verify consumer identities and investigate potential fraud. The core capabilities and delivery methods in our U.S. Markets

segment allow us to serve a broad set of customers across industries. We report disaggregated revenue of our U.S. Markets segment for Financial Services and Emerging Verticals.

- The International segment provides services similar to our U.S. Markets segment to businesses in select regions outside the United States. Depending on the maturity of the credit economy in each country, services may include credit reports, analytics and decisioning services, and other value-added risk management services. We also have insurance, business and automotive databases in select geographies. These services are offered to customers in a number of industries including financial services, retail credit, insurance, automotive, collections, public sector, and communications, and are delivered through both direct and indirect channels. The International segment also provides consumer services similar to those offered by our Consumer Interactive segment that help consumers proactively manage their personal finances and take precautions against identity theft.

  We report disaggregated revenue of our International segment for the following regions: Canada, Latin America, the United Kingdom, Africa, India, and Asia Pacific.

- The Consumer Interactive segment provides solutions that help consumers manage their personal finances and take precautions against identity theft. Services in this segment include credit reports and scores, credit monitoring, fraud protection and resolution, and financial management for consumers. The segment also provides solutions that help businesses respond to data breach events. Our products are provided through user-friendly online and mobile interfaces and are supported by educational content and customer support. Our Consumer Interactive segment serves consumers through both direct and indirect channels.

In addition, Corporate provides support services for each of the segments, holds investments, and conducts enterprise functions. Certain costs incurred in Corporate that are not directly attributable to one or more of the segments remain in Corporate. These costs are typically enterprise-level costs and are primarily administrative in nature.

Factors Affecting Our Results of Operations

The following are certain key factors that affect, or have recently affected, our results of operations:

Macroeconomic and Industry Trends; Effects of Coronavirus ("COVID-19") on our Business and Results of Operations

Our revenues can be significantly influenced by general macroeconomic conditions, including the availability of credit and capital, interest rates, inflation, employment levels, consumer confidence and housing demand. The global spread and unprecedented impact of COVID-19 is complex and rapidly-evolving. On March 11, 2020, the World Health Organization declared COVID-19 a global pandemic and recommended extensive containment and mitigation measures worldwide. The outbreak has reached all of the regions in which we do business, and governmental authorities around the world have implemented numerous measures attempting to contain and mitigate the effects of the virus, including travel bans and restrictions, border closings, quarantines, shelter-in-place orders, shutdowns, limitations or closures of non-essential businesses, school closures, and social distancing requirements. The global spread of COVID-19 and actions taken in response to the virus have negatively affected workforces, customers, consumer confidence, financial markets, employment rates, consumer spending, credit markets and housing demand, caused significant economic and business disruption, volatility and financial uncertainty, and led to a significant economic downturn, including in the markets where we operate. While we experienced first quarter 2020 revenue growth of 11% when compared with the first quarter of 2019, since mid-March 2020, the COVID-19 pandemic and widespread measures implemented to contain and mitigate the effects of the virus had, and are expected to continue to have for an inherently uncertain period of time, a material adverse impact on numerous aspects of our business, including customer demand for our services and solutions, our consolidated financial statements, and the trading price of our securities. In addition, if the pandemic continues to create significant disruptions in the credit or financial markets, or impacts our credit ratings, it could adversely impact our ability to access capital on favorable terms or at all.

From the earliest days of the COVID pandemic, the Company's primary focus has been the health and safety of our associates, our customers, and the wider communities in which we operate. In each of the markets we serve, we have quickly and effectively moved to a work from home model, allowing us to protect our associates and the broader population while continuing to operate our businesses and provide services and solutions to customers and consumers. In addition, the Company has taken several actions to support those who are financially impacted by the COVID-19 pandemic in the jurisdictions where we operate. We remain focused on ensuring impacted consumers are aware of resources and relief available to them, and we are working directly with our partners across the broader consumer credit ecosystem in an effort to prevent adverse impacts to consumers' credit reports as a result of the pandemic. We are also working with trade associations and industry peers to develop additional proactive solutions to help impacted consumers and to facilitate access to resources and educational materials aimed at consumers.

The decline in demand for our services and solutions resulted in a reduction in certain costs that vary with revenue. In addition, we are actively monitoring our cost base and taking actions with the goal of maintaining financial liquidity and flexibility, such as halting our travel-related expenses, putting a temporary hold on new hiring until we have a better understanding of the shape

and the speed of the expected recovery. We have also addressed some other discretionary costs by canceling internal meetings and reducing second quarter capital spending, and continue to monitor and plan for other cost levers that we can pull. Going forward, we will continue to evaluate whether additional cost control measures are necessary or desirable to enhance our liquidity and financial profile as the effects of the COVID-19 pandemic evolve. However, there is no certainty that such measures, or measures that we have already taken, will be successful in mitigating the numerous operational, health and financial risks posed by COVID-19 and it may be necessary to further modify our business practices in the future, which could materially and adversely impact our consolidated financial statements in future periods.

The extent to which COVID-19 impacts our business, operations and our consolidated financial statements is inherently uncertain and will depend on numerous evolving factors that we may not be able to accurately predict, including: the duration, scope and severity of the pandemic; the impact on worldwide macroeconomic conditions, including interest rates, employment rates, consumer confidence, and foreign exchange rates in each of the markets in which we operate; governmental, business and individuals' actions that have been, and continue to be, taken in response to the pandemic, which could include limitations on and changes to our operations or mandates to provide services; the effect on our customers; changes in customer and consumer demand for our services; the effect on consumer confidence and spending; our ability to sell and provide our services, including the impact of travel restrictions and people working from home; the ability of our customers to pay for our services on a timely basis or at all; the health of, and the effect on, our workforce; our ability to maintain sufficient liquidity; and the potential effects on our internal controls, including those over financial reporting, as a result of changes in working environments for our employees, business partners and suppliers. Each of these factors could cause or contribute to the risks and uncertainties described in our Annual Report on Form 10-K for the year ended December 31, 2019, and in this Quarterly Report on Form 10-Q, and could materially and adversely impact our business, consolidated financial statements and our stock price.

We have assessed various accounting estimates and other matters, including those that require consideration of forecasted financial information, in context of the unknown future impacts of COVID-19 using information that is reasonably available to us at this time. The accounting estimates and other matters we have assessed include, but were not limited to, our allowance for doubtful accounts, stock-based compensation, goodwill and other long-lived assets, financial assets, valuation allowances for tax assets and revenue recognition. While based on our current assessment of these estimates there was not a material impact to our consolidated financial statements as of and for the quarter ended March 31, 2020, as additional information becomes available to us, our future assessment of these estimates, including our expectations at the time regarding the duration, scope and severity of the pandemic, as well as other factors, could materially and adversely impact our consolidated financial statements in future reporting periods.

Our revenues are also significantly influenced by industry trends, including the demand for information services in financial services, healthcare, insurance and other industries we serve. Companies are increasingly relying on business analytics and big-data technologies to help process data in a cost-efficient manner. As customers have gained the ability to rapidly aggregate and analyze data generated by their own activities, they are increasingly expecting access to real-time data and analytics from their information providers as well as solutions that fully integrate into their workflows. In the long term, and once the impact of COVID-19 subsides, we expect demand for consumer solutions to rise, with higher consumer awareness of the importance and usage of their credit information, increased risk of identity theft due to data breaches, and more readily available free credit information. The complexity of existing regulations and the emergence of new regulations across the globe, including new and future COVID-19 related regulations on consumer and business activities and interactions and stimulus packages, will continue to make operations for businesses more complex.

Effects of Inflation

We do not believe that inflation has had a material effect on our business, results of operations or financial condition.

Recent Developments

The following developments impact the comparability of our balance sheets, results of operations and cash flows between years:

On March 11, 2020, the World Health Organization declared COVID-19 a global pandemic and recommended extensive containment and mitigation measures worldwide. While we experienced first quarter 2020 revenue growth when compared with the first quarter of 2019, the COVID-19 pandemic and widespread measures implemented to contain and mitigate the effects of the virus had, and are expected to continue to have for an inherently uncertain period of time, a material adverse impact on numerous aspects of our business, including customer demand for our services and solutions in all of the regions in which we do business, and our consolidated financial statements. We expect these trends to continue and, potentially, worsen into the second quarter and beyond as the pandemic continues.

On March 10, 2020, we entered into two tranches of interest rate swap agreements with various counter-parties that effectively fixes our LIBOR exposure on a portion of our Senior Secured Term Loans or similar replacement debt. The first tranche commences on June 30, 2020 and expires on June 30, 2022 with an initial notional amount of $1,150.0 million which amortizes each quarter.

The first tranche requires TransUnion to pay fixed rates varying between 0.5200% and 0.5295% in exchange for receiving a variable rate which matches the variable rate on our loans. The second tranche commences on June 30, 2022 and expires on June 30, 2025 with an initial notional amount of $1,110.0 million which amortizes each quarter. The second tranche requires TransUnion to pay fixed rates varying between 0.9125% and 0.9280% in exchange for receiving a variable rate which matches the variable rate on our loans. We have designated these swap agreements as cash flow hedges.

On February 27, 2020, the United States Court of Appeals for the Ninth Circuit affirmed in part and reversed and vacated in part the trial court's judgment in *Ramirez v. Trans Union LLC*, reducing the trial court's punitive damages award from approximately $52 million to approximately $32 million. As a result, we recorded $30.5 million of litigation expense in selling, general and administrative expenses.

During the last three quarters of 2019 we prepaid $340 million of our Senior Secured Term Loans, resulting in lower interest expense for the quarter ended March 31, 2020, compared with the quarter ended March 31, 2019.

Recent Acquisitions and Partnerships

We selectively evaluate acquisitions and partnerships as a means to expand our business and international footprint and to enter new markets. Since January 1, 2019, we have completed the following acquisitions, including those that impact the comparability of our results between periods:

- On May 22, 2019, we acquired 100% of the equity of TruSignal, Inc. ("TruSignal"). TruSignal is an innovative leader in people-based marketing technology for Fortune 500 brands, agencies, platforms, publishers and data owners. TruSignal uses predictive scoring, powered by artificial intelligence, to make big data actionable for one-to-one addressable marketing. The results of operations of TruSignal, which are not material to our consolidated financial statements, have been included as part of our U.S. Markets segment in our consolidated statements of income since the date of the acquisition.

Key Components of Our Results of Operations

Revenue

The following is a more detailed description of how we derive and report revenue for our three reportable segments:

U.S. Markets

The U.S. Markets segment provides consumer reports, actionable insights and analytics such as credit and other scores, and decisioning capabilities to businesses. These businesses use our services to acquire new customers, assess consumers' ability to pay for services, identify cross-selling opportunities, measure and manage debt portfolio risk, collect debt, verify consumer identities and investigate potential fraud. The core capabilities and delivery methods in our U.S. Markets segment allow us to serve a broad set of customers across industries. We report disaggregated revenue of our U.S. Markets segment for the following verticals:

- ***Financial Services:*** The Financial Services vertical consists of our consumer lending, mortgage, auto and cards and payments lines of business. Our financial services clients consist of most banks, credit unions, finance companies, auto lenders, mortgage lenders, online-only lenders (FinTech), and other consumer lenders in the United States. We also distribute our solutions through most major resellers, secondary market players and sales agents. Beyond traditional lenders, we work with a variety of credit arrangers, such as auto dealers and peer-to-peer lenders. We provide solutions across every aspect of the lending lifecycle; customer acquisition and engagement, fraud and ID management, retention and recovery. Our products are focused on mitigating risk and include credit reporting, credit marketing, analytics and consulting, identity verification and authentication and debt recovery solutions.
- ***Emerging Verticals:*** Emerging Verticals include Healthcare, Insurance, Tenant and Employment, Collections, Public Sector, Media, Diversified Markets and other verticals. Our solutions in these verticals are also data-driven and address the entire customer lifecycle. We offer onboarding and transaction processing products, scoring and analytic products, marketing solutions, fraud and identity management solutions and customer retention solutions.

International

The International segment provides services similar to our U.S. Markets segment to businesses in select regions outside the United States. Depending on the maturity of the credit economy in each country, services may include credit reports, analytics and decisioning services, and other value-added risk management services. In addition, we have insurance, business and automotive databases in select geographies. These services are offered to customers in a number of industries including financial services, insurance, automotive, collections, and communications, and are delivered through both direct and indirect channels. The International segment also provides consumer services similar to those offered by our Consumer Interactive segment that help consumers proactively manage their personal finances and take precautions against identity theft.

We report disaggregated revenue of our International segment for the following regions: Canada, Latin America, the United Kingdom, Africa, India, and Asia Pacific.

Consumer Interactive

The Consumer Interactive segment provides solutions that help consumers manage their personal finances and take precautions against identity theft. Services in this segment include credit reports and scores, credit monitoring, fraud protection and resolution, and financial management for consumers. The segment also provides solutions that help businesses respond to data breach events. Our products are provided through user-friendly online and mobile interfaces and are supported by educational content and customer support. Our Consumer Interactive segment serves consumers through both direct and indirect channels.

Cost of Services

Costs of services include data acquisition and royalty fees, personnel costs related to our databases and software applications, consumer and call center support costs, hardware and software maintenance costs, telecommunication expenses and occupancy costs associated with the facilities where these functions are performed.

Selling, General and Administrative

Selling, general and administrative expenses include personnel-related costs for sales, administrative and management employees, costs for professional and consulting services, advertising and occupancy and facilities expense of these functions.

Non-Operating Income and Expense

Non-operating income and expense includes interest expense, interest income, earnings from equity-method investments, dividends from cost-method investments, impairments of equity-method and cost-method investments, if any, expenses related to successful and unsuccessful business acquisitions, loan fees, debt refinancing expenses, certain acquisition-related gains and losses and other non-operating income and expenses.

Results of Operations

Key Performance Measures

Management, including our chief operating decision maker ("CODM"), evaluates the financial performance of our businesses based on a variety of key indicators. These indicators include the GAAP measures of revenue, segment Adjusted EBITDA, cash provided by operating activities and cash paid for capital expenditures, and the non-GAAP measures Adjusted Revenue and consolidated Adjusted EBITDA. For the three months ended March 31, 2020 and 2019, these key indicators were as follows:

(in millions)	Three Months Ended March 31, 2020	2019	$ Change	% Change
Revenue and Adjusted Revenue:				
Consolidated revenue as reported	$ 687.6	$ 619.3	$ 68.3	11.0 %
Acquisition revenue-related adjustments[1]	—	4.2	(4.2)	nm
Consolidated Adjusted Revenue[2]	$ 687.6	$ 623.5	$ 64.1	10.3 %
U.S. Markets gross revenue	$ 421.9	$ 368.8	$ 53.1	14.4 %
Acquisition revenue-related adjustments[1]	—	0.2	(0.2)	nm
U.S. Markets gross Adjusted Revenue[2]	$ 421.9	$ 369.0	$ 52.9	14.3 %
International gross revenue	$ 157.7	$ 146.0	$ 11.7	8.0 %
Acquisition revenue-related adjustments[1]	—	4.0	(4.0)	nm
International gross Adjusted Revenue[2]	$ 157.7	$ 150.0	$ 7.7	5.2 %
Consumer Interactive gross revenue	$ 126.7	$ 123.4	$ 3.4	2.7 %
Adjusted EBITDA[2]:				
Reconciliation of net income attributable to TransUnion to Adjusted EBITDA[2]:				
Net income attributable to TransUnion	$ 70.2	$ 70.9	$ (0.7)	(1.0)%
Discontinued operations	—	1.6	(1.6)	nm
Net income from continuing operations attributable to TransUnion	70.2	72.5	(2.3)	(3.2)%
Net interest expense	35.8	43.5	(7.7)	(17.8)%
Provision for income taxes	22.3	0.6	21.7	nm
Depreciation and amortization	90.3	93.5	(3.1)	(3.4)%
EBITDA	218.5	210.0	8.5	4.0 %
Adjustments to EBITDA:				
Acquisition revenue-related adjustments[1]	—	4.2	(4.2)	(100.0)%
Stock-based compensation[3]	2.3	12.7	(10.4)	(81.9)%
Mergers and acquisitions, divestitures and business optimization[4]	4.3	11.3	(7.0)	(61.7)%
Accelerated technology investment[5]	2.5	—	2.5	nm
Other[6]	35.7	0.7	35.0	nm
Total adjustments to EBITDA	44.8	28.9	16.0	55.3 %
Consolidated Adjusted EBITDA[2]	$ 263.4	$ 238.9	$ 24.5	10.2 %

(in millions)	Three Months Ended March 31, 2020	2019	$ Change	% Change
U.S. Markets Adjusted EBITDA	$ 171.5	$ 142.0	$ 29.5	20.8 %
International Adjusted EBITDA	60.2	65.0	(4.7)	(7.3)%
Consumer Interactive Adjusted EBITDA	57.4	60.2	(2.8)	(4.7)%
Corporate	(25.8)	(28.3)	2.5	8.8 %
Consolidated Adjusted EBITDA[2]	$ 263.4	$ 238.9	$ 24.5	10.2 %
Other metrics:				
Cash provided by operating activities of continuing operations	$ 125.5	$ 126.2	$ (0.7)	(0.6)%
Capital expenditures	$ (42.0)	$ (41.9)	$ (0.1)	0.2 %

nm: not meaningful

As a result of displaying amounts in millions, rounding differences may exist in the tables above and footnotes below.

(1) This adjustment represents certain non-cash adjustments related to acquired entities, predominantly adjustments to increase revenue resulting from purchase accounting reductions to deferred revenue we record on the opening balance sheets of acquired entities. Deferred revenue results when a company receives payment in advance of fulfilling their performance obligations under contracts. Business combination accounting rules require us to record deferred revenue of acquired entities at fair value if we are obligated to perform any future services under these contracts. The fair value of this deferred revenue is determined based on the direct and indirect incremental costs of fulfilling our performance obligations under these contracts, plus a normal profit margin. Generally, this fair value calculation results in a reduction to the purchased deferred revenue balance. The above adjustment includes an estimate for the increase in revenue equal to the difference between what the acquired entities would have recorded as revenue and the lower revenue we record as a result of the reduced deferred revenue balance. This increase is partially offset by an estimated decrease to revenue for certain acquired non-core customer contracts that are not classified as discontinued operations that will expire within approximately one year from the date of acquisition. Beginning in the third quarter of 2019, we no longer have these adjustments to revenue. We present Adjusted Revenue as a supplemental measure of our revenue because we believe it provides meaningful information regarding our revenue and provides a basis to compare revenue between periods. In addition, our board of directors and executive management team use Adjusted Revenue as a compensation measure under our incentive compensation plans. The table above provides a reconciliation for revenue to Adjusted Revenue.

(2) We define Adjusted Revenue as GAAP revenue adjusted for certain acquisition-related deferred revenue and non-core contract-related revenue. We define Adjusted EBITDA as net income (loss) attributable to the Company before net interest expense, income tax provision (benefit), depreciation and amortization and other adjustments noted in the table above. We present Adjusted Revenue as a supplemental measure of revenue because we believe it provides a basis to compare revenue between periods. We present Adjusted EBITDA as a supplemental measure of our operating performance because it eliminates the impact of certain items that we do not consider indicative of our cash operations and ongoing operating performance. Also, Adjusted EBITDA is a measure frequently used by securities analysts, investors and other interested parties in their evaluation of the operating performance of companies similar to ours. In addition, our board of directors and executive management team use Adjusted EBITDA as a compensation measure under our incentive compensation plan. Furthermore, under the credit agreement governing our Senior Secured Credit Facility, our ability to engage in activities such as incurring additional indebtedness, making investments and paying dividends is tied to a ratio based on Adjusted EBITDA. See "Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources - Debt." Adjusted EBITDA does not reflect our capital expenditures, interest, income tax, depreciation, amortization, stock-based compensation and certain other income and expense. Other companies in our industry may calculate Adjusted EBITDA differently than we do, limiting its usefulness as a comparative measure. Because of these limitations, Adjusted EBITDA should not be considered in isolation or as a substitute for performance measures calculated in accordance with GAAP. Adjusted EBITDA is not a measure of financial condition or profitability under GAAP and should not be considered as an alternative to cash flows from operating activities, as a measure of liquidity or as an alternative to operating income or net income as indicators of operating performance. We believe that the most directly comparable GAAP measure to Adjusted EBITDA is net income attributable to TransUnion. The table above provides a reconciliation from our net income (loss) attributable to TransUnion to consolidated Adjusted EBITDA for the three months ended March 31, 2020 and 2019.

(3) Consisted of stock-based compensation and cash-settled stock-based compensation.

(4) For the three months ended March 31, 2020, consisted of the following adjustments: $3.8 million of Callcredit integration costs; $2.1 million of acquisition expenses; $0.3 million of adjustments to contingent consideration expense from previous acquisitions; a ($1.8) million gain on the disposal of assets of a small business in our United Kingdom region that are classified as held-for-sale; and a ($0.1) million reimbursement for transition services provided to the buyers of certain of our discontinued operations.

For the three months ended March 31, 2019, consisted of the following adjustments: a $5.3 million loss on the impairment of an investment in a nonconsolidated affiliate; $4.2 million of Callcredit integration costs; a $0.9 million adjustment to contingent consideration expense from previous acquisitions; and $0.9 million of acquisition expenses.

(5) Represents expenses associated with our accelerated technology investment.

(6) For the three months ended March 31, 2020, consisted of the following adjustments: $30.5 million of expense incurred in connection with the *Ramirez* litigation as discussed in Part 1, Item 1, footnote 14, "Contingencies"; a $4.9 million loss from currency remeasurement of our foreign operations; $0.4 million of loan fees; $0.2 million of fees related to our new swap agreements; $0.2 million of administrative expenses associated with the Fraud Incident; and a ($0.5) million reimbursement of fees associated with the refinancing of our Senior Secured Credit Facility.

For the three months ended March 31, 2019, consisted of the following adjustments: a $0.3 million loss from currency remeasurement of our foreign operations; and $0.4 million of loan fees.

Revenue

Revenue increased $68.3 million for the three months ended March 31, 2020, compared with the same period in 2019, due primarily to organic growth in all of our segments, including both U.S. Markets Financial Services and Emerging Verticals and most of the International regions, revenue from recent acquisitions in our U.S. Markets segments and revenue from new product initiatives, partially offset by the impact of weakening foreign currencies on revenue from certain International regions. The impact of weakening foreign currencies accounted for a decrease in revenue of 0.9%. While we experienced first quarter 2020 revenue growth of 11% when compared with the first quarter of 2019, since mid-March 2020 the COVID-19 pandemic and widespread measures implemented to contain and mitigate the effects of the virus had, and are expected to continue to have for an inherently uncertain period of time, a material adverse impact on numerous aspects of our business, including customer demand for our services and solutions in all of our segments, and our consolidated financial statements.

Revenue by segment and a more detailed explanation of revenue within each segment are as follows:

	Three Months Ended March 31,			
(in millions)	2020	2019	$ Change	% Change
U.S. Markets:				
Financial Services	$ 230.4	$ 189.1	$ 41.2	21.8 %
Emerging Verticals	191.5	179.7	11.8	6.6 %
U.S. Markets gross revenue	421.9	368.8	53.1	14.4 %
International:				
Canada	26.5	23.0	3.5	15.3 %
Latin America	24.3	25.3	(1.0)	(3.9)%
United Kingdom	48.8	42.2	6.6	15.6 %
Africa	14.3	15.0	(0.7)	(4.7)%
India	30.8	27.7	3.1	11.2 %
Asia Pacific	13.0	12.8	0.2	1.4 %
International gross revenue	157.7	146.0	11.7	8.0 %
Consumer Interactive gross revenue	126.7	123.4	3.4	2.7 %
Total gross revenue	$ 706.3	$ 638.2	$ 68.2	10.7 %
Intersegment revenue eliminations:				
U.S. Markets	$ (17.1)	$ (17.5)	$ 0.4	(2.4)%
International	(1.3)	(1.2)	(0.1)	5.8 %
Consumer Interactive	(0.4)	(0.2)	(0.2)	90.8 %
Total intersegment revenue eliminations	(18.7)	(18.9)	0.2	0.8 %
Total revenue as reported	$ 687.6	$ 619.3	$ 68.3	11.0 %

nm: not meaningful

As a result of displaying amounts in millions, rounding differences may exist in the table above.

U.S. Markets Segment

U.S. Markets revenue increased $53.1 million for the three months ended March 31, 2020, compared with the same periods in 2019, due primarily to increases in revenue from both verticals. While we experienced first quarter 2020 revenue growth in both verticals when compared with the first quarter of 2019, since mid-March 2020 the COVID-19 pandemic and widespread measures implemented to contain and mitigate the effects of the virus had, and are expected to continue to have for an inherently uncertain period of time, a material adverse impact on customer demand for our services and solutions in both verticals.

Financial Services: Revenue increased $41.2 million for the three months ended March 31, 2020, compared with the same period in 2019, due primarily to improvements in market conditions in all of our lines of business when considering the quarter as a whole, particularly in the mortgage line of business, and an increase from new product initiatives.

Emerging Verticals: Revenue increased $11.8 million for the three months ended March 31, 2020, compared with the same period in 2019, due primarily to an increase from new product initiatives and other organic growth in our emerging verticals, particularly our Healthcare, Insurance, Media and Public Sector verticals.

International Segment

International revenue increased $11.7 million, or 8.0%, for the three months ended March 31, 2020, compared with the same period in 2019, due primarily to higher local currency revenue in all regions from increased volumes including new product initiatives, partially offset by a decrease 3.6% from the impact of weakening foreign currencies. While we experienced first quarter 2020 local currency revenue growth in all regions when compared with the first quarter of 2019, since mid-March 2020 the COVID-19 pandemic and widespread measures implemented to contain and mitigate the effects of the virus had, and are expected to continue to have for an inherently uncertain period of time, a material adverse impact on customer demand for our services and solutions in all regions.

Canada: Revenue increased $3.5 million, or 15.3%, for the three months ended March 31, 2020, compared with the same period in 2019, due primarily to higher local currency revenue from increased volumes including new product initiatives, partially offset by a decrease of 0.8% from the impact of weakening foreign currency.

Latin America: Revenue decreased $1.0 million, or 3.9%, for the three months ended March 31, 2020, compared with the same period in 2019, due primarily to a decrease of 9.9% from the impact of weakening foreign currencies, partially offset by higher local currency revenue from increased volumes including new product initiatives.

United Kingdom: Revenue increased $6.6 million, or 15.6% for the three months ended March 31, 2020, compared with the same period in 2019, due primarily to higher local currency revenue from increased volumes including new product initiatives, partially offset by a decrease of 1.5% due to the impact of weakening foreign currencies.

Africa: Revenue decreased $0.7 million, or 4.7%, for the three months ended March 31, 2020, compared with the same period in 2019, due primarily to a decrease of 8.5% from the impact of weakening foreign currencies, partially offset by higher local currency revenue from increased volumes including new product initiatives.

India: Revenue increased $3.1 million, or 11.2%, for the three months ended March 31, 2020, compared with the same period in 2019, due primarily to higher local currency revenue from increased volumes including new product initiatives, partially offset by a decrease of 3.0% from the impact of weakening foreign currency.

Asia Pacific: Revenue increased $0.2 million, or 1.4%, for the three months ended March 31, 2020, compared with the same period in 2019, due primarily to an increase of 1.3% from the impact of strengthening foreign currencies and higher local currency revenue from increased volumes including new product initiatives.

Consumer Interactive Segment

Consumer Interactive revenue increased $3.4 million for the three months ended March 31, 2020, compared with the same period in 2019, due primarily to an increase in revenue in both our direct and indirect channels. While we experienced first quarter revenue growth in both channels when compared with the first quarter of 2019, the COVID-19 pandemic and widespread measures implemented to contain and mitigate the effects of the virus are expected to have for an inherently uncertain period of time a material adverse impact on customer demand for our services and solutions, particularly in our indirect channel.

Operating Expenses

Operating expenses for the three months ended March 31, 2020 and 2019, were as follows:

	Three Months Ended March 31,			
(in millions)	2020	2019	$ Change	% Change
Cost of services	$ 225.1	$ 208.1	$ 17.0	8.2 %
Selling, general and administrative	235.4	195.7	39.7	20.3 %
Depreciation and amortization	90.3	93.5	(3.1)	(3.4)%
Total operating expenses	$ 550.8	$ 497.2	$ 53.6	10.8 %

As a result of displaying amounts in millions, rounding differences may exist in the table above.

The COVID-19 pandemic and widespread measures implemented to contain and mitigate the effects of the virus had, and are expected to continue to have for an inherently uncertain period of time, a material adverse impact on numerous aspects of our business, including customer demand for our services and solutions in all of our segments, and our consolidated financial statements. Certain of our cost of services costs are variable in nature and fluctuate directly with revenu**e.** Certain other costs of services and selling, general and administrative costs are discretionary in nature and management has identified several cost savings measures that can be implemented to a varying extent, depending on the severity of any decline in revenue.

Cost of Services

Cost of services increased $17.0 million for the three months ended March 31, 2020, compared with the same period in 2019.

The increase was due primarily to:

- an increase in product costs resulting from the increase in revenue, primarily in our U.S. Markets segment; and
- an increase in labor costs, as we invested in key strategic growth initiatives;

partially offset by:

- a decrease in stock based compensation due primarily to lower current expected achievement on our performance awards and a reduction of expense for our cash-settleable liability awards due to the decrease in our stock price at March 31, 2020, compared with December 31, 2019; and
- the impact of weakening foreign currencies on the expenses of our International segment.

Selling, General and Administrative

Selling, general and administrative expenses increased $39.7 million for the three months ended March 31, 2020, compared with the same period in 2019.

The increase was due primarily to:

- $30.5 million of expense incurred in connection with the *Ramirez* litigation, as discussed in Part 1, Item 1, footnote 14, “Contingencies”;
- operating and integration-related costs related to the business acquisitions in our U.S. Markets and International segments;
- an increase in advertising costs, primarily in our Consumer Interactive segment; and
- an increase in bad debt expense due to an increase in our estimated reserves including our current expected impact of COVID-19 due to applying ASU No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments;*

partially offset by:

- a decrease in discretionary compensation expense including stock based compensation, due primarily to lower expected achievement on performance-based awards, forfeitures of awards of certain senior executives, and a reduction of expense for our cash-settleable liability awards due to the decrease in our stock price at March 31, 2020, compared with December 31. 2019; and
- the impact of overall weakening foreign currencies on the expenses of our International segment.

Depreciation and Amortization

Depreciation and amortization decreased $3.1 million for the three months ended March 31, 2020, compared with the same period in 2019, primarily in our International and U.S. Markets segment, due primarily to a decrease in amortization related to intangible assets from our 2012 change in control, offset by an increase in depreciation and amortization from other tangible and intangible assets (including a recent business acquisition in our U.S. Markets segment).

Adjusted EBITDA and Adjusted EBITDA margin

(in millions)	Three Months Ended March 31, 2020	2019	$ Change	% Change
Adjusted Revenue:				
U.S. Markets gross Adjusted Revenue	$421.9	$369.0	$ 52.9	14.3 %
International gross Adjusted Revenue	157.7	150.0	7.7	5.2 %
Consumer Interactive gross Adjusted Revenue	126.7	123.4	3.4	2.7 %
Total gross Adjusted Revenue	706.3	642.4	64.0	10.0 %
Less: intersegment revenue eliminations	(18.7)	(18.9)	0.2	0.8 %
Consolidated Adjusted Revenue	$687.6	$623.5	$ 64.1	10.3 %
Adjusted EBITDA[(1)]:				
U.S. Markets	$171.5	$142.0	$ 29.5	20.8 %
International	60.2	65.0	(4.7)	(7.3)%
Consumer Interactive	57.4	60.2	(2.8)	(4.7)%
Corporate	(25.8)	(28.3)	2.5	8.8 %
Consolidated Adjusted EBITDA[(1)]	$263.4	$238.9	$ 24.5	10.2 %
Adjusted EBITDA margin[(1)]:				
U.S. Markets	40.7%	38.5%		2.2 %
International	38.2%	43.3%		(5.1)%
Consumer Interactive	45.3%	48.8%		(3.5)%
Consolidated Adjusted EBITDA margin[(1)]	38.3%	38.3%		— %

As a result of displaying amounts in millions, rounding differences may exist in the table above.

1. See the reconciliation of net income attributable to TransUnion to Consolidated Adjusted EBITDA in the "Key Performance Measures" section at the beginning of our discussion about our Results of Operations. Segment Adjusted EBITDA margins are calculated using segment gross Adjusted Revenue and segment Adjusted EBITDA. Consolidated Adjusted EBITDA margin is calculated using consolidated Adjusted Revenue and consolidated Adjusted EBITDA.

Consolidated Adjusted EBITDA increased $24.5 million for the three months ended March 31, 2020, compared to the same period in 2019. The increase was due primarily to:

- an increase in revenue in all of our segments, including revenue from recent business acquisitions;

partially offset by:

- an increase in operating and integration-related costs related to recent business acquisitions;
- an increase in product costs, due to the increase in revenue;
- an increase in labor costs as we continue to invest in strategic growth initiatives; and
- an increase in advertising costs, primarily in our Consumer Interactive segment.

Adjusted EBITDA margins for the U.S. Markets segment increased due primarily to the increase in revenue, partially offset by the integration-related costs of the recent business acquisitions.

Adjusted EBITDA margins for the International segment decreased due to the impact of COVID-19 on revenue during the second half of March and certain expense benefits realized in 2019 that did not recur in 2020.

Adjusted EBITDA margins for the Consumer Interactive segment decreased due to an increase in advertising costs, partially offset by an increase in revenue.

Non-Operating Income and Expense

(in millions)	Three Months Ended March 31, 2020	2019	$ Change	% Change
Interest expense	$ (37.7)	$ (45.0)	$ 7.3	16.2 %
Interest income	1.9	1.5	0.4	27.9 %
Earnings from equity method investments	2.6	3.8	(1.2)	(32.2)%
Other income and expense, net:				
Acquisition fees	(2.1)	(0.9)	(1.2)	nm
Loan fees	0.1	(0.4)	0.5	nm
Other income (expense), net	(5.0)	(5.6)	0.5	9.5 %
Total other income and expense, net	(7.0)	(6.8)	(0.2)	(2.4)%
Non-operating income and expense	$ (40.2)	$ (46.5)	$ 6.3	13.6 %

nm: not meaningful

As a result of displaying amounts in millions, rounding differences may exist in the table above.

For the three months ended March 31, 2020, interest expense decreased $7.3 million compared with the same period in 2019, due primarily to the impact of the decrease in our average outstanding principal balance and an decrease in the average interest rate for the three-month period. During the last three quarters of 2019 we prepaid $340 million of our Senior Secured Term Loans which impacts the comparability of interest expense between the quarter ended March 31, 2019, and the quarter ended March 31, 2020. We also refinanced our Senior Secured Credit Facility in late 2019 resulting in a lower interest rate. Our future interest expense could be materially impacted by changes in our variable interest rates caused by COVID-19 or other macro-economic factors, to the extent our variable rate debt is not hedged with fixed rate debt.

Acquisition fees represent costs we have incurred for various acquisition-related efforts.

Other income (expense), net includes currency remeasurement gains and losses and other miscellaneous non-operating income and expense items. For the three months ended March 31, 2019, other income (expense), net included a ($5.3 million) loss on the impairment of an investment in a nonconsolidated affiliate.

Provision for Income Taxes

For the three months ended March 31, 2020, we reported an effective tax rate of 23.1%, which was higher than the 21.0% U.S. federal statutory rate due primarily to $16.2 million of various foreign, federal and state tax impacts and $2.1 million valuation allowance for foreign tax credit reserves due to decreased foreign source income, partially offset by $16.2 million of excess tax benefits on stock-based compensation. We periodically assess the recoverability of our deferred tax assets, and a valuation allowance is recorded against deferred tax assets if it is more likely than not that some portion of the deferred tax assets will not be realized. COVID-19 had no material impact on our assessment of the recoverability of our deferred tax assets at March 31, 2020. As additional information becomes available to us, our future assessment of the recoverability of our deferred tax assets could materially and adversely impact our consolidated financial statements in future reporting periods.

For the three months ended March 31, 2019, we reported an effective tax rate of 0.8%, which was lower than the 21.0% U.S. federal statutory rate due primarily to $21.0 million of excess tax benefits on stock-based compensation and $7.9 million of valuation allowance releases on foreign tax credit carryforwards, partially offset by $13.7 million of various foreign, state and federal tax impacts.

Significant Changes in Assets and Liabilities

Total goodwill at March 31, 2020, compared with December 31, 2019, was due to the impact of changes in the foreign exchange rates of our international operations relative to the U.S. dollar on the translated balances of our foreign goodwill. Total other intangible assets at March 31, 2020, compared with December 31, 2019, was due to the impact of changes in the foreign exchange rates of our international operations relative to the U.S. dollar on the translated balances of our foreign goodwill and additional investments in internally developed software, offset by additional amortization during the first quarter of 2020.

Liquidity and Capital Resources

Overview

Our principal sources of liquidity are cash flows provided by operating activities, cash and cash equivalents on hand, and our Senior Secured Revolving Credit Facility. Our principal uses of liquidity are working capital, capital expenditures, debt service and other capital structure payments, business acquisitions and other general corporate purposes. We believe our cash on hand, cash generated from operations, and funds available under the Senior Secured Credit Facility will be sufficient to fund our operating needs, planned capital expenditures, debt service and other capital structure payments, and business acquisitions for the foreseeable future. Since mid-March 2020, the COVID-19 pandemic and widespread measures implemented to contain and mitigate the effects of the virus had, and are expected to continue to have for an inherently uncertain period of time, a material adverse impact on numerous aspects of our business, including customer demand for our services and solutions in all of our segments, and our consolidated financial statements. At this time, however, we do not expect the impact of COVID-19 to impact our ability to fund these needs for the foreseeable future. Our ability to maintain adequate liquidity for our operations in the future is dependent upon a number of factors, including our revenue, macroeconomic conditions, the length and severity of business disruptions caused by COVID-19, our ability to contain costs, including capital expenditures, and to collect accounts receivable, and various other factors, many of which are beyond our control. We will continue to monitor our liquidity position and may elect to raise funds through debt or equity financing in the future to fund operations, significant investments or acquisitions that are consistent with our growth strategy. In addition, if the pandemic continues to create significant disruptions in the credit or financial markets, or impacts our credit ratings, it could adversely affect our ability to access capital on favorable terms or at all.

Cash and cash equivalents totaled $305.7 million and $274.1 million at March 31, 2020, and December 31, 2019, respectively, of which $206.8 million and $176.5 million was held outside the United States in each respective period. As of March 31, 2020, we had no outstanding balance under the Senior Secured Revolving Credit Facility and $0.1 million of outstanding letters of credit, and could have borrowed up to the remaining $299.9 million available.

TransUnion also has the ability to request incremental loans on the same terms under the Senior Secured Credit Facility up to the greater of $1,000.0 million and 100% of consolidated EBITDA for the four quarters preceding the measurement date, and may incur additional incremental loans so long as the senior secured net leverage ratio does not exceed 4.25-to-1, subject to certain additional conditions and commitments by existing or new lenders to fund any additional borrowings.

With certain exceptions, the Senior Secured Credit Facility obligations are secured by a first-priority security interest in substantially all of the assets of Trans Union LLC, including its investment in subsidiaries. The Senior Secured Credit Facility contains various restrictions and nonfinancial covenants, along with a senior secured net leverage ratio test. The nonfinancial covenants include restrictions on dividends, investments, dispositions, future borrowings and other specified payments, as well as additional reporting and disclosure requirements. The senior secured net leverage test must be met as a condition to incur additional indebtedness, make certain investments, and may be required to make certain restricted payments. The senior secured net leverage ratio must not exceed 5.5-to-1 at any such measurement date.

The balance retained in cash and cash equivalents is consistent with our short-term cash needs and investment objectives. We may be required to make additional principal payments on the Senior Secured Term Loans B-5 and A-3 based on excess cash flows of the prior year, as defined in the credit agreement. There were no excess cash flows for 2019 and therefore no additional payment was required in 2020. Additional payments based on excess cash flows could be due in future years. See Part I, Item 1, Note 8 “Debt,” for additional information about our debt.

During the first quarter of 2020, 0.9 million outstanding employee restricted stock units vested and became taxable to the employees. The employees used 0.3 million shares of the vested stock to satisfy their payroll tax withholding obligations in a net share settlement arrangement whereby the employees received 0.6 million of the shares and gave TransUnion the remaining 0.3 million shares that we have recorded as treasury stock. We remitted cash equivalent to the $32.1 million vest date value of the treasury stock to the respective governmental agencies in settlement of the employee withholding tax obligations. On occasion, as other stock units vest or stock options are exercised, employees use shares of stock to satisfy their payroll tax withholding obligations in a net settlement arrangement and we remit the equivalent value of those shares to the respective governmental agencies.

On February 28, 2020, the board of directors declared a dividend of $0.075 per share to holders of record as of the close of business on March 13, 2020. The total dividend declared was $14.4 million, of which $14.2 million was paid on March 30, 2020, with the remainder due as dividend equivalents to employees who hold restricted stock units when and if those units vest. An additional $0.5 million of dividend equivalents were paid to employees whose restricted stock units vested in the first quarter of 2020.

Any determination to pay dividends in the future will be at the discretion of our board of directors and will depend upon results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law and other factors our board of directors deems relevant. We currently have capacity and intend to continue to pay a quarterly dividend, subject to approval by our board. While we are comfortable paying the dividend at this time, if circumstances further deteriorate, we would consider recommending that our board temporarily reduce or suspend our dividend.

On February 13, 2017, our board of directors authorized the repurchase of up to $300.0 million of our common stock over the next 3 years. Our board of directors removed the three-year time limitation on February 8, 2018. To date, we have repurchased $133.5 million of our common stock and have the ability to repurchase the remaining $166.5 million.

We have no obligation to repurchase additional shares, and the timing, actual number and value of the shares that are repurchased, if any, will be at the discretion of management and will depend on a number of factors, including market conditions, the cost of repurchasing shares, the availability of alternative investment opportunities, liquidity, and other factors deemed appropriate. Repurchases may be suspended, terminated or modified at any time for any reason. Any repurchased shares will have the status of treasury shares and may be used, if and when needed, for general corporate purposes. While the existing share repurchase program remains authorized by the board of directors, given the uncertainties arising from the COVID-19 pandemic, we do not intend to repurchase additional shares in the short term. We may resume share repurchases in the future at any time, depending upon market conditions, our capital needs and other factors.

Sources and Uses of Cash

	Three Months Ended March 31,		
(in millions)	2020	2019	Change
Cash provided by operating activities of continuing operations	$ 125.5	$ 126.2	$ (0.7)
Cash used in investing activities of continuing operations	(25.5)	(50.9)	25.4
Cash (used in) provided by financing activities	(49.7)	(59.9)	10.2
Cash used in discontinued operations	—	(2.4)	2.4
Effect of exchange rate changes on cash and cash equivalents	(18.7)	0.5	(19.2)
Net change in cash and cash equivalents	$ 31.6	$ 13.5	$ 18.1

Operating Activities

The increase in cash provided by operating activities of continuing operations was due primarily to an increase in operating performance and lower interest expense in 2020 was offset by an increase in working capital in 2020.

Investing Activities

The decrease in cash used in investing activities was due primarily to an increase in net proceeds received from the sale of other investments, partially offset by cash used to purchase an investment in a nonconsolidated affiliate.

Financing Activities

The decrease in cash used in financing activities was due primarily to lower debt repayments and employee taxes paid on restricted stock units.

Capital Expenditures

We make capital expenditures to grow our business by developing new and enhanced capabilities, to increase the effectiveness and efficiency of the organization and to reduce risks. We make capital expenditures for product development, disaster recovery, security enhancements, regulatory compliance, and the replacement and upgrade of existing equipment at the end of its useful life.

Cash paid for capital expenditures increased $0.1 million, from $41.9 million for the three months ended March 31, 2019, to $42.0 million for the three months ended March 31, 2020.

Debt

Hedges

On March 10, 2020, we entered into two tranches of interest rate swap agreements with various counter-parties that effectively fix our LIBOR exposure on a portion of our Senior Secured Term Loans or similar replacement debt. The first tranche commences on June 30, 2020 and expires on June 30, 2022 with an initial notional amount of $1,150.0 million that amortizes each quarter.

The first tranche requires TransUnion to pay fixed rates varying between 0.5200% and 0.5295% in exchange for receiving a variable rate that matches the variable rate on our loans. The second tranche commences on June 30, 2022 and expires on June 30, 2025 with an initial notional amount of $1,110.0 million that amortizes each quarter. The second tranche requires TransUnion to pay fixed rates varying between 0.9125% and 0.9280% in exchange for receiving a variable rate that matches the variable rate on our loans. We have designated these swap agreements as cash flow hedges.

On December 17, 2018, we entered into interest rate swap agreements with various counter-parties that effectively fix our LIBOR exposure on a portion of our Senior Secured Term Loans or similar replacement debt, which is currently fixed at 2.702% and 2.706%. We have designated these swap agreements as cash flow hedges. The current aggregate notional amount under these agreements is $1,425.0 million, decreasing each quarter until the second agreement terminates on December 30, 2022.

On December 18, 2015, we entered into interest rate cap agreements with various counter-parties that effectively cap our LIBOR exposure on a portion of our Senior Secured Term Loans or similar replacement debt at 0.75% beginning June 30, 2016. We have designated these cap agreements as cash flow hedges. The current aggregate notional amount under these agreements is $1,246.9 million and will continue to decrease each quarter until the agreement terminates on June 30, 2020. We began to pay the various counter-parties a fixed rate on the outstanding notional amounts of between 0.98% and 0.994% and receive payments to the extent LIBOR exceeds 0.75%.

Effect of Certain Debt Covenants

A breach of any of the covenants under the agreements governing our debt could limit our ability to borrow funds under the Senior Secured Revolving Credit Facility and could result in a default under the Senior Secured Credit Facility. Upon the occurrence of an event of default under the Senior Secured Credit Facility, the lenders could elect to declare all amounts then outstanding to be immediately due and payable, and the lenders could terminate all commitments to extend further credit. If we were unable to repay the amounts declared due, the lenders could proceed against any collateral granted to them to secure that indebtedness.

With certain exceptions, the Senior Secured Credit Facility obligations are secured by a first-priority security interest in substantially all of the assets of Trans Union LLC, including its investment in subsidiaries. The Senior Secured Credit Facility contains various restrictions and nonfinancial covenants, along with a senior secured net leverage ratio test. The nonfinancial covenants include restrictions on dividends, investments, dispositions, future borrowings and other specified payments, as well as additional reporting and disclosure requirements. The senior secured net leverage test must be met as a condition to incur additional indebtedness, make certain investments, and may be required to make certain restricted payments. The senior secured net leverage ratio must not exceed 5.5-to-1 at any such measurement date. As of March 31, 2020, we were in compliance with all debt covenants.

Our ability to meet our liquidity needs or to pay dividends on our common stock depends on our subsidiaries' earnings, the terms of our indebtedness, and other contractual restrictions. Trans Union LLC, the borrower under the Senior Secured Credit Facility, is not permitted to declare any dividend or make any other distribution subject to certain exceptions. TransUnion may make dividend payments up to the greater of $75 million or 7.5% of Consolidated EBITDA per year, or an unlimited amount provided that no default or event of default exists and so long as the total net leverage ratio does not exceed 4.75-to-1. As of March 31, 2020, we were in compliance with all debt covenants.

For additional information about our debt and hedge, see Part I, Item 1, "Notes to Unaudited Consolidated Financial Statements," Note 8, "Debt."

Recent Accounting Pronouncements

See Part I, Item 1, "Notes to Unaudited Consolidated Financial Statements," Note 1, "Significant Accounting and Reporting Policies," for information about recent accounting pronouncements and the impact on our consolidated financial statements.

Application of Critical Accounting Estimates

We prepare our consolidated financial statements in conformity with generally accepted accounting principles ("GAAP"). The notes to our consolidated financial statements include disclosures about our significant accounting policies. These accounting policies require us to make certain judgments and estimates in reporting our operating results and our assets and liabilities. The following paragraphs describe the accounting policies that require significant judgment and estimates due to inherent uncertainty or complexity.

See Note 1, "Significant Accounting and Reporting Policies," to the financial statements included in this Quarterly Report on Form 10-Q, which includes certain updates to our accounting policies, including our critical accounting estimates, based on our current expectations of the impact of COVID-19. Although we believe that our estimates and judgments are reasonable, they are based on information reasonably available at this time, and actual results may differ from these estimates under different conditions. See also the "Application of Critical Accounting Estimates" section in "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 1, "Significant Accounting and Reporting Policies," to our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 18, 2020, for additional information.

Cautionary Notice Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are based on the current beliefs and expectations of TransUnion's management and are subject to significant risks and uncertainties. Actual results may differ materially from those described in the forward-looking statements. Any statements made in this report that are not statements of historical fact, including statements about our beliefs and expectations, are forward-looking statements. Forward-looking statements include information concerning possible or assumed future results of operations, including descriptions of our business plans and strategies. These statements often include words such as "anticipate," "expect," "guidance," "suggest," "plan," "believe," "intend," "estimate," "target," "project," "should," "could," "would," "may," "will," "forecast," "outlook," "potential," "continues," "seeks," "predicts," or the negatives of these words and other similar expressions.

Factors that could cause actual results to differ materially from those described in the forward-looking statements. Factors that could materially affect our financial results or such forward-looking statements include:

- the effects of the COVID-19 pandemic;
- the timing of the recovery following the COVID-19 pandemic;
- macroeconomic and industry trends and adverse developments in the debt, consumer credit and financial services markets;
- our ability to provide competitive services and prices;
- our ability to retain or renew existing agreements with large or long-term customers;
- our ability to maintain the security and integrity of our data;
- our ability to deliver services timely without interruption;
- our ability to maintain our access to data sources;
- government regulation and changes in the regulatory environment;
- litigation or regulatory proceedings;
- regulatory oversight of "critical activities";
- our ability to effectively manage our costs;
- economic and political stability in the United States and international markets where we operate;
- our ability to effectively develop and maintain strategic alliances and joint ventures;
- our ability to timely develop new services and the market's willingness to adopt our new services;
- our ability to manage and expand our operations and keep up with rapidly changing technologies;
- our ability to make acquisitions and successfully integrate the operations of acquired businesses and realize the intended benefits of such acquisitions;
- our ability to protect and enforce our intellectual property, trade secrets and other forms of unpatented intellectual property;
- our ability to defend our intellectual property from infringement claims by third parties;
- the ability of our outside service providers and key vendors to fulfill their obligations to us;
- further consolidation in our end-customer markets;

- the increased availability of free or inexpensive consumer information;
- losses against which we do not insure;
- our ability to make timely payments of principal and interest on our indebtedness;
- our ability to satisfy covenants in the agreements governing our indebtedness;
- our ability to maintain our liquidity;
- share repurchase plans; and
- our reliance on key management personnel.

There may be other factors, many of which are beyond our control, that may cause our actual results to differ materially from the forward-looking statements, including factors disclosed in our Annual Report on Form 10-K for the year ended December 31, 2019, and any subsequent Quarterly Report on Form 10-Q or Current Report on Form 8-K filed with the Securities and Exchange Commission, and in this report under the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in this report. You should evaluate all forward-looking statements made in this report in the context of these risks and uncertainties.

The forward-looking statements contained in this report speak only as of the date of this report. We undertake no obligation to publicly release the result of any revisions to these forward-looking statements, to reflect the impact of events or circumstances that may arise after the date of this report.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no other material changes from the quantitative and qualitative disclosures about market risk included in our Annual Report on Form 10-K for the year ended December 31, 2019.

In the normal course of business we are exposed to market risk, primarily from changes in variable interest rates and foreign currency exchange rates, which could impact our results of operations and financial position. We manage the exposure to this market risk through our regular operating and financing activities. We may use derivative financial instruments, such as foreign currency and interest rate hedges, but only as a risk management tool and not for speculative or trading purposes.

Interest Rate Risk

Our Senior Secured Credit Facility consists of Senior Secured Term Loans and a $300.0 million Senior Secured Revolving Credit Facility. Interest rates on these borrowings are based, at our election, on LIBOR or an alternate base rate, subject to floors, plus applicable margins based on applicable net leverage ratios. We currently have several interest rate hedge instruments that effectively fixes our LIBOR exposure on approximately 73% of our outstanding debt. Based on the amount of unhedged outstanding variable-rate debt, we have a material exposure to interest rate risk. In the future our exposure to interest rate risk may change due to changes in the amount borrowed, changes in interest rates, or changes in the amount we have hedged. Since the onset of the COVID-19 pandemic, LIBOR has dropped significantly, and may be more volatile in the future, which could materially impact our total interest expense due to the unhedged portion of our debt. The amount of our outstanding debt, and the ratio of fixed-rate debt to variable-rate debt, can be expected to vary as a result of future business requirements, market conditions or other factors.

See Part I, Item 1, "Notes to Unaudited Consolidated Financial Statements," Note 8, "Debt," for additional information about interest rates on our debt.

Foreign Currency Exchange Rate Risk

A substantial majority of our revenue, expense and capital expenditure activities are transacted in U.S. dollars. However, we transact business in a number of foreign currencies, including British pounds sterling, the South African rand, the Canadian dollar, the Indian rupee, the Colombian peso and the Brazilian real. In reporting the results of our foreign operations, we benefit from a weaker U.S. dollar and are adversely affected by a stronger U.S. dollar relative to the foreign currencies.

We are required to translate the assets and liabilities of our foreign subsidiaries that are measured in foreign currencies at the applicable period-end exchange rate in our consolidated balance sheets. We are required to translate revenue and expenses at the average exchange rates prevailing during the year in our consolidated statements of income. The resulting translation adjustment is included in other comprehensive income, as a component of stockholders' equity. Transaction gains and losses that arise from exchange rate fluctuations on transactions denominated in a currency other than the functional currency are included in other income and expense as incurred.

Since the onset of the COVID-19 pandemic, the U.S. dollar has strengthened against many of the currencies in the countries in which we operate, which has adversely impacted our results of operations. COVID-19 may continue to create volatile exchange rates that could materially and adversely impact our consolidated financial statements in the future.

ITEM 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. The term "disclosure controls and procedures" as defined in Rules 13a-15(e) and 15d-15(e) under the 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 SEC's rules and forms.

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 the end of the period covered by this report, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at a reasonable assurance level.

Changes in Internal Controls over Financial Reporting

During the quarter covered by this report, there have been no changes in our internal controls over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

General

The following discussion describes material developments in previously disclosed material legal proceedings that occurred in the three months ended March 31, 2020. Refer to Part I, Item 3, "Legal Proceedings," of our Annual Report on Form 10-K for the year ended December 31, 2019, for a full description of our material pending legal proceedings.

Ramirez v. Trans Union LLC

On February 27, 2020, the United States Court of Appeals for the Ninth Circuit issued its opinion in *Ramirez v. Trans Union LLC*, (No. 3:12-cv-00632-JSC, United States District Court for the Northern District of California), which affirmed in part and reversed and vacated in part the trial court's judgment, holding that the punitive damages award was excessive in violation of constitutional due process. The appeals court remanded the case to the trial court with instructions to reduce the punitive damages award from approximately $52.0 million ($6,353.08 per class member) to approximately $32.0 million ($3,936.88 per class member). On April 8, 2020, the Ninth Circuit denied our petition for rehearing en banc. We determined that punitive damages were probable and reasonably estimable and recorded an estimated liability at March 31, 2020, in an amount equal to the portion of the punitive damages award affirmed by the Ninth Circuit and a partially offsetting insurance receivable, with expense of $30.5 million recorded in selling, general and administrative expense. We also recorded a related tax benefit of $7.6 million in our provision for income taxes. The extent of our insurance coverage for punitive damages in this matter is uncertain and may be less than the full amount affirmed by the Ninth Circuit. Despite the jury verdict and Ninth Circuit opinion, we continue to believe that we have not willfully violated any law. We are evaluating further appropriate post-judgment actions seeking further modification of the judgment, have engaged with our insurance carriers and will aggressively pursue all potential recoveries.

ITEM 1A. RISK FACTORS

The following discussion supplements the discussion of risk factors affecting the Company as set forth in Part I, Item 1A, "Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2019, and "Cautionary Statement Regarding Forward-Looking Statements" of this Form 10-Q. The discussion of risk factors, as so supplemented, sets forth the material risk factors that could materially affect our business, financial condition or future results. The risks described in our Annual Report on Form 10-K for the year ended December 31, 2019, and this Quarterly Report on Form 10-Q are not the only risks facing TransUnion. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial may also materially and adversely impact our business, financial condition, results of operations and cash flows.

Our results of operations have been materially and adversely impacted and could be materially and adversely impacted in the future by the COVID-19 global pandemic.

The global spread and unprecedented impact of COVID-19 has created significant volatility, uncertainty and economic disruption. The extent to which the COVID-19 pandemic impacts our business, operations, and consolidated financial statements will depend on numerous evolving factors that we may not be able to accurately predict, including: the duration, scope, and severity of the pandemic; the impact on worldwide macroeconomic conditions, including interest rates, employment rate, consumer confidence, and foreign exchange rates in each of the markets in which we operate; governmental, business, and individuals' actions that have been, and continue to be, taken in response to the pandemic (which could include limitations on or changes to our operations or mandates to provide services); the effect on our customers; changes in customer and consumer demand for our services; the effect on consumer confidence and spending; our ability to sell and provide our services, including the impact of travel restrictions and people working from home; the ability of our customers to pay for our services; the health of, and the effect on, our workforce; and the potential effects on our internal controls, including those over financial reporting, as a result of changes in working environments for our employees and business partners.

The global spread of COVID-19 and measures taken by governmental authorities in response to the pandemic have already had a material adverse impact on numerous aspects of our business, including customer demand for our services and solutions, our consolidated financial statements and the trading price of our securities. In the last two weeks of March 2020, we experienced revenue declines, a trend which we expect to continue, and potentially worsen, into the second quarter of 2020 and beyond. If the current trend continues, we also expect our consolidated financial statements to be materially and adversely impacted as a result of the pandemic in 2020. In addition, if the pandemic continues to create significant disruptions in the credit or financial markets, or impacts our credit ratings, it could adversely affect our ability to access capital on favorable terms or at all. The impact of COVID-19 may also heighten other risks discussed in our Annual Report on Form 10-K, which could materially and adversely impact our business, consolidated financial statements and stock price.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

(a) Recent Sales of Unregistered Securities

Not applicable.

(b) Use of Proceeds

Not applicable.

(c) Issuer Purchases of Equity Securities

	(a) Total Number of Shares Purchased	(b) Average Price Paid Per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Approximate Dollar Value, in millions, of Shares that May Yet Be Purchased Under the Plans or Programs[1]
January 1 to January 31	1,708	$ 88.10	—	$ 166.6
February 1 to February 29	329,144	97.76	—	$ 166.6
March 1 to March 31	2,858	93.54	—	$ 166.6
Total	333,710	$ 97.68	—	

Shares shown in column (a) above consist of shares that were repurchased from employees for withholding taxes on options exercised and restricted stock units vesting pursuant to the terms of the Company's equity compensation plans and net settled.

(1) On February 13, 2017, our board of directors authorized the repurchase of up to $300.0 million of common stock over the next three years. On February 8, 2018, our board of directors removed the three-year time limitation. Prior to the second quarter of 2018, we had purchased approximately $133.4 million of common stock under the program and may purchase up to an additional $166.6 million. Additional repurchases may be made from time to time at management's discretion at prices management considers to be attractive through open market purchases or through privately negotiated transactions, subject to availability. Open market purchases will be conducted in accordance with the limitations set forth in Rule 10b-18 of the Exchange Act and other applicable legal requirements.

ITEM 6. EXHIBITS

3.1	Second Amended and Restated Certificate of Incorporation of TransUnion (Incorporated by reference to Exhibit 4.1 to TransUnion's Registration Statement on Form S-8 filed June 26, 2015).
3.2	Second Amended and Restated Bylaws of TransUnion Amended as of August 7, 2019 (Incorporated by reference to Exhibit 3.1 to TransUnion's Quarterly Report on Form 10-Q filed October 22, 2019).
31.1**	TransUnion Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2**	TransUnion Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32**	TransUnion Certification of 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.
101.SCH**	XBRL Taxonomy Extension Schema Document.
101.CAL**	XBRL Taxonomy Extension Calculation Linkbase Document.
101.LAB**	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE**	XBRL Taxonomy Extension Presentation Linkbase Document.
101.DEF**	XBRL Taxonomy Extension Definition Linkbase Document.
104	The cover page from this Quarterly Report on Form 10-Q for the quarter ended September 30, 2019, formatted in Inline XBRL (included with Exhibit 101 attachments).

** Filed or furnished herewith.

SIGNATURES

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

TransUnion

April 28, 2020 By /s/ Todd M. Cello
Todd M. Cello
Executive Vice President, Chief Financial Officer

April 28, 2020 By /s/ Timothy Elberfeld
Timothy Elberfeld
Senior Vice President, Chief Accounting Officer
(Principal Accounting Officer)