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

FORM 10-Q

(Mark One)

 \boxtimes QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the quarterly period ended September 30, 2019

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 001-35985

CDW CORPORATION

(Exact name of registrant as specified in its charter)

Delaware 26-0273989 other jurisdiction of (I.R.S. Employer

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

75 Tri-State International Lincolnshire , Illinois

60069

(Address of principal executive offices)

(Zip Code)

(847) 465-6000

(Registrant's telephone number, including area code)

None

(Former name, former address and former fiscal year, if changed since last report)

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, par value \$0.01 per share	CDW	Nasdaq Global Select Market

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 pr	receding 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.	
\square 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).

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a 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:

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Large accelerated filer	\boxtimes	Accelerated filer			
Non-accelerated filer		Smaller reporting company			
		Emerging growth company			
If an emerging growth company, indicate by check mark if the registrant financial accounting standards provided pursuant to Section 13(a) of the Ex		to use the extended transition period for complying with any new or revised			
Indicate by check mark whether the registrant is a shell company (as define As of October 28, 2019, there were 143,680,653 shares of common stock, \$		<i>C</i> ,			

CDW CORPORATION AND SUBSIDIARIES FORM 10-Q

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PART I—FINANCIAL INFORMATION

Item 1. Financial Statements

CDW CORPORATION AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS

(in millions, except per-share amounts)

(De	cember 31,
Aggeta		ember 30, 2019		2018
Assets Current assets:	((unaudited)		
Cash and cash equivalents	\$	166.9	\$	205.8
Accounts receivable, net of allowance for doubtful accounts of \$9.1 and \$7.0, respectively	Φ	2,899.5	Ф	2,671.2
Merchandise inventory		603.6		454.3
Miscellaneous receivables		432.2		316.4
Prepaid expenses and other		193.1		149.1
Total current assets				
		4,295.3 84.2		3,796.8
Operating lease right-of-use assets		171.1		156.1
Property and equipment, net				
Goodwill		2,515.9		2,462.8
Other intangible assets, net		616.1		712.2
Other assets	<u></u>	20.5	Φ.	39.8
Total Assets	\$	7,703.1	\$	7,167.7
Liabilities and Stockholders' Equity				
Current liabilities:				
Accounts payable-trade	\$	1,900.0	\$	1,577.1
Accounts payable-inventory financing		411.7		429.3
Current maturities of long-term debt		25.4		25.3
Contract liabilities		212.1		178.3
Accrued expenses and other current liabilities:				
Compensation		191.4		186.4
Advertising		158.0		119.2
Sales and income taxes		51.4		55.5
Other		291.0		232.0
Total current liabilities		3,241.0		2,803.1
Long-term liabilities:				
Debt		3,259.0		3,183.3
Deferred income taxes		111.3		141.9
Operating lease liabilities		81.7		_
Other liabilities		75.0		64.2
Total long-term liabilities	· ·	3,527.0		3,389.4
Stockholders' equity:				
Preferred stock, \$0.01 par value, 100.0 shares authorized; no shares issued or outstanding for both periods		_		_
Common stock, \$0.01 par value, 1,000.0 shares authorized; 143.9 and 147.7 shares outstanding, respectively		1.4		1.5
Paid-in capital		3,073.2		2,996.9
Accumulated deficit		(1,985.4)		(1,892.6)
Accumulated other comprehensive loss		(154.1)		(130.6)
Total stockholders' equity		935.1		975.2
Total Liabilities and Stockholders' Equity	\$	7,703.1	\$	7,167.7

CDW CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS

(in millions, except per-share amounts) (unaudited)

	7	Three Months En	ded Se	ptember 30,	 Nine Months En	ded Se	ptember 30,
		2019		2018	2019		2018
Net sales	\$	4,907.7	\$	4,373.2	\$ 13,495.5	\$	12,165.7
Cost of sales		4,091.2		3,659.6	11,233.1		10,152.6
Gross profit		816.5		713.6	2,262.4		2,013.1
Selling and administrative expenses		444.9		390.7	1,269.3		1,134.8
Advertising expense		51.0		48.1	143.3		133.9
Operating income		320.6		274.8	849.8		744.4
Interest expense, net		(42.3)		(36.6)	(121.1)		(111.5)
Other (expense) income, net		(17.4)		0.2	(15.0)		1.0
Income before income taxes		260.9		238.4	713.7		633.9
Income tax expense		(59.2)		(54.7)	(162.5)		(150.2)
Net income	\$	201.7	\$	183.7	\$ 551.2	\$	483.7
Net income per common share:							
Basic	\$	1.39	\$	1.22	\$ 3.78	\$	3.19
Diluted	\$	1.37	\$	1.20	\$ 3.72	\$	3.14
Weighted-average common shares outstanding:							
Basic		144.5		150.9	145.7		151.6
Diluted		147.2		153.7	148.2		154.1

CDW CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(in millions) (unaudited)

	Three Months Ended September 30,				Nine Months Ended Septe			ptember 30,
		2019		2018		2019		2018
Net income	\$	201.7	\$	183.7	\$	551.2	\$	483.7
Other comprehensive income (loss):								
Unrealized (loss) gain from hedge accounting, net of tax		(0.4)		(1.0)		(12.8)		3.1
Reclassification of hedge accounting gain to net income, net of tax		0.3		1.1		2.0		2.5
Foreign currency translation, net of tax		(14.6)		(3.2)		(12.7)		(17.9)
Other comprehensive loss		(14.7)		(3.1)		(23.5)		(12.3)
Comprehensive income	\$	187.0	\$	180.6	\$	527.7	\$	471.4

CDW CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(in millions) (unaudited)

	Comm	on Stock									
	Shares	A	mount	- Paid-in Capital				Accumulated Other t Comprehensive Loss		Total Stockholders' Equity	
Balance as of June 30, 2019	145.0	\$	1.5	\$	3,047.6	\$	(1,973.6)	\$	(139.4)	\$	936.1
Net income	_		_		_		201.7		_		201.7
Equity-based compensation expense	_		_		12.9		_		_		12.9
Stock option exercises	0.3		_		8.6		_		_		8.6
Coworker stock purchase plan	_		_		3.9		_		_		3.9
Repurchases of common stock	(1.4)		(0.1)		_		(161.0)		_		(161.1)
Dividends paid (\$0.295 per share)	_		_		0.2		(42.8)		_		(42.6)
Incentive compensation plan stock withheld for taxes	_		_		_		(9.7)		_		(9.7)
Foreign currency translation	_		_		_		_		(14.6)		(14.6)
Unrealized loss from hedge accounting	_		_		_		_		(0.4)		(0.4)
Realized gain from hedge accounting	_		_		_		_		0.3		0.3
Balance as of September 30, 2019	143.9	\$	1.4	\$	3,073.2	\$	(1,985.4)	\$	(154.1)	\$	935.1

Three Months Ended September 30, 2018

	Comn	non Stock				_
	Shares	Amount	Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
Balance as of June 30, 2018	151.5	\$ 1.5	\$ 2,953.3	\$ (1,780.8)	\$ (105.1)	\$ 1,068.9
Net income	_	_	_	183.7	_	183.7
Equity-based compensation expense	_	_	9.9	_	_	9.9
Stock option exercises	_	_	4.5	_	_	4.5
Coworker stock purchase plan	_	_	3.0	_	_	3.0
Repurchases of common stock	(0.6)	_	_	(56.1)	_	(56.1)
Dividends paid (\$0.210 per share)	_	_	0.2	(31.9)	_	(31.7)
Incentive compensation plan stock withheld for taxes	_	_	_	(18.4)	_	(18.4)
Foreign currency translation	_	_	_	_	(3.2)	(3.2)
Unrealized loss from hedge accounting	_	_	_	_	(1.0)	(1.0)
Realized gain from hedge accounting	_	_	_	_	1.1	1.1
Balance as of September 30, 2018	150.9	\$ 1.5	\$ 2,970.9	\$ (1,703.5)	\$ (108.2)	\$ 1,160.7

Nine Months Ended September 30, 2019

	Comm	on Stock									
	Shares	A	Amount	- Paid-in Capital						Total Stockholders' Equity	
Balance as of December 31, 2018	147.7	\$	1.5	\$	2,996.9	\$	(1,892.6)	\$	(130.6)	\$	975.2
Net income	_		_		_		551.2		_		551.2
Equity-based compensation expense	_		_		36.9		_		_		36.9
Stock option exercises	1.0		_		27.6		_		_		27.6
Coworker stock purchase plan	_		_		11.2		_		_		11.2
Repurchases of common stock	(4.8)		(0.1)		_		(493.2)		_		(493.3)
Dividends paid (\$0.885 per share)	_		_		0.6		(129.5)		_		(128.9)
Incentive compensation plan stock withheld for taxes	_		_		_		(21.3)		_		(21.3)
Foreign currency translation	_		_		_		_		(12.7)		(12.7)
Unrealized loss from hedge accounting	_		_		_		_		(12.8)		(12.8)
Realized gain from hedge accounting	_		_		_		_		2.0		2.0
Balance as of September 30, 2019	143.9	\$	1.4	\$	3,073.2	\$	(1,985.4)	\$	(154.1)	\$	935.1

Nine Months Ended September 30, 2018

					-		
	Comn	non Stock	_				
	Shares	Amount	_	Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
Balance as of December 31, 2017	153.1	\$ 1.5	\$	2,911.6	\$ (1,831.6)	\$ (95.9)	\$ 985.6
Net income	_	_		_	483.7	_	483.7
Equity-based compensation expense	_	_		26.0	_	_	26.0
Stock option exercises	0.7	_		24.4	_	_	24.4
Coworker stock purchase plan	0.1	_		8.4	_	_	8.4
Repurchases of common stock	(3.0)	_		_	(232.5)	_	(232.5)
Dividends paid (\$0.640 per share)	_	_		0.5	(96.0)	_	(95.5)
Incentive compensation plan stock withheld for taxes	_	_		_	(27.1)	_	(27.1)
Foreign currency translation	_	_		_	_	(17.9)	(17.9)
Unrealized gain from hedge accounting	_	_		_	_	3.1	3.1
Realized gain from hedge accounting	_	_		_	_	2.5	2.5
Balance as of September 30, 2018	150.9	\$ 1.5	\$	2,970.9	\$ (1,703.5)	\$ (108.2)	\$ 1,160.7

CDW CORPORATION AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS (in millions)

(unaudited)

	Nine Months En	ded September 30,
	2019	2018
Cash flows from operating activities:		
Net income	\$ 551.2	\$ 483.7
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	197.5	198.3
Equity-based compensation expense	37.7	29.9
Deferred income taxes	(33.5)	(39.2
Other	25.2	8.7
Changes in assets and liabilities:		
Accounts receivable	(171.8)	(334.3
Merchandise inventory	(151.1)	(72.
Other assets	(82.2)	(66.
Accounts payable-trade	264.0	300.
Other liabilities	45.3	92.4
Net cash provided by operating activities	682.3	602.3
Cash flows used in investing activities:		
Capital expenditures	(75.0)	(53.4
Acquisition of business, net of cash acquired	(75.0)	_
Net cash used in investing activities	(150.0)	(53.4
Cash flows used in financing activities:		Ì
Proceeds from borrowings under revolving credit facility	1,860.5	688.9
Repayments of borrowings under revolving credit facility	(1,834.5)	(681.9
Repayments of long-term debt	(19.7)	(18.2
Proceeds from issuance of long-term debt	600.0	_
Payments to extinguish long-term debt	(538.1)	_
Net change in accounts payable-inventory financing	(17.4)	(90.1
Repurchases of common stock	(493.3)	(232.:
Payment of incentive compensation plan withholding taxes		
Dividend payments	(21.3)	(27.1
Other	(128.9)	(95.:
Net cash used in financing activities	24.2	21.1
-	(568.5)	(435.2
Effect of exchange rate changes on cash and cash equivalents Net (decrease) increase in cash and cash equivalents	(2.7)	(2.
cash and cash equivalents—beginning of period	(38.9)	110.9
Cash and cash equivalents—beginning of period	205.8	144.
•	\$ 166.9	\$ 255.
Supplementary disclosure of cash flow information:		
Interest paid	\$ (124.8)	\$ (117.4
Taxes paid, net	\$ (203.0)	\$ (200.5

1. Description of Business and Summary of Significant Accounting Policies

Description of Business

CDW Corporation ("Parent"), a Fortune 500 company and member of the S&P 500 Index, is a leading provider of integrated information technology ("IT") solutions with multi-national capabilities to small, medium and large business, government, education and healthcare customers in the United States ("US"), the United Kingdom ("UK") and Canada. The Company's offerings range from discrete hardware and software products to integrated IT solutions such as mobility, security, data center optimization, cloud computing, virtualization and collaboration.

Throughout this report, the terms the "Company" and "CDW" refer to Parent and its 100% owned subsidiaries.

Parent has two 100% owned subsidiaries, CDW LLC and CDW Finance Corporation. CDW LLC is an Illinois limited liability company that, together with its 100% owned subsidiaries, holds all material assets and conducts all business activities and operations of the Company. CDW Finance Corporation is a Delaware corporation formed for the sole purpose of acting as co-issuer of certain debt obligations as described in Note 13 (Supplemental Guarantor Information) and does not hold any material assets or engage in any business activities or operations.

Basis of Presentation

The accompanying unaudited interim Consolidated Financial Statements as of September 30, 2019 and for the three and nine months ended September 30, 2019 and 2018 (the "Consolidated Financial Statements") have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP") and the rules and regulations of the US Securities and Exchange Commission (the "SEC") for interim financial statements. Accordingly, certain information and footnote disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to the rules and regulations of the SEC. These Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements and the notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018 (the "December 31, 2018 Consolidated Financial Statements"). The significant accounting policies used in preparing these Consolidated Financial Statements were applied on a basis consistent with those reflected in the December 31, 2018 Consolidated Financial Statements. In the opinion of management, the Consolidated Financial Statements contain all adjustments (consisting of a normal, recurring nature) necessary to present fairly the Company's financial position, results of operations, comprehensive income, cash flows and changes in stockholders' equity as of the dates and for the periods indicated. The unaudited results of operations for such interim periods reported are not necessarily indicative of results for the full year.

Principles of Consolidation

The accompanying Consolidated Financial Statements include the accounts of Parent and its 100% owned subsidiaries. All intercompany transactions and accounts are eliminated in consolidation.

Use of Estimates

The preparation of the Consolidated Financial Statements in accordance with GAAP requires management to make use of certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the Consolidated Financial Statements and the reported amounts of revenue and expenses during the reported periods. The Company bases its estimates on historical experience and on various other assumptions that management believes are reasonable under the circumstances, the results of which form the basis for making judgments about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results could differ from those estimates.

The notes to the Consolidated Financial Statements contained in the December 31, 2018 Consolidated Financial Statements include a discussion of the significant accounting policies and estimates used in the preparation of the Company's Consolidated Financial Statements. Except as noted below for the adoption of Accounting Standards Update ("ASU") 2016-02, Leases ("Topic 842"), there have been no material changes to the Company's significant accounting policies and estimates during the nine months ended September 30, 2019.

Leases

The Company enters into operating lease contracts, as assessed at contract inception, primarily for real estate, data centers and equipment. On the Company's Consolidated Balance Sheets, Operating lease assets are included in Operating lease right-of-use assets and Operating lease liabilities are included in Other current liabilities and Long-term operating lease liabilities. At the lease commencement date, the Company records Operating lease liabilities based on the present value of the future lease payments. In determining the present value of future lease payments, the Company uses its incremental borrowing rate based on the information available at the commencement date. For real estate and data center contracts, the Company accounts for the lease and non-lease components as a single lease component. For certain equipment leases, the Company applies a portfolio approach to account for the right-of-use asset and operating lease liability. In assessing the lease term, the Company includes options to renew only when it is reasonably certain that it will be exercised; a determination which is at the sole discretion of the Company. Generally, for leases with an initial term of 12 months or less, the Company has elected to not record a right-of-use asset and lease liability. For equipment leases used in revenue generating activities, the Company will record a right-of-use asset and lease liability for leases with a term of 12 months or less. The Company records lease expense on a straight-line basis over the lease term beginning on the commencement date.

2. Recent Accounting Pronouncements

Measurement of Credit Losses on Financial Instruments

In June 2016, the Financial Accounting Standards Board issued ASU 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. The ASU introduces a new forward-looking approach, based on expected losses, to estimate credit losses on certain types of financial instruments, including trade receivables. The estimate of expected credit losses will require considerations of historical information, current information and reasonable and supportable forecasts. The ASU also expands the disclosure requirements to enable users of financial statements to understand the assumptions, models and methods for estimating expected credit losses. The ASU will be adopted on January 1, 2020. The Company has established a cross-functional implementation team to analyze the effect of the ASU. The analysis includes identifying pools of receivables, evaluating and assessing estimation methodologies, assessing policy elections, and evaluating its business processes and internal controls to meet the ASU's accounting, reporting and disclosure requirements. The Company is currently evaluating the impact the ASU will have on its Consolidated Financial Statements.

Accounting for Leases

On January 1, 2019, the Company adopted and applied Topic 842 resulting in the recognition of right-of-use assets and additional lease liabilities of \$81 million as of January 1, 2019, mainly related to operating leases for the Company's real estate portfolio. For additional details regarding the impact to the Company's Consolidated Balance Sheets from adopting this standard, see Note 9 (Leases).

3. Acquisition

On February 1, 2019, the Company completed the acquisition of all issued and outstanding shares of Scalar Decisions Inc. ("Scalar"), a leading technology solutions provider in Canada, for a total final purchase price of \$88 million of which \$13 million is deferred to satisfy potential indemnity obligations and is expected to be paid in the first quarter of 2021. The financial results of Scalar have been included in the Company's Consolidated Financial Statements since the date of the acquisition. The financial results are included in the CDW Canada operating segment which is shown in an all other category ("Other") along with CDW UK. The purchase price allocation is preliminary and subject to revision as additional information about fair value of assets and liabilities becomes available.

The preliminary purchase price allocation is as follows:

(in millions)	Acquisition-Da	te Fair Value
Net assets acquired	\$	5.7
Identified intangible assets ⁽¹⁾		20.3
Goodwill ⁽²⁾		62.0
Total purchase price	\$	88.0

- (1) Net of a related deferred tax liability of \$7 million.
- (2) Goodwill in the amount of \$62 million was recognized in connection with the acquisition of Scalar, primarily attributed to cross selling opportunities and overall corporate synergies. The full amount of goodwill recognized is not deductible for income tax purposes in Canada.

4. <u>Inventory Financing Agreements</u>

The Company has entered into agreements with certain financial intermediaries to facilitate the purchase of inventory from various suppliers under certain terms and conditions, as described below. These amounts are classified separately as Accounts payable-inventory financing on the Consolidated Balance Sheets. The Company does not incur any interest expense associated with these agreements as balances are paid when they are due.

Amounts included in Accounts payable-inventory financing are as follows:

(in millions)	September 30,	2019	Ι	December 31, 2018	
Revolving Loan inventory financing agreement(1)	\$	382.1	\$	406.3	
Other inventory financing agreements		29.6		23.0	
Accounts payable-inventory financing	\$	411.7	\$	429.3	

(1) The Senior Secured Asset-Based Revolving Credit Facility includes an inventory floorplan sub-facility that enables the Company to maintain an inventory financing agreement with a financial intermediary to facilitate the purchase of inventory from certain vendors on more favorable terms than offered directly by the vendors.

5. Contract Liabilities and Performance Obligations

The Company's contract liabilities consist of payments received from customers, or such consideration that is contractually due, in advance of providing the product or performing services. The Company's contract liabilities are reported in a net position on a contract-by-contract basis at the end of each reporting period. As of September 30, 2019 and December 31, 2018, the contract liability balance was \$212 million and \$178 million, respectively. During the nine months ended September 30, 2019 and 2018, the Company recognized revenue of \$117 million and \$153 million, respectively, related to its contract liabilities.

A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. The following table represents the total transaction price for the remaining performance obligations as of September 30, 2019 related to noncancelable contracts longer than 12 months in duration that is expected to be recognized over future periods.

(in millions)	Within	n 1 Year	Υe	ears 1-2	Ye	ears 2-3	The	ereafter
Remaining performance obligations	\$	40.2	\$	17.6	\$	5.1	\$	0.3

6. Financial Instruments

The Company's indebtedness creates interest rate risk on its variable-rate debt. The Company uses derivative financial instruments to manage its exposure to interest rate risk. The Company does not hold or issue derivative financial instruments for trading or speculative purposes.

The Company has interest rate cap agreements that entitle it to payments from the counterparty of the amount, if any, by which three-month London Interbank Offered Rate ("LIBOR") exceeds the strike rates of the caps during the agreement period in exchange for an upfront premium. During 2019, the Company entered into interest rate cap agreements with a combined notional value of \$1.2 billion resulting in premiums paid to the counterparties of \$6 million

As of September 30, 2019 and December 31, 2018, the Company had the following interest rate cap agreements for which the fair values are classified within Other assets on the Consolidated Balance Sheets:

				September 30, 2019		Dec	cember 31, 2018
Notional V	alue (in millions)	Effective Date	Maturity Date	Fair Value (in millions)		Fair Value (in millions)	
\$	1,400.0	December 31, 2018	December 31, 2020	\$	0.1	\$	10.6
	1,400.0	December 31, 2020	December 31, 2022		1.0		1.5
				\$	1.1	\$	12.1

The fair values of the Company's interest rate cap agreements are classified as Level 2 in the fair value hierarchy. The valuation of the interest rate cap agreements is derived by using a discounted cash flow analysis on the expected cash receipts that would occur if variable interest rates rise above the strike rates of the caps. This analysis reflects the contractual terms of the interest rate cap agreements, including the period to maturity, and uses observable market-based inputs, including LIBOR curves and implied volatilities. The Company also incorporates insignificant credit valuation adjustments to appropriately reflect the respective counterparty's nonperformance risk in the fair value measurements. The counterparty credit spreads are based on publicly available credit information obtained from a third-party credit data provider. For additional details, see Note 7 (Long-Term Debt).

The interest rate cap agreements are designated as cash flow hedges. The changes in the fair value of derivatives that qualify as cash flow hedges are recorded in Accumulated other comprehensive loss and are subsequently reclassified into Interest expense in the period when the hedged forecasted transaction affects earnings. The Company recorded an insignificant loss and a loss of \$13 million, net of tax, into Accumulated other comprehensive loss for the three and nine months ended September 30, 2019, respectively. The Company recorded a loss of \$1 million and a gain of \$3 million, net of tax, into Accumulated other comprehensive loss for the three and nine months ended September 30, 2018, respectively. During the three and nine months ended September 30, 2019, the Company reclassified an insignificant amount and \$2 million, respectively, from Accumulated other comprehensive loss to earnings within Interest expense, net on the Consolidated Statement of Operations. During the three and nine months ended September 30, 2018, the Company reclassified \$1 million and \$3 million, respectively, from Accumulated other comprehensive loss to earnings within Interest expense, net on the Consolidated Statement of Operations. The Company expects to reclassify \$7 million from Accumulated other comprehensive loss to earnings within Interest expense, net during the next 12 months.

7. <u>Long-Term Debt</u>

		As of Septem	nber 30, 2019	As of December 31, 2018		
(dollars in millions)	Maturity	Interest Rate	Amount	Interest Rate	Amount	
Credit Facilities						
CDW UK revolving credit facility ⁽¹⁾	July 2021	%	\$ —	%	\$ —	
Senior secured asset-based revolving credit facility	March 2022	3.31%	26.0	%	_	
Total credit facilities			26.0		_	
Term Loans						
CDW UK term loan ⁽¹⁾	August 2021	2.16%	56.5	2.29%	65.0	
Senior secured term loan facility ⁽²⁾	August 2023	3.80%	1,442.0	4.10%	1,453.2	
Total term loans			1,498.5		1,518.2	
Unsecured Senior Notes						
Senior notes due 2023 ("2023 Senior Notes")	September 2023	%	_	5.00%	525.0	
Senior notes due 2024 ("2024 Senior Notes")	December 2024	5.50%	575.0	5.50%	575.0	
Senior notes due 2025 ("2025 Senior Notes")	September 2025	5.00%	600.0	5.00%	600.0	
Senior notes due 2028 ("2028 Senior Notes")	April 2028	4.25%	600.0	<u> </u>	_	
Total unsecured senior notes			1,775.0		1,700.0	
Other long-term obligations			4.4		8.3	
Unamortized deferred financing fees			(19.5)		(17.9)	
Current maturities of long-term debt			(25.4)		(25.3)	
Total long-term debt			\$ 3,259.0		\$ 3,183.3	

- (1) British pound-denominated debt facilities.
- (2) See Note 14 (Subsequent Events).

As of September 30, 2019, the Company is in compliance with the covenants under the various credit agreements and indentures.

Credit Facilities

The Company has a variable rate CDW UK revolving credit facility that is denominated in British pounds. As of September 30, 2019, the Company could have borrowed up to an additional £50 million (\$61 million at September 30, 2019) under the CDW UK revolving credit facility.

The Company also has a variable rate senior secured asset-based revolving credit facility (the "Revolving Loan") that is denominated in US dollars. The Revolving Loan is used by the Company for borrowings, issuances of letters of credit and floorplan financing. As of September 30, 2019, the Revolving Loan had less than \$1 million of undrawn letters of credit, \$356 million reserved for the floorplan sub-facility and a borrowing base of \$2.2 billion, which is based on the amount of eligible inventory and accounts receivable balances as of August 31, 2019. As of September 30, 2019, the Company could have borrowed up to an additional \$1.1 billion under the Revolving Loan.

The Revolving Loan is collateralized by a first priority interest in inventory (excluding inventory to the extent collateralized under the inventory financing arrangements as described in Note 4 (Inventory Financing Agreements)), deposits and accounts receivable, and by a second priority interest in substantially all other US assets.

Term Loans

The CDW UK term loan has a variable interest rate. The Company is required to make annual principal installments of £5 million (\$6 million at September 30, 2019), with the remaining principal amount due at the maturity date.

The CDW UK term loan agreement imposes restrictions on CDW UK's ability to transfer funds to the Company through the payment of dividends, repayment of intercompany loans, advances or subordinated debt that require, among other things, the maintenance of a minimum net leverage ratio. As of September 30, 2019, the amount of restricted payment capacity under the CDW UK term loan was £134 million (\$165 million at September 30, 2019).

The senior secured term loan facility (the "Term Loan") has a variable interest rate, which has effectively been capped through the use of interest rate caps (see Note 6 (Financial Instruments)). The interest rate disclosed in the table above represents the variable interest rates in effect for September 30, 2019 and December 31, 2018, respectively. The Company is required to pay quarterly principal installments of \$4 million with the remaining principal amount due at the maturity date. As of September 30, 2019, the amount of CDW's restricted payment capacity under the Term Loan was \$1.7 billion.

The Term Loan is collateralized by a second priority interest in substantially all inventory (excluding inventory to the extent collateralized under the inventory financing arrangements as described in Note 4 (Inventory Financing Agreements), deposits and accounts receivable, and by a first priority interest in substantially all other US assets.

Unsecured Senior Notes

The 2024 Senior Notes and 2025 Senior Notes have a fixed interest rate, for which interest is paid semi-annually.

On September 26, 2019, the Company completed the issuance of \$600 million aggregate principal amount of 4.25% Senior Notes due 2028 at par. The 2028 Senior Notes will mature on April 1, 2028 and bear interest at a rate of 4.25% per annum, payable semi-annually on April 1 and October 1 of each year, commencing on April 1, 2020. The net proceeds from the issuance of the 2028 Senior Notes were primarily used to redeem all of the remaining \$525 million aggregate principal amount of the 2023 Senior Notes at a redemption price of 102.5% of the principal amount redeemed, plus accrued and unpaid interest to the date of redemption, and to pay fees and expenses related to the issuance and redemption. The redemption date was October 12, 2019. On the same date, the indenture governing the 2023 Senior Notes was satisfied and discharged.

Fair Value

The fair values of the Senior Notes were estimated using quoted market prices for identical liabilities that are traded in over-the-counter secondary markets that are not considered active. The fair value of the Term Loan was estimated using dealer quotes for identical liabilities in markets that are not considered active. The Senior Notes, Term Loan and CDW UK term loan are classified as Level 2 within the fair value hierarchy. The carrying value of the Revolving Loan and CDW UK revolving credit facility approximate fair value if there are outstanding borrowings.

The approximate fair values and related carrying values of the Company's long-term debt, including current maturities and excluding unamortized discount and unamortized deferred financing fees, are as follows:

(in millions)	 September 30, 2019	I	December 31, 2018	
Fair value	\$ 3,412.3	\$	3,145.8	
Carrying value	3,303.9		3,226.5	

8. <u>Income Taxes</u>

Income tax expense was \$59 million for the three months ended September 30, 2019, compared to \$55 million for the same period of the prior year. The effective tax rate, expressed by calculating the income tax expense as a percentage of Income before income taxes, was 22.7% and 22.9% for the three months ended September 30, 2019 and 2018, respectively, and differed from the US federal statutory rate of 21.0% primarily due to state income taxes partially offset by excess tax benefits on equity-based compensation.

Income tax expense was \$163 million for the nine months ended September 30, 2019, compared to \$150 million for the same period of the prior year. The effective tax rate was 22.8% and 23.7% for the nine months ended September 30, 2019

and 2018, respectively, and differed from the US federal statutory rate of 21.0% primarily due to state income taxes partially offset by excess tax benefits on equity-based compensation.

9. <u>Leases</u>

The Company has operating leases primarily for real estate, data centers and equipment. Lease terms range from 1 year to 17 years.

Supplemental Consolidated Balance Sheet information related to the Company's operating leases is as follows:

(in millions)	Classification on the Consolidated Balance Sheets	Septe	mber 30, 2019
Assets			
	Operating lease right-of-use assets	\$	84.2
Liabilities			
Current	Accrued expenses and other current liabilities - Other	\$	30.6
Long-term	Long-term operating lease liabilities		81.7
Total lease liabilities		\$	112.3
Lease term and discount	rate	Septe	mber 30, 2019
Weighted average remai	ning lease term (years)		5.8
Weighted average discou	unt rate		4.53%

The components of operating lease expense are as follows:

(in millions) Financial statement line item	Months Ended ember 30, 2019	Nine Months Ended September 30, 2019		
Cost of sales	\$ 43.9	\$ 57.7		
Selling and administrative expenses	7.0	21.9		
Total lease cost	\$ 50.9	\$ 79.6		

Maturities of operating lease liabilities are as follows:

(in millions)	Septem	September 30, 2019	
Remainder of 2019	\$	8.2	
2020		31.5	
2021		22.2	
2022		15.0	
2023		11.7	
Thereafter		38.3	
Total lease payments	\$	126.9	
Less: Interest		(14.6)	
Present value of lease liabilities	\$	112.3	

Supplemental cash flow information related to operating leases is as follows:

(in millions)	ber 30, 2019
Cash paid for amounts included in the measurement of lease liabilities	
Operating cash flows from operating leases	\$ 79.5
Right-of-use assets obtained in exchange for lease obligations	
Operating leases	\$ 56.0

As of September 30, 2019, the Company has an additional operating lease commitment that has not yet commenced of \$99 million. This operating lease is expected to commence in 2019 with a lease term of 17 years.

10. Earnings Per Share

The numerator for both basic and diluted earnings per share is Net income. The denominator for basic earnings per share is the weighted-average shares outstanding during the period.

A reconciliation of basic weighted-average shares outstanding to diluted weighted-average shares outstanding is as follows:

	Three Months Ende	ed September 30,	Nine Months Ended September 30,		
(in millions)	2019	2018	2019	2018	
Basic weighted-average shares outstanding	144.5	150.9	145.7	151.6	
Effect of dilutive securities ⁽¹⁾	2.7	2.8	2.5	2.5	
Diluted weighted-average shares outstanding(2)	147.2	153.7	148.2	154.1	

- (1) The dilutive effect of outstanding stock options, restricted stock units, restricted stock, performance share units and Coworker Stock Purchase Plan units is reflected in the diluted weighted-average shares outstanding using the treasury stock method.
- (2) There were fewer than 0.1 million potential common shares excluded from diluted weighted-average shares outstanding for both the three and nine months ended September 30, 2019 and 2018 as their inclusion would have had an anti-dilutive effect.

11. Commitments and Contingencies

The Company is party to various legal proceedings that arise in the ordinary course of its business, which include commercial, intellectual property, employment, tort and other litigation matters. The Company is also subject to audit by federal, state, international, national, provincial and local authorities, and by various partners, group purchasing organizations and customers, including government agencies, relating to purchases and sales under various contracts. In addition, the Company is subject to indemnification claims under various contracts. From time to time, certain customers of the Company file voluntary petitions for reorganization or liquidation under the US bankruptcy laws or similar laws of the jurisdictions for the Company's business activities outside of the US. In such cases, certain pre-petition payments received by the Company could be considered preference items and subject to return to the bankruptcy administrator.

As of September 30, 2019, the Company does not believe that there is a reasonable possibility that any material loss exceeding the amounts already recognized for these proceedings and matters, if any, has been incurred. However, the ultimate resolutions of these proceedings and matters are inherently unpredictable. As such, the Company's financial condition and results of operations could be adversely affected in any particular period by the unfavorable resolution of one or more of these proceedings or matters.

12. Segment Information

The Company has three reportable segments: Corporate, which is comprised primarily of US private sector business customers with more than 250 employees, Small Business, which primarily serves US private sector business customers with up to 250 employees, and Public, which is comprised of government agencies and education and healthcare institutions in the US. The Company has two other operating segments: CDW UK and CDW Canada, both of which do not meet the reportable segment quantitative thresholds and, accordingly, are included in an all other category ("Other"). Headquarters function costs that are not allocated to the segments are included under the heading of "Headquarters" in the tables below.

During the first quarter of 2019, the Company evaluated its methodology for allocating certain depreciation and amortization expenses to each of its segments. The evaluation resulted in a revision to the allocation of depreciation and amortization expenses from Headquarters to the Company's reportable segments, effective January 1, 2019. The prior period results have been recast to reflect these changes and present comparable information.

Information about the Company's segments is as follows:

(in millions)	(Corporate	Sm	all Business	Public	Other		Headquarters	Total
Three Months Ended September 30, 2019									
Net sales	\$	1,913.5	\$	386.2	\$ 2,100.9	\$ 507.1	\$		\$ 4,907.7
Operating income (loss)		138.9		27.2	168.4	21.9		(35.8)	320.6
Depreciation and amortization expense		(21.7)		(5.6)	(15.0)	(7.9)		(18.0)	(68.2)
Three Months Ended September 30, 2018									
Net sales	\$	1,706.5	\$	340.0	\$ 1,875.1	\$ 451.6	\$	_	\$ 4,373.2
Operating income (loss)		125.7		23.8	136.6	19.2		(30.5)	274.8
Depreciation and amortization expense		(21.8)		(5.5)	(12.9)	(7.3)		(18.3)	(65.8)
(in millions)	(Cornorate	Sm	all Rusiness	Public	Other		Headquarters	Total
(in millions) Nine Months Ended September 30, 2019		Corporate	Sm	all Business	 Public	 Other	_	Headquarters	 Total
(in millions) Nine Months Ended September 30, 2019 Net sales	\$	5,533.6	Sm \$	1,119.2	\$ Public 5,271.7	\$ Other 1,571.0	\$	Headquarters	\$ Total 13,495.5
Nine Months Ended September 30, 2019					\$	\$	\$	Headquarters — (99.7)	\$
Nine Months Ended September 30, 2019 Net sales		5,533.6		1,119.2	\$ 5,271.7	\$ 1,571.0	\$	_	\$ 13,495.5
Nine Months Ended September 30, 2019 Net sales Operating income (loss)		5,533.6 430.8		1,119.2 78.2	\$ 5,271.7 373.9	\$ 1,571.0 66.6	\$	(99.7)	\$ 13,495.5 849.8
Nine Months Ended September 30, 2019 Net sales Operating income (loss)		5,533.6 430.8		1,119.2 78.2	\$ 5,271.7 373.9	\$ 1,571.0 66.6	\$	(99.7)	\$ 13,495.5 849.8
Nine Months Ended September 30, 2019 Net sales Operating income (loss) Depreciation and amortization expense		5,533.6 430.8		1,119.2 78.2	\$ 5,271.7 373.9	\$ 1,571.0 66.6	\$	(99.7)	\$ 13,495.5 849.8
Nine Months Ended September 30, 2019 Net sales Operating income (loss) Depreciation and amortization expense Nine Months Ended September 30, 2018	\$	5,533.6 430.8 (64.8)	\$	1,119.2 78.2 (16.8)	5,271.7 373.9 (41.4)	1,571.0 66.6 (23.1)		(99.7)	13,495.5 849.8 (197.5)
Nine Months Ended September 30, 2019 Net sales Operating income (loss) Depreciation and amortization expense Nine Months Ended September 30, 2018 Net sales	\$	5,533.6 430.8 (64.8) 5,006.1	\$	1,119.2 78.2 (16.8) 997.1	5,271.7 373.9 (41.4) 4,740.5	1,571.0 66.6 (23.1) 1,422.0		(99.7) (51.4)	13,495.5 849.8 (197.5) 12,165.7

				Three M	onths l	Ended Septembe	er 30,	2019	
(in millions)	C	Corporate	Small	Business		Public		Other	Total
Geography ⁽¹⁾									
United States	\$	1,910.9	\$	386.2	\$	2,100.9	\$	7.6	\$ 4,405.6
Rest of World		2.6		_		_		499.5	502.1
Total Net sales		1,913.5		386.2		2,100.9		507.1	4,907.7
Major Product and Services									
Hardware		1,528.0		326.6		1,711.3		358.3	3,924.2
Software		269.1		47.6		324.4		66.1	707.2
Services		97.9		6.7		59.0		80.2	243.8
Other ⁽²⁾		18.5		5.3		6.2		2.5	32.5
Total Net sales		1,913.5		386.2		2,100.9		507.1	4,907.7
Sales by Channel									
Corporate		1,913.5		_		_		_	1,913.5
Small Business		_		386.2		_		_	386.2
Government		_		_		793.4			793.4
Education		_		_		807.0		_	807.0
Healthcare		_				500.5		_	500.5
Other								507.1	507.1
Total Net sales		1,913.5		386.2		2,100.9		507.1	4,907.7
Timing of Revenue Recognition									
Transferred at a point in time where CDW is principal		1,743.4		364.0		1,939.3		443.8	4,490.5
Transferred at a point in time where CDW is agent		111.0		19.6		79.6		15.5	225.7
Transferred over time where CDW is principal		59.1		2.6		82.0		47.8	191.5
Total Net sales	\$	1,913.5	\$	386.2	\$	2,100.9	\$	507.1	\$ 4,907.7

⁽¹⁾ Net sales by geography is generally based on the ship-to address with the exception of certain services that may be performed at, or on behalf of, multiple locations. Such service arrangements are categorized based on the bill-to address.

⁽²⁾ Includes items such as delivery charges to customers.

			Three 1	Month	hs Ended Septembe	r 30, 2018		
(in millions)	Co	rporate	Small Business		Public	Other		Total
Geography ⁽¹⁾								
United States	\$	1,704.1	\$ 340.0	\$	1,875.1	\$	6.8	\$ 3,926.0
Rest of World		2.4	_		_	4	44.8	447.2
Total Net sales		1,706.5	340.0		1,875.1	4	51.6	4,373.2
Major Product and Services								
Hardware		1,379.5	284.0		1,530.8	3	63.6	3,557.9
Software		227.5	44.3		291.0		45.6	608.4
Services		83.1	6.6		48.8		40.5	179.0
Other ⁽²⁾		16.4	5.1		4.5		1.9	27.9
Total Net sales		1,706.5	340.0		1,875.1	4	51.6	 4,373.2
Sales by Channel								
Corporate		1,706.5	_		_		_	1,706.5
Small Business		_	340.0		_		—	340.0
Government		_	_		639.3		_	639.3
Education		_	_		793.1		—	793.1
Healthcare		_			442.7		_	442.7
Other				. <u> </u>	<u> </u>	4	51.6	 451.6
Total Net sales		1,706.5	340.0		1,875.1	4	51.6	 4,373.2
Timing of Revenue Recognition								
Transferred at a point in time where CDW is principal		1,571.6	321.0		1,764.6	4	02.8	4,060.0
Transferred at a point in time where CDW is agent		85.7	16.9		64.3		12.3	179.2
Transferred over time where CDW is principal		49.2	2.1		46.2		36.5	134.0

⁽¹⁾ Net sales by geography is generally based on the ship-to address with the exception of certain services that may be performed at, or on behalf of, multiple locations. Such service arrangements are categorized based on the bill-to address.

340.0

1,875.1

451.6

4,373.2

Total Net sales

1,706.5

\$

⁽²⁾ Includes items such as delivery charges to customers.

		Nine Mo	onths Ended Septembe	er 30, 2019	
(in millions)	Corporate	Small Business	Public	Other	Total
Geography ⁽¹⁾					
United States	\$ 5,525.5	\$ 1,119.2	\$ 5,271.7	\$ 24.8	\$ 11,941.2
Rest of World	8.1	_	_	1,546.2	1,554.3
Total Net sales	5,533.6	1,119.2	5,271.7	1,571.0	13,495.5
Major Product and Services					
Hardware	4,411.6	937.5	4,297.6	1,143.0	10,789.7
Software	784.8	145.0	808.0	213.3	1,951.1
Services	284.0	20.8	150.8	206.3	661.9
Other ⁽²⁾	53.2	15.9	15.3	8.4	92.8
Total Net sales	5,533.6	1,119.2	5,271.7	1,571.0	13,495.5
Sales by Channel					
Corporate	5,533.6	_	_	_	5,533.6
Small Business	_	1,119.2	_	_	1,119.2
Government	_	_	1,860.2	_	1,860.2
Education	_	_	1,981.0	_	1,981.0
Healthcare	_	_	1,430.5	_	1,430.5
Other				1,571.0	1,571.0
Total Net sales	5,533.6	1,119.2	5,271.7	1,571.0	13,495.5
Timing of Revenue Recognition					
Transferred at a point in time where CDW is principal	5,033.4	1,054.7	4,908.0	1,383.7	12,379.8
Transferred at a point in time where CDW is agent	333.7	59.4	190.9	42.0	626.0
Transferred over time where CDW is principal	166.5	5.1	172.8	145.3	489.7

⁽¹⁾ Net sales by geography is generally based on the ship-to address with the exception of certain services that may be performed at, or on behalf of, multiple locations. Such service arrangements are categorized based on the bill-to address.

1,119.2 \$

5,271.7 \$

1,571.0 \$

13,495.5

\$

5,533.6

Total Net sales

⁽²⁾ Includes items such as delivery charges to customers.

			INIII	C IVIO	iluis i	Ended September	50, 2	010	
(in millions)	Co	rporate	Small Busine	ss		Public		Other	Total
Geography ⁽¹⁾									
United States	\$	4,999.9	\$ 997	7.1	\$	4,740.5	\$	24.0	\$ 10,761.5
Rest of World		6.2		_		_		1,398.0	1,404.2
Total Net sales		5,006.1	997	7.1		4,740.5		1,422.0	12,165.7
	-		-						
Major Product and Services									
Hardware		4,013.4	829	0.4		3,876.7		1,136.9	9,856.4
Software		699.6	131	.2		730.5		154.0	1,715.3
Services		242.3	20).6		120.5		124.8	508.2
Other ⁽²⁾		50.8	15	5.9		12.8		6.3	85.8
Total Net sales		5,006.1	997	7.1		4,740.5		1,422.0	12,165.7
	-								
Sales by Channel									
Corporate		5,006.1				_		_	5,006.1
Small Business		_	997	7.1		_		_	997.1
Government		_				1,551.3			1,551.3
Education		_		_		1,902.4		_	1,902.4
Healthcare		_				1,286.8			1,286.8
Other		_						1,422.0	 1,422.0
Total Net sales		5,006.1	997	7.1		4,740.5		1,422.0	12,165.7
Timing of Revenue Recognition									
Transferred at a point in time where CDW is									
principal		4,581.3	940	0.0		4,445.8		1,277.4	11,244.5
Transferred at a point in time where CDW is		270.0				160.5		27.1	520.2
agent		279.9).5		160.7		37.1	528.2
Transferred over time where CDW is principal		144.9		5.6		134.0		107.5	393.0
Total Net sales	\$	5,006.1	\$ 997	7.1	\$	4,740.5	\$	1,422.0	\$ 12,165.7

Nine Months Ended September 30, 2018

⁽¹⁾ Net sales by geography is generally based on the ship-to address with the exception of certain services that may be performed at, or on behalf of, multiple locations. Such service arrangements are categorized based on the bill-to address.

⁽²⁾ Includes items such as delivery charges to customers.

The following table presents Net sales by major category for the three and nine months ended September 30, 2019 and 2018. Categories are based upon internal classifications.

		Three Months En	ded September 30,					
	201	9		201	8			
	Dollars in Millions	Percentage of Total Net Sales		Dollars in Millions	Percentage of Total Net Sales			
Notebooks/Mobile Devices	\$ 1,325.6	27.0%	\$	1,124.8	25.7%			
Netcomm Products	567.3	11.6		582.4	13.3			
Desktops	448.4	9.1		349.0	8.0			
Video	353.3	7.2		320.5	7.3			
Enterprise and Data Storage (Including Drives)	283.6	5.8		297.4	6.8			
Other Hardware	946.0	19.3		883.8	20.3			
Total Hardware	3,924.2	80.0		3,557.9	81.4			
Software ⁽¹⁾	707.2	14.3		608.4	13.9			
Services ⁽¹⁾	243.8	5.0		179.0	4.1			
Other ⁽²⁾	32.5	0.7		27.9	0.6			
Total Net sales	\$ 4,907.7	100.0%	\$	4,373.2	100.0%			

	Nine Months Ended September 30,									
		201	9		201	18				
		Dollars in Millions	Percentage of Total Net Sales		Dollars in Millions	Percentage of Total Net Sales				
Notebooks/Mobile Devices	\$	3,537.5	26.2%	\$	3,069.4	25.2%				
Netcomm Products		1,641.9	12.2		1,568.5	12.9				
Desktops		1,183.6	8.8		1,013.2	8.3				
Video		972.7	7.2		904.4	7.4				
Enterprise and Data Storage (Including Drives)		849.2	6.3		816.2	6.7				
Other Hardware		2,604.8	19.3		2,484.7	20.5				
Total Hardware		10,789.7	80.0		9,856.4	81.0				
Software ⁽¹⁾		1,951.1	14.4		1,715.3	14.1				
Services ⁽¹⁾		661.9	4.9		508.2	4.2				
Other ⁽²⁾		92.8	0.7		85.8	0.7				
Total Net sales	\$	13,495.5	100.0%	\$	12,165.7	100.0%				

⁽¹⁾ Certain software and services revenues are recorded on a net basis for accounting purposes. As a result, the category percentage of net revenues is not representative of the category percentage of gross profits.

⁽²⁾ Includes items such as delivery charges to customers.

13. Supplemental Guarantor Information

The Senior Notes are guaranteed by Parent and each of CDW LLC's direct and indirect, 100% owned, domestic subsidiaries (the "Guarantor Subsidiaries"). All guarantees by Parent and the Guarantor Subsidiaries are and were joint and several, and full and unconditional; provided that guarantees by the Guarantor Subsidiaries are subject to certain customary release provisions contained in the indentures governing the Senior Notes. CDW LLC's 100% owned foreign subsidiaries, CDW International Holdings Limited, which is comprised of CDW UK and CDW Canada (together the "Non-Guarantor Subsidiaries"), do not guarantee the Senior Notes. CDW LLC and CDW Finance Corporation, as co-issuers, are 100% owned by Parent and each of the Guarantor Subsidiaries and the Non-Guarantor Subsidiaries are, directly or indirectly, 100% owned by CDW LLC.

The following tables set forth Condensed Consolidating Balance Sheets as of September 30, 2019 and December 31, 2018, Consolidating Statements of Operations for the three and nine months ended September 30, 2019 and 2018, Condensed Consolidating Statements of Comprehensive Income for the three and nine months ended September 30, 2019 and 2018, and Condensed Consolidating Statements of Cash Flows for the nine months ended September 30, 2019 and 2018, in accordance with Rule 3-10 of Regulation S-X. The consolidating financial information includes the accounts of CDW Corporation (the "Parent Guarantor"), which has no independent assets or operations, the accounts of CDW LLC (the "Subsidiary Issuer"), the combined accounts of the Guarantor Subsidiaries, the combined accounts of the Non-Guarantor Subsidiaries, and the accounts of CDW Finance Corporation (the "Co-Issuer") for the periods indicated. The information is prepared on the same basis as the Company's Consolidated Financial Statements.

Condensed Consolidating Balance Sheet

September 30, 2019

			сриси	10er 30, 2019						
(in millions)	Parent uarantor	Subsidiary Issuer		Guarantor Subsidiaries	on-Guarantor Subsidiaries	C	o-Issuer	onsolidating djustments	C	Consolidated
Assets								,		
Current assets:										
Cash and cash equivalents	\$ _	\$ 124.1	\$	_	\$ 78.5	\$	_	\$ (35.7)	\$	166.9
Accounts receivable, net	_	_		2,539.1	360.4		_	_		2,899.5
Merchandise inventory	_	_		525.2	78.4		_	_		603.6
Miscellaneous receivables	_	103.1		300.6	28.5			_		432.2
Prepaid expenses and other	_	22.2		122.6	48.3		_	_		193.1
Total current assets		249.4		3,487.5	594.1			(35.7)		4,295.3
Operating lease right-of-use assets	_	23.2		33.1	27.9		_	_		84.2
Property and equipment, net	_	75.8		68.4	26.9		_	_		171.1
Goodwill	_	751.8		1,437.9	326.2		_	_		2,515.9
Other intangible assets, net	_	243.1		206.2	166.8		_	_		616.1
Other assets	1.0	27.0		2.4	172.1		_	(182.0)		20.5
Investment in and advances to subsidiaries	934.1	3,189.6		_	_		_	(4,123.7)		_
Total Assets	\$ 935.1	\$ 4,559.9	\$	5,235.5	\$ 1,314.0	\$		\$ (4,341.4)	\$	7,703.1
Liabilities and Stockholders' Equity										
Current liabilities:										
Accounts payable-trade	\$ _	\$ 26.2	\$	1,701.9	\$ 207.6	\$	_	\$ (35.7)	\$	1,900.0
Accounts payable-inventory financing	_	0.1		382.0	29.6		_	_		411.7
Current maturities of long-term debt	_	14.9		4.2	6.3		_	_		25.4
Contract liabilities	_	_		127.1	85.0		_	_		212.1
Accrued expenses and other current					0.0					
liabilities	 <u> </u>	 256.0		352.0	 83.8			 		691.8
Total current liabilities	_	297.2		2,567.2	412.3		_	(35.7)		3,241.0
Long-term liabilities:					40.0					
Debt	_	3,209.1		_	49.9		_	_		3,259.0
Deferred income taxes	_	51.7		32.0	28.7		_	(1.1)		111.3
Operating lease liabilities	_	33.0		25.2	23.5		_			81.7
Other liabilities	 	 34.8		0.9	 220.2			 (180.9)		75.0
Total long-term liabilities		3,328.6		58.1	322.3			(182.0)		3,527.0
Total stockholders' equity	 935.1	 934.1		2,610.2	 579.4			 (4,123.7)		935.1
Total Liabilities and Stockholders' Equity	\$ 935.1	\$ 4,559.9	\$	5,235.5	\$ 1,314.0	\$	_	\$ (4,341.4)	\$	7,703.1

Condensed Consolidating Balance Sheet

December 31, 2018

(in millions)	Parent uarantor	S	Subsidiary Issuer	Guarantor Subsidiaries	on-Guarantor Subsidiaries	Со	-Issuer	onsolidating djustments	C	Consolidated
Assets				 						
Current assets:										
Cash and cash equivalents	\$ _	\$	176.0	\$ _	\$ 46.7	\$	_	\$ (16.9)	\$	205.8
Accounts receivable, net	_			2,331.2	340.0		_	_		2,671.2
Merchandise inventory	_		_	387.4	66.9		_	_		454.3
Miscellaneous receivables	_		110.6	187.7	18.1		_	_		316.4
Prepaid expenses and other	_		17.1	93.8	38.2		_	_		149.1
Total current assets			303.7	 3,000.1	509.9			(16.9)		3,796.8
Property and equipment, net	_		82.3	52.0	21.8		_	_		156.1
Goodwill	_		751.8	1,437.8	273.2		_	_		2,462.8
Other intangible assets, net	_		252.5	300.0	159.7		_	_		712.2
Other assets	1.4		49.8	9.6	140.2		_	(161.2)		39.8
Investment in and advances to subsidiaries	973.8		3,028.9	_	_		_	(4,002.7)		_
Total Assets	\$ 975.2	\$	4,469.0	\$ 4,799.5	\$ 1,104.8	\$		\$ (4,180.8)	\$	7,167.7
Liabilities and Stockholders' Equity								 		
Current liabilities:										
Accounts payable-trade	\$ _	\$	39.2	\$ 1,387.9	\$ 166.9	\$	_	\$ (16.9)	\$	1,577.1
Accounts payable-inventory financing	_		0.2	406.1	23.0		_	_		429.3
Current maturities of long-term debt	_		14.9	4.0	6.4		_	_		25.3
Contract liabilities	_		_	95.6	82.7		_	_		178.3
Accrued expenses and other current liabilities	_		217.6	306.7	68.8		_	_		593.1
Total current liabilities	_		271.9	2,200.3	347.8		_	(16.9)		2,803.1
Long-term liabilities:										
Debt	_		3,121.3	4.3	57.7		_	_		3,183.3
Deferred income taxes	_		55.9	60.5	26.9		_	(1.4)		141.9
Other liabilities	_		46.1	5.7	172.2		_	(159.8)		64.2
Total long-term liabilities	_		3,223.3	70.5	256.8			(161.2)		3,389.4
Total stockholders' equity	975.2		973.8	2,528.7	500.2			(4,002.7)		975.2
Total Liabilities and Stockholders' Equity	\$ 975.2	\$	4,469.0	\$ 4,799.5	\$ 1,104.8	\$	_	\$ (4,180.8)	\$	7,167.7

Three Months Ended September 30, 2019

(in millions)	arent arantor	S	ubsidiary Issuer	Guarantor Subsidiaries	1	Non-Guarantor Subsidiaries	Co-Issuer	Consolidating Adjustments	C	onsolidated
Net sales	\$ _	\$		\$ 4,400.6	\$	507.1	\$ _	\$ _	\$	4,907.7
Cost of sales	_		_	3,671.5		419.7	_	_		4,091.2
Gross profit	_		_	729.1		87.4		_		816.5
Selling and administrative expenses	_		35.8	347.4		61.7	_	_		444.9
Advertising expense	_		_	47.2		3.8	_	_		51.0
Operating income (loss)	_		(35.8)	334.5		21.9		_		320.6
Interest (expense) income, net	_		(42.0)	0.1		(0.4)	_	_		(42.3)
Other income, net	_		(16.1)	_		(1.3)	_	_		(17.4)
Income (loss) before income taxes			(93.9)	334.6		20.2				260.9
Income tax (expense) benefit	(0.1)		30.3	(87.9)		(1.5)	_	_		(59.2)
Income (loss) before equity in earnings of subsidiaries	(0.1)		(63.6)	246.7		18.7	_	_		201.7
Equity in earnings of subsidiaries	201.8		265.4	_		_	_	(467.2)		_
Net income	\$ 201.7	\$	201.8	\$ 246.7	\$	18.7	\$ _	\$ (467.2)	\$	201.7

Three Months Ended September 30, 2018

(in millions)	Parent Guarantor	Subsidiary Issuer	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Co-Issuer	Consolidating Adjustments	Consolidated
Net sales	\$ —	\$ —	\$ 3,921.6	\$ 451.6	\$ —	\$ —	\$ 4,373.2
Cost of sales	_	_	3,286.6	373.0	_	_	3,659.6
Gross profit	_	_	635.0	78.6	_	_	713.6
Selling and administrative expenses	_	33.7	299.8	57.2	_	_	390.7
Advertising expense	_	_	45.9	2.2	_	_	48.1
Operating income (loss)	_	(33.7)	289.3	19.2	_	_	274.8
Interest (expense) income, net	_	(36.1)	0.9	(1.4)	_	_	(36.6)
Other income, net	_	_	0.1	0.1			0.2
Income (loss) before income taxes	_	(69.8)	290.3	17.9	_	_	238.4
Income tax (expense) benefit	(0.1)	20.5	(75.3)	0.2	_	_	(54.7)
Income (loss) before equity in earnings of							
subsidiaries	(0.1)	(49.3)	215.0	18.1	_	_	183.7
Equity in earnings of subsidiaries	183.8	233.1		_		(416.9)	
Net income	\$ 183.7	\$ 183.8	\$ 215.0	\$ 18.1	\$	\$ (416.9)	\$ 183.7

Nine Months Ended September 30, 2019

(in millions)	Parent uarantor	S	Subsidiary Issuer	Guarantor Subsidiaries	N	Non-Guarantor Subsidiaries	Co-Issuer	onsolidating djustments	C	onsolidated
Net sales	\$ 	\$	_	\$ 11,924.5	\$	1,571.0	\$ _	\$ _	\$	13,495.5
Cost of sales	_		_	9,926.3		1,306.8	_	_		11,233.1
Gross profit			_	1,998.2		264.2		_		2,262.4
Selling and administrative expenses	_		99.7	980.6		189.0	_	_		1,269.3
Advertising expense	_		_	134.7		8.6	_	_		143.3
Operating income (loss)	 		(99.7)	 882.9		66.6		 		849.8
Interest (expense) income, net	_		(120.2)	0.3		(1.2)	_	_		(121.1)
Other (expense) income, net	_		(16.1)	2.1		(1.0)	_	_		(15.0)
Income (loss) before income taxes	_		(236.0)	885.3		64.4	_	_		713.7
Income tax (expense) benefit	(0.3)		75.2	(229.2)		(8.2)	_	_		(162.5)
Income (loss) before equity in earnings of subsidiaries	(0.3)		(160.8)	656.1		56.2	_			551.2
Equity in earnings of subsidiaries	551.5		712.3			_	_	(1,263.8)		_
Net income	\$ 551.2	\$	551.5	\$ 656.1	\$	56.2	\$ 	\$ (1,263.8)	\$	551.2

Nine Months Ended September 30, 2018

(in millions)	Parent Guarantor				Guarantor Subsidiaries		Non-Guarantor Subsidiaries		Co-Issuer		Consolidating Adjustments		Consolidated	
Net sales	\$		\$		\$	10,743.7	\$	1,422.0	\$		\$		\$	12,165.7
Cost of sales				_		8,966.6		1,186.0		_		_		10,152.6
Gross profit						1,777.1		236.0						2,013.1
Selling and administrative expenses				103.3		861.8		169.7		_		_		1,134.8
Advertising expense		_		_		128.3		5.6		_		_		133.9
Operating income (loss)				(103.3)		787.0		60.7						744.4
Interest (expense) income, net		_		(109.9)		2.8		(4.4)		_		_		(111.5)
Other income, net						0.6		0.4		_				1.0
Income (loss) before income taxes		_		(213.2)		790.4		56.7		_		_		633.9
Income tax (expense) benefit		(0.3)		61.5		(202.6)		(8.8)		_		_		(150.2)
Income (loss) before equity in earnings of subsidiaries		(0.3)		(151.7)		587.8		47.9				_		483.7
Equity in earnings of subsidiaries		484.0		635.7		_		_		_		(1,119.7)		_
Net income	\$	483.7	\$	484.0	\$	587.8	\$	47.9	\$		\$	(1,119.7)	\$	483.7

Condensed Consolidating Statement of Comprehensive Income

				Three M	onths E	anded Septemb	er 30, 20	19						
(in millions)		Parent uarantor		ıbsidiary Issuer		Guarantor absidiaries	Non-Guarantor Subsidiaries		Co-Issuer			onsolidating djustments	Co	nsolidated
Comprehensive income	\$	\$ 187.0 \$		187.1	\$	246.7	\$	\$ 4.1		<u>\$</u>		(437.9)	\$	187.0
		Conde	nsed (Consolida	ting S	tatement of	Compr	ehensive In	come					
					onths E	Inded Septemb								
(in millions)				ubsidiary Issuer				-Guarantor bsidiaries	Co-Issuer		Consolidating Adjustments		Consolidated	
Comprehensive income	\$	180.6	\$ 180.7		\$	215.0	\$ 14.9		\$		\$	(410.6)	\$	180.6
Comprehensive income	<u> </u>	100.0	=	100.7		210.0	<u> </u>				<u> </u>	(111)		
Comprehensive income	<u> </u>		<u> </u>	Consolida	ting S		-	ehensive In	come		<u> </u>	(,		
(in millions)			nsed (Consolida	ting Stonths En	tatement of	er 30, 201 Nor	ehensive In		o-Issuer		onsolidating djustments	Con	nsolidated
	\$	Conde	nsed (C onsolida Nine Mo ubsidiary	ting Stonths En	tatement of nded September Guarantor	er 30, 201 Nor	ehensive Inc 9 n-Guarantor		o-Issuer —		onsolidating	Con \$	nsolidated 527.7
(in millions)	\$	Parent Guarantor 527.7	s S	Consolidar Nine Mo ubsidiary Issuer 528.0	sting Something	tatement of inded September Guarantor Subsidiaries 656.1	Nor St \$	ehensive Inc 9 n-Guarantor absidiaries 43.5	\$	o-Issuer		onsolidating djustments		
(in millions)	\$	Parent Guarantor 527.7	s s	Consolidar Nine Mo ubsidiary Issuer 528.0	sting Souths English Souths English Souths English	tatement of nded Septembe Guarantor subsidiaries 656.1	Nor St. St. Compress 30, 201	ehensive Inc 9 n-Guarantor absidiaries 43.5	\$	o-Issuer	\$ \$	onsolidating djustments		

587.8

\$

471.7

471.4

\$

(1,089.5) \$

\$

30.0

471.4

Comprehensive income

Condensed Consolidating Statement of Cash Flows

Nine Months Ended September 30, 2019

(in millions)	Parent Guarantor	Subsidiary Issuer	Guarantor Subsidiaries	Non-Guarantor Subsidiaries	Co-Issuer	Consolidating Adjustments	Consolidated	
Net cash provided by (used in) operating activities	\$ —	\$ (6.3)	\$ 620.6	\$ 95.4	\$ —	\$ (27.4)	\$ 682.3	
Cash flows used in investing activities:								
Capital expenditures	_	(46.4)	(19.5)	(9.1)	_	_	(75.0)	
Acquisition of business, net of cash acquired	_	_	_	(75.0)	_	_	(75.0)	
Net cash used in investing activities	_	(46.4)	(19.5)	(84.1)		_	(150.0)	
Cash flows (used in) provided by financing activities:								
Proceeds from borrowings under revolving credit facility	_	1,860.5	_	_	_	_	1,860.5	
Repayments of borrowings under revolving credit facility	_	(1,834.5)	_	_	_	_	(1,834.5)	
Repayments of long-term debt	_	(11.0)	_	(8.7)	_	_	(19.7)	
Proceeds from issuance of long-term debt	_	600.0	_	_	_	_	600.0	
Payments to extinguish long-term debt	_	(538.1)	_	_	_	_	(538.1)	
Net change in accounts payable- inventory financing	_	_	(24.2)	6.8	_	_	(17.4)	
Repurchases of common stock	(493.3)	_	_	_	_	_	(493.3)	
Payment of incentive compensation plan withholding taxes	(21.3)	_	_	_	_	_	(21.3)	
Dividend payments	(128.9)	_	_	_	_	_	(128.9)	
Capital contributions	_	(76.0)	_	76.0	_	_	_	
Other	_	28.8	(4.4)	(0.2)	_	_	24.2	
Distributions and advances from (to) affiliates	643.5	(28.9)	(572.5)	(50.7)	_	8.6	_	
Net cash (used in) provided by financing activities	_	0.8	(601.1)	23.2	_	8.6	(568.5)	
Effect of exchange rate changes on cash and cash equivalents	- I	_	_	(2.7)	_	_	(2.7)	
Net (decrease) increase in cash and cash equivalents		(51.9)		31.8		(18.8)	(38.9)	
Cash and cash equivalents—beginning of period	_	176.0	_	46.7	_	(16.9)	205.8	
Cash and cash equivalents—end of period	\$ —	\$ 124.1	\$ —	\$ 78.5	\$ —	\$ (35.7)	\$ 166.9	

Condensed Consolidating Statement of Cash Flows

Nine Months Ended September 30, 2018

(in millions)	Parent Guarantor					nsolidating justments					
Net cash provided by (used in) operating activities	\$ —	\$	(78.9)	\$	608.4	\$ 80.2	\$ 	\$	(7.4)	\$	602.3
Cash flows used in investing activities:											
Capital expenditures	_		(40.9)		(3.5)	(9.0)	_		_		(53.4)
Net cash used in investing activities			(40.9)		(3.5)	(9.0)	_				(53.4)
Cash flows (used in) provided by financing activities:											
Proceeds from borrowings under revolving credit facility	_		640.0		_	48.9	_		_		688.9
Repayments of borrowings under revolving credit facility	_		(640.0)		_	(41.9)	_		_		(681.9)
Repayments of long-term debt	_		(11.2)		_	(7.0)	_		_		(18.2)
Net change in accounts payable- inventory financing	_		(0.8)		(85.8)	(3.5)	_		_		(90.1)
Repurchases of common stock	(232.5)		_		_	_	_		_		(232.5)
Payment of incentive compensation plan withholding taxes	(27.1)		_		_	_	_		_		(27.1)
Dividend payments	(95.5)		_		_	_	_		_		(95.5)
Repayment of intercompany loan	_		_		47.5	(47.5)	_		_		_
Other	_		25.8		(4.3)	(0.4)	_				21.1
Distributions and advances from (to) affiliates	355.1		213.2		(562.3)	_	_		(6.0)		_
Net cash (used in) provided by financing activities	_		227.0		(604.9)	(51.4)	_		(6.0)		(435.3)
Effect of exchange rate changes on cash and cash equivalents	_		_		_	(2.7)	_		_		(2.7)
Net increase (decrease) in cash and cash equivalents	_		107.2		_	17.1			(13.4)		110.9
Cash and cash equivalents—beginning of period	_		113.7		_	32.4	_		(1.9)		144.2
Cash and cash equivalents—end of period	\$	\$	220.9	\$		\$ 49.5	\$ 	\$	(15.3)	\$	255.1

14. <u>Subsequent Events</u>

On October 11, 2019, CDW extended the maturity date of the existing Term Loan to October 2026.

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

Unless otherwise indicated or the context otherwise requires, as used in this "Management's Discussion and Analysis of Financial Condition and Results of Operations," the terms "we," "us," "the Company," "our," "CDW" and similar terms refer to CDW Corporation and its subsidiaries. "Management's Discussion and Analysis of Financial Condition and Results of Operations" should be read in conjunction with the unaudited interim Consolidated Financial Statements and the related notes included elsewhere in this report and with the audited Consolidated Financial Statements and the related notes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018. This discussion contains forward-looking statements that are subject to numerous risks and uncertainties. Actual results may differ materially from those contained in any forward-looking statements. See "Forward-Looking Statements" at the end of this discussion.

Overview

CDW Corporation, a Fortune 500 company and member of the S&P 500 Index, is a leading provider of integrated information technology ("IT") solutions with multi-national capabilities to small, medium and large business, and government, education and healthcare customers in the US, the UK and Canada. Our broad array of offerings ranges from discrete hardware and software products to integrated IT solutions such as mobility, security, data center optimization, cloud computing, virtualization and collaboration.

We are technology "agnostic," with a broad portfolio including more than 100,000 products and services from more than 1,000 leading and emerging brands. Our solutions are delivered in physical, virtual and cloud-based environments through over 6,000 customer-facing coworkers, including sellers, highly-skilled technology specialists and advanced service delivery engineers. We are a leading sales channel partner for many original equipment manufacturers ("OEMs"), software publishers and cloud providers (collectively, our "vendor partners"), whose products we sell or include in the solutions we offer. We provide our vendor partners with a cost-effective way to reach customers and deliver a consistent brand experience through our established end-market coverage, technical expertise and extensive customer access.

We have three reportable segments, Corporate, Small Business and Public. Our Corporate segment primarily serves US private sector business customers with more than 250 employees. Our Small Business segment primarily serves US private sector business customers with up to 250 employees. Our Public segment is comprised of government agencies and education and healthcare institutions in the US. We also have two other operating segments: CDW UK and CDW Canada, each of which do not meet the reportable segment quantitative thresholds and, accordingly, are included in an all other category ("Other").

We may sell all or only select products that our vendor partners offer. Each vendor partner agreement provides for specific terms and conditions, which may include one or more of the following: product return privileges, price protection policies, purchase discounts and vendor incentive programs, such as purchase or sales rebates and cooperative advertising reimbursements. We also resell software for major software publishers. Our agreements with software publishers allow the end-user customer to acquire software or licensed products and services. In addition to helping our customers determine the best software solutions for their needs, we help them manage their software agreements, including warranties and renewals. A significant portion of our advertising and marketing expenses are reimbursed through cooperative advertising programs with our vendor partners. These programs are at the discretion of our vendor partners and are typically tied to sales or other commitments to be met by us within a specified period of time.

Trends and Key Factors Affecting our Financial Performance

We believe the following key factors may have a meaningful impact on our business performance, influencing our ability to generate sales and achieve our targeted financial and operating results:

• General economic conditions are a key factor affecting our results as they impact our customers' willingness to spend on information technology. This is particularly the case for our Corporate and Small Business customers, as their purchases tend to reflect confidence in their business prospects, which are driven by their discrete perceptions of business and general economic conditions. Additionally, changes in trade policy and product constraints from suppliers could have an adverse impact on our business. There continues to be substantial uncertainty regarding the impact of the UK's planned withdrawal from the European Union ("EU") (referred to as "Brexit"). Potential adverse consequences of Brexit such as global market uncertainty, volatility in currency exchange rates, greater restrictions on imports and exports between UK and EU countries and increased regulatory complexities could have a negative impact on our business, financial condition and results of operations. To date, CDW UK has not experienced significant changes in the buying behavior of its customers even with the uncertainty related to the timing and terms of Brexit. We have established a presence on the continent to support CDW UK's broader growth opportunities in the EU. This also serves as a contingency plan to address future developments as needed around Brexit.

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- Changes in spending policies, budget priorities and funding levels are a key factor influencing the purchasing levels of government, healthcare and education customers.
- Technology trends drive customer purchasing behaviors in the market. Current technology trends are focused on delivering greater flexibility and efficiency, as well as designing IT securely. These trends are driving customer adoption of solutions such as those delivered via cloud, software defined architectures and hybrid on-premise and off-premise combinations, as well as the evolution of the IT consumption model to more "as a service" offerings, including Device as a Service ("DaaS") and managed services.

Key Business Metrics

We monitor a number of financial and non-financial measures and ratios on a regular basis in order to track the progress of our business and make adjustments as necessary. Effective January 1, 2019, we made a change to the Non-GAAP financial measures that we use to provide meaningful methods of evaluating our financial performance and have replaced EBITDA, Adjusted EBITDA and Adjusted EBITDA margin with Non-GAAP operating income and Non-GAAP operating income margin. We made this change due to the continuing evolution of the IT consumption model. We believe Non-GAAP operating income will be more reflective of the costs of providing services to our customers and our own costs as the consumption model continues to evolve. Non-GAAP operating income is also being used for the first time in 2019 as a key business metric for our annual incentive compensation programs.

In addition to Non-GAAP operating income and Non-GAAP operating income margin, we believe that the most important financial and non-financial measures and ratios include average daily sales, gross margin, operating margin, Net income, Non-GAAP income before income taxes, Non-GAAP net income, Net income per diluted share, Non-GAAP net income per diluted share, free cash flow, return on working capital, Cash and cash equivalents, net working capital, cash conversion cycle (defined to be days of sales outstanding in Accounts receivable and certain receivables due from vendors plus days of supply in Merchandise inventory minus days of purchases outstanding in Accounts payable and Accounts payable-inventory financing, based on a rolling three-month average), debt levels including available credit, sales per coworker and coworker turnover. These measures and ratios are compared to standards or objectives set by management, so that actions can be taken, as necessary, in order to achieve the standards and objectives.

In this report, we discuss Non-GAAP operating income, Non-GAAP operating income margin, Non-GAAP income before income taxes and Non-GAAP net income, which are non-GAAP financial measures.

We believe these measures provide analysts, investors and management with helpful information regarding the underlying operating performance of our business, as they remove the impact of items that management believes are not reflective of underlying operating performance. Management uses these measures to evaluate period-over-period performance as management believes they provide a more comparable measure of the underlying business. For the definitions of Non-GAAP operating income, Non-GAAP income before income taxes and Non-GAAP net income and reconciliations to the most directly comparable GAAP measure, see "Results of Operations - Non-GAAP Financial Measure Reconciliations."

Third Quarter Overview

The results of certain business metrics are as follows:

	 Three Months E	nded Se	eptember 30,
(dollars in millions)	2019		2018
Net sales	\$ 4,907.7	\$	4,373.2
Gross profit	816.5		713.6
Operating income	320.6		274.8
Net income	201.7		183.7
Non-GAAP operating income	380.4		333.9
Non-GAAP net income	249.9		217.6
Average daily sales ⁽¹⁾	76.7		69.4
Net debt ⁽²⁾	3,117.5		2,964.3
Cash conversion cycle (in days)	17		18

- (1) There were 64 and 63 selling days for the three months ended September 30, 2019 and 2018, respectively.
- (2) Defined as Total debt minus Cash and cash equivalents.

Results of Operations

Three Months Ended September 30, 2019 Compared to Three Months Ended September 30, 2018

Results of operations, in dollars and as a percentage of Net sales are as follows:

		Three Months En	ded S	September 30,	
	20)19		2	018
	Dollars in Millions	Percentage of Net Sales		Dollars in Millions	Percentage of Net Sales
Net sales	\$ 4,907.7	100.0 %	\$	4,373.2	100.0 %
Cost of sales	4,091.2	83.4		3,659.6	83.7
Gross profit	816.5	16.6		713.6	16.3
Selling and administrative expenses	444.9	9.1		390.7	8.9
Advertising expense	51.0	1.0		48.1	1.1
Operating income	320.6	6.5	_	274.8	6.3
Interest expense, net	(42.3)	(0.9)		(36.6)	(0.8)
Other (expense) income, net	(17.4)	(0.3)		0.2	_
Income before income taxes	260.9	5.3		238.4	5.5
Income tax expense	(59.2)	(1.2)		(54.7)	(1.2)
Net income	\$ 201.7	4.1 %	\$	183.7	4.2 %

Net sales

Net sales by segment, in dollars and as a percentage of total Net sales, and the year-over-year dollar and percentage change in Net sales are as follows:

Three Months Ended Sentember 20

		Three Months En	ded S	September 30,				
	2	2019		2	018			
(dollars in millions)	 Net Sales	Percentage of Total Net Sales		Net Sales	Percentage of Total Net Sales	Dollar Change	Percent Change	Average Daily Sales Percent Change ⁽¹⁾
Corporate	\$ 1,913.5	39.0%	\$	1,706.5	39.1%	\$ 207.0	12.1%	10.4%
Small Business	386.2	7.9		340.0	7.8	46.2	13.6	11.8
Public:								
Government	793.4	16.2		639.3	14.6	154.1	24.1	22.2
Education	807.0	16.4		793.1	18.1	13.9	1.8	0.2
Healthcare	500.5	10.2		442.7	10.1	57.8	13.1	11.3
Total Public	2,100.9	42.8		1,875.1	42.8	225.8	12.0	10.3
Other	507.1	10.3		451.6	10.3	55.5	12.3	10.6
				_		_		
Total Net sales	\$ 4,907.7	100.0%	\$	4,373.2	100.0%	\$ 534.5	12.2%	10.5%

(1) There were 64 and 63 selling days for the three months ended September 30, 2019 and 2018, respectively.

Total Net sales for the three months ended September 30, 2019 increased \$535 million, or 12.2%, to \$4,908 million, compared to \$4,373 million for the three months ended September 30, 2018. There was one more selling day in the three months ended September 30, 2019 compared to the same period of 2018, and Net sales on an average daily sales basis increased 10.5%. Excluding the impact of foreign currency fluctuations, constant currency Net sales growth on an average daily sales basis was 10.9%. See "Non-GAAP Financial Measure Reconciliations" below for additional information regarding constant currency Net sales growth.

For the three months ended September 30, 2019, Net sales growth reflected growth across most major product categories, particularly client devices (defined as notebooks/mobile devices and desktops), software and services. For additional details, see Note 12 (Segment Information) to the accompanying Consolidated Financial Statements.

Corporate segment Net sales for the three months ended September 30, 2019 increased \$207 million, or 12.1%, compared to the three months ended September 30, 2018. On an average daily sales basis, Corporate segment Net sales increased 10.4%. Growth was primarily driven by client devices and software.

Small Business segment Net sales for the three months ended September 30, 2019 increased \$46 million, or 13.6%, compared to the three months ended September 30, 2018. On an average daily sales basis, Small Business segment Net sales increased 11.8%. Growth was primarily driven by client devices.

Public segment Net sales for the three months ended September 30, 2019 increased \$226 million, or 12.0%, compared to the three months ended September 30, 2018. On an average daily sales basis, Public segment Net sales increased 10.3%. Net sales to Government and Healthcare customers increased 22.2% and 11.3% on an average daily sales basis, respectively, primarily driven by client devices. Net sales to Education customers were flat.

Net sales in Other, which is comprised of results from our UK and Canadian operations, for the three months ended September 30, 2019 increased \$56 million, or 10.6% on an average daily sales basis, compared to the three months ended September 30, 2018. Both operations grew in local currency led by Canada growth which included the incremental Net sales from Scalar Decisions Inc. ("Scalar"). This increase was partially offset by the impact of foreign currency exchange of approximately 470 basis points, due to the unfavorable impact resulting from the British pound and Canadian dollar to US dollar translations.

Gross profit

Gross profit increased \$103 million, or 14.4%, to \$816 million for the three months ended September 30, 2019, compared to the three months ended September 30, 2018. As a percentage of Net sales, Gross profit margin increased 30 basis points to 16.6% for the three months ended September 30, 2019. Gross profit margin was positively impacted by an increase in the mix of netted down revenues, such as Software as a Service and warranties.

Selling and administrative expenses

Selling and administrative expenses increased \$54 million, or 13.9%, to \$445 million for the three months ended September 30, 2019, compared to \$391 million for the three months ended September 30, 2018. The increase was driven by higher payroll expenses due to higher sales payroll expenses, including sales commissions, which are primarily driven by higher gross profit, the inclusion of Scalar expenses, and performance-based compensation consistent with higher attainment against goals. Total coworker count was 9,843, up 906 from 8,937 at September 30, 2018, including the incremental coworker count from Scalar.

As a percentage of Net sales, selling and administrative expenses increased 20 basis points to 9.1% during the three months ended September 30, 2019, from 8.9% in the three months ended September 30, 2018.

Operating income

During the first quarter of 2019, we evaluated our methodology for allocating certain depreciation and amortization expenses to each of our segments. The evaluation resulted in a revision to the allocation of depreciation and amortization expenses from Headquarters to our reportable segments, effective January 1, 2019. The prior period results have been recast to reflect these changes and present comparable information.

Operating income by segment, in dollars and as a percentage of Net sales, and the year-over-year percentage change are as follows:

		Three Months En	ded S	September 30,		
	20	19		20		
	 Dollars in Millions	Operating Margin		Dollars in Millions	Operating Margin	Percent Change in Operating Income
Segments:(1)						
Corporate	\$ 138.9	7.3%	\$	125.7	7.4%	10.5 %
Small Business	27.2	7.0		23.8	7.0	14.3
Public	168.4	8.0		136.6	7.3	23.3
Other ⁽²⁾	21.9	4.3		19.2	4.3	14.1
Headquarters ⁽³⁾	(35.8)	nm*		(30.5)	nm*	(17.4)
Total Operating income	\$ 320.6	6.5%	\$	274.8	6.3%	16.7 %

* Not meaningful

- (1) Segment operating income includes the segment's direct operating income, allocations for Headquarters' costs, allocations for income and expenses from logistics services, certain inventory adjustments and volume rebates and cooperative advertising from vendors.
- (2) Includes the financial results for our other operating segments, CDW UK and CDW Canada, which do not meet the reportable segment quantitative thresholds.
- (3) Includes certain Headquarters' function costs that are not allocated to the segments.

Operating income was \$321 million for the three months ended September 30, 2019, an increase of \$46 million, or 16.7%, compared to \$275 million for the three months ended September 30, 2018. Operating income increased primarily due to higher gross profit dollars partially offset by higher payroll expenses. Total operating margin percentage increased 20 basis points to 6.5% for the three months ended September 30, 2019, from 6.3% for the three months ended September 30, 2018.

Corporate segment Operating income was \$139 million for the three months ended September 30, 2019, an increase of \$13 million, or 10.5%, compared to \$126 million for the three months ended September 30, 2018. Corporate segment Operating income increased primarily due to higher gross profit dollars partially offset by higher payroll expenses. Corporate segment operating margin percentage decreased 10 basis points to 7.3% for the three months ended September 30, 2019, compared to 7.4% for the three months ended September 30, 2018.

Small Business segment Operating income was \$27 million for the three months ended September 30, 2019, an increase of \$3 million, or 14.3%, compared to \$24 million for the three months ended September 30, 2018. Small Business segment Operating income increased primarily due to higher gross profit dollars partially offset by higher payroll expenses. Small Business segment operating margin percentage remained flat at 7.0% for the three months ended September 30, 2019 and 2018

Public segment Operating income was \$168 million for the three months ended September 30, 2019, an increase of \$32 million, or 23.3%, compared to \$137 million for the three months ended September 30, 2018. Public segment Operating income increased primarily due to higher gross profit dollars partially offset by higher sales payroll expenses. Public segment operating margin percentage increased 70 basis points to 8.0% for the three months ended September 30, 2019 from 7.3% for the three months ended September 30, 2018. This increase in operating margin percentage was primarily driven by an increase in product margin improvement partially offset by higher payroll expenses.

Other Operating income was \$22 million for the three months ended September 30, 2019, an increase of \$3 million, or 14.1%, compared to \$19 million for the three months ended September 30, 2018. Other Operating income increased primarily due to higher gross profit dollars offset by higher payroll expenses, which was due to the inclusion of Scalar expenses, and the unfavorable translation of the British pound and Canadian dollar to US dollar. Other operating margin percentage remained flat at 4.3% for the three months ended September 30, 2019.

Interest expense, net

At September 30, 2019, our outstanding debt totaled \$3,304 million compared to \$3,238 million at September 30, 2018. Interest expense, net for the three months ended September 30, 2019 was \$42 million, an increase of \$5 million compared to \$37 million for the three months ended September 30, 2018. This increase was primarily due to paying an effective interest rate on the term loan in 2019 that exceeded the capped rate in 2018.

Other (expense) income, net

During the three months ended September 30, 2019, there was a \$16 million net loss on extinguishment of long-term debt. For additional details, see Note 7 (Long-Term Debt) to the accompanying Consolidated Financial Statements.

Income tax expense

Income tax expense was \$59 million for the three months ended September 30, 2019, compared to \$55 million for the same period of the prior year. The effective tax rate, expressed by calculating the income tax expense as a percentage of Income before income taxes, was 22.7% and 22.9% for the three months ended September 30, 2019 and 2018, respectively, and differed from the US federal statutory rate of 21.0% primarily due to state income taxes partially offset by excess tax benefits on equity-based compensation.

The lower effective tax rate for the three months ended September 30, 2019 as compared to the same period of the prior year was primarily attributable to higher excess tax benefits on equity-based compensation.

Non-GAAP Financial Measure Reconciliations

We have included reconciliations of Non-GAAP operating income, Non-GAAP income before income taxes, Non-GAAP net income and Net sales growth on a constant currency basis for the three months ended September 30, 2019 and 2018 below.

Non-GAAP operating income excludes, among other things, charges related to the amortization of acquisition-related intangible assets, equity-based compensation and the associated payroll taxes, and acquisition and integration expenses. Non-GAAP operating income margin is defined as Non-GAAP operating income as a percentage of Net sales. Non-GAAP income before income taxes, and Non-GAAP net income exclude, among other things, charges related to acquisition-related intangible asset amortization, equity-based compensation, net loss on extinguishment of long-term debt, acquisition and integration expenses, and the associated tax effects of each. Net sales growth on a constant currency basis is defined as Net sales growth excluding the impact of foreign currency translation on Net sales compared to the prior period.

Non-GAAP operating income, Non-GAAP operating income margin, Non-GAAP income before income taxes, Non-GAAP net income and Net sales growth on a constant currency basis are considered non-GAAP financial measures. Generally, a non-GAAP financial measure is a numerical measure of a company's performance or financial position that either excludes or includes amounts that are not normally included or excluded in the most directly comparable measure calculated and presented in accordance with GAAP. Non-GAAP measures used by management may differ from similar measures used by other companies, even when similar terms are used to identify such measures.

We believe these measures provide analysts, investors and management with helpful information regarding the underlying operating performance of our business, as they remove the impact of items that management believes are not reflective of underlying operating performance. Management uses these measures to evaluate period-over-period performance as management believes they provide a more comparable measure of the underlying business.

Non-GAAP operating income

Non-GAAP operating income was \$380 million for the three months ended September 30, 2019, an increase of \$46 million, or 13.9%, compared to \$334 million for the three months ended September 30, 2018. As a percentage of Net sales, Non-GAAP operating income was 7.8% and 7.6% for the three months ended September 30, 2019 and 2018, respectively.

	1	Three Months En	nded September 30,		
(dollars in millions)		2019		2018	
Operating income	\$	320.6	\$	274.8	
Amortization of intangibles ⁽¹⁾		44.6		45.3	
Equity-based compensation		12.8		10.8	
Scalar acquisition and integration expenses		0.9		_	
Other adjustments ⁽²⁾		1.5		3.0	
Non-GAAP operating income	\$	380.4	\$	333.9	
Non-GAAP operating income margin		7.8%		7.6%	

- (1) Includes amortization expense for acquisition-related intangible assets, primarily customer relationships, customer contracts and trade names.
- (2) Includes other expenses such as payroll taxes on equity-based compensation.

Non-GAAP net income

Non-GAAP net income was \$250 million for the three months ended September 30, 2019, an increase of \$32 million, or 14.8%, compared to \$218 million for the three months ended September 30, 2018.

			Three	e Months End	ded Se	ptember 30,					
		2019			2018						
(in millions)	ome before ome taxes	expense ⁽¹⁾	N	et income		ome before come taxes		ncome tax expense ⁽¹⁾	Ne	t income	
GAAP (as reported)	\$ 260.9	\$ (59.2)	\$	201.7	\$	238.4	\$	(54.7)	\$	183.7	
Amortization of intangibles ⁽²⁾	44.6	(11.3)		33.3		45.3		(12.0)		33.3	
Equity-based compensation	12.8	(11.8)		1.0		10.8		(10.5)		0.3	
Net loss on extinguishment of long-term debt	16.1	(4.0)		12.1		_		_		_	
Scalar acquisition and integration expenses	0.9	(0.2)		0.7		_		_		_	
Other adjustments ⁽³⁾	1.5	(0.4)		1.1		3.0		(2.7)		0.3	
Non-GAAP	\$ 336.8	\$ (86.9)	\$	249.9	\$	297.5	\$	(79.9)	\$	217.6	

- (1) Income tax on non-GAAP adjustments includes excess tax benefits associated with equity-based compensation and the impact of global intangible low tax income ("GILTI") due to equity-based compensation and amortization of intangibles.
- (2) Includes amortization expense for acquisition-related intangible assets, primarily customer relationships, customer contracts and trade names.
- (3) Includes other expenses such as payroll taxes on equity-based compensation.

Net sales growth on a constant currency basis

Net sales increased \$535 million, or 12.2%, to \$4,908 million for the three months ended September 30, 2019, compared to \$4,373 million for the three months ended September 30, 2018. Net sales on a constant currency basis, which excludes the impact of foreign currency translation, increased \$552 million, or 12.7%.

	Three Months Ended September 30,										
(dollars in millions)		2019		2018	% Change	Average Daily % Change ⁽¹⁾					
Net sales, as reported	\$	4,907.7	\$	4,373.2	12.2%	10.5%					
Foreign currency translation ⁽²⁾		_		(18.1)							
Net sales, on a constant currency basis	\$	4,907.7	\$	4,355.1	12.7%	10.9%					

- (1) There were 64 and 63 selling days for the three months ended September 30, 2019 and 2018, respectively.
- (2) Represents the effect of translating the prior year results of CDW UK and CDW Canada at the average exchange rates applicable in the current year.

Nine Months Overview

The results of certain business metrics are as follows:

	 Nine Months E	nded Se	eptember 30,
(dollars in millions)	2019		2018
Net sales	\$ 13,495.5	\$	12,165.7
Gross profit	2,262.4		2,013.1
Operating income	849.8		744.4
Net income	551.2		483.7
Non-GAAP operating income	1,026.1		917.1
Non-GAAP net income	673.0		593.6
Average daily sales ⁽¹⁾	70.7		63.7
Net debt ⁽²⁾	3,117.5		2,964.3
Cash conversion cycle (in days) ⁽³⁾	17		18

- (1) There were 191 selling days for both the nine months ended September 30, 2019 and 2018.
- (2) Defined as Total debt minus Cash and cash equivalents.
- (3) Cash conversion cycle is defined as days of sales outstanding in Accounts receivable and certain receivables due from vendors plus days of supply in Merchandise inventory minus days of purchases outstanding in Accounts payable and Accounts payable-inventory financing, based on a rolling three-month average.

Results of Operations

Nine Months Ended September 30, 2019 Compared to Nine Months Ended September 30, 2018

Results of operations, in dollars and as a percentage of Net sales are as follows:

	 	Nine Months En	ded S	September 30,	
	20)19		20	018
	Dollars in Millions	Percentage of Net Sales		Dollars in Millions	Percentage of Net Sales
Net sales	\$ 13,495.5	100.0 %	\$	12,165.7	100.0 %
Cost of sales	11,233.1	83.2		10,152.6	83.5
Gross profit	2,262.4	16.8		2,013.1	16.5
Selling and administrative expenses	1,269.3	9.4		1,134.8	9.3
Advertising expense	143.3	1.1		133.9	1.1
Operating income	849.8	6.3		744.4	6.1
Interest expense, net	(121.1)	(0.9)		(111.5)	(0.9)
Other (expense) income, net	(15.0)	(0.1)		1.0	_
Income before income taxes	713.7	5.3		633.9	5.2
Income tax expense	(162.5)	(1.2)		(150.2)	(1.2)
Net income	\$ 551.2	4.1 %	\$	483.7	4.0 %

Net sales

Net sales by segment, in dollars and as a percentage of total Net sales, and the year-over-year dollar and percentage change in Net sales are as follows:

	Nine Months Ended September 30,									
		20)19		20	018				
(dollars in millions)		Net Sales	Percentage of Total Net Sales		Net Sales	Percentage of Total Net Sales		Dollar Change	Percent Change ⁽¹⁾	
Corporate	\$	5,533.6	41.0%	\$	5,006.1	41.1%	\$	527.5	10.5%	
Small Business		1,119.2	8.3		997.1	8.2		122.1	12.2	
Public:										
Government		1,860.2	13.8		1,551.3	12.8		308.9	19.9	
Education		1,981.0	14.7		1,902.4	15.6		78.6	4.1	
Healthcare		1,430.5	10.6		1,286.8	10.6		143.7	11.2	
Total Public		5,271.7	39.1		4,740.5	39.0		531.2	11.2	
Other		1,571.0	11.6		1,422.0	11.7		149.0	10.5	
Total Net sales	\$	13,495.5	100.0%	\$	12,165.7	100.0%	\$	1,329.8	10.9%	

⁽¹⁾ There were 191 selling days for both the nine months ended September 30, 2019 and 2018.

Total Net sales for the nine months ended September 30, 2019 increased \$1,330 million, or 10.9%, to \$13,495 million, compared to the nine months ended September 30, 2018. Excluding the impact of foreign currency fluctuations, constant currency Net sales growth was 11.6%. See "Non-GAAP Financial Measure Reconciliations" below for additional information regarding constant currency Net sales growth.

For the nine months ended September 30, 2019, Net sales growth reflected growth across most major product categories, particularly client devices, software and services. Additionally, eight months of results from Scalar, which was acquired on February 1, 2019,

contributed to our Net sales growth. For additional details, see Note 12 (Segment Information) to the accompanying Consolidated Financial Statements.

Corporate segment Net sales for the nine months ended September 30, 2019 increased \$528 million, or 10.5%, compared to the nine months ended September 30, 2018. Growth was primarily driven by client devices and software.

Small Business segment Net sales for the nine months ended September 30, 2019 increased \$122 million, or 12.2%, compared to the nine months ended September 30, 2018. Growth was primarily driven by client devices.

Public segment Net sales for the nine months ended September 30, 2019 increased \$531 million, or 11.2%, compared to the nine months ended September 30, 2018. The increase was primarily driven by growth in Government and Healthcare. Net sales to Government customers increased 19.9% primarily driven by client devices, software and enterprise storage. Net sales to Healthcare customers increased 11.2% primarily driven by client devices, software and services. Net sales to Education customers increased 4.1% primarily driven by client devices and video.

Net sales in Other, which is comprised of results from our UK and Canadian operations, for the nine months ended September 30, 2019 increased \$149 million, or 10.5%, compared to the nine months ended September 30, 2018. Both operations grew in local currency and Canada growth included the incremental Net sales from Scalar. The impact of foreign currency exchange decreased Other sales growth by approximately 560 basis points, due to the unfavorable impact resulting from the British pound and Canadian dollar to US dollar translations.

Gross profit

Gross profit increased \$249 million, or 12.4%, to \$2,262 million for the nine months ended September 30, 2019, compared to \$2,013 million for the nine months ended September 30, 2018. As a percentage of Net sales, Gross profit margin increased 30 basis points to 16.8% for the nine months ended September 30, 2019. Gross profit margin was positively impacted by an increase in the mix of netted down revenues, such as Software as a Service and warranties.

Selling and administrative expenses

Selling and administrative expenses increased \$134 million, or 11.9%, to \$1,269 million for the nine months ended September 30, 2019, compared to \$1,135 million for the nine months ended September 30, 2018. The increase was driven by higher payroll expenses due to higher sales payroll expenses, including sales commissions, which are primarily driven by higher gross profit, the inclusion of Scalar expenses, and performance-based compensation consistent with higher attainment against goals.

As a percentage of Net sales, selling and administrative expenses increased 10 basis points to 9.4% during the nine months ended September 30, 2019, from 9.3% in the nine months ended September 30, 2018.

Operating income

During the first quarter of 2019, we evaluated our methodology for allocating certain depreciation and amortization expenses to each of our segments. The evaluation resulted in a revision to the allocation of depreciation and amortization expenses from Headquarters to our reportable segments, effective January 1, 2019. The prior period results have been recast to reflect these changes and present comparable information.

Operating income by segment, in dollars and as a percentage of Net sales, and the year-over-year percentage change are as follows:

	 	Nine Months En	ded Se	eptember 30,		
	 2019			2018		
	Dollars in Millions	Operating Margin		Dollars in Millions	Operating Margin	Percent Change in Operating Income
Segments:(1)						
Corporate	\$ 430.8	7.8%	\$	388.3	7.8%	10.9 %
Small Business	78.2	7.0		70.0	7.0	11.7
Public	373.9	7.1		318.3	6.7	17.5
Other ⁽²⁾	66.6	4.2		60.7	4.3	9.7
Headquarters ⁽³⁾	(99.7)	nm*		(92.9)	nm*	(7.3)
Total Operating income	\$ 849.8	6.3%	\$	744.4	6.1%	14.2 %

* Not meaningful

- (1) Segment operating income includes the segment's direct operating income, allocations for Headquarters' costs, allocations for income and expenses from logistics services, certain inventory adjustments and volume rebates and cooperative advertising from vendors.
- (2) Includes the financial results for our other operating segments, CDW UK and CDW Canada, which do not meet the reportable segment quantitative thresholds.
- (3) Includes certain Headquarters' function costs that are not allocated to the segments.

Operating income was \$850 million for the nine months ended September 30, 2019, an increase of \$105 million, or 14.2%, compared to \$744 million for the nine months ended September 30, 2018. Operating income increased primarily due to higher gross profit dollars partially offset by higher payroll expenses. Total operating margin percentage increased 20 basis points to 6.3% for the nine months ended September 30, 2019, from 6.1% for the nine months ended September 30, 2018 due to mix into netted down revenues.

Corporate segment Operating income was \$431 million for the nine months ended September 30, 2019, an increase of \$43 million, or 10.9%, compared to \$388 million for the nine months ended September 30, 2018. Corporate segment Operating income increased primarily due to higher gross profit dollars partially offset by higher payroll expenses. Corporate segment operating margin percentage remained flat at 7.8% for the nine months ended September 30, 2019 and 2018.

Small Business segment Operating income was \$78 million for the nine months ended September 30, 2019, an increase of \$8 million, or 11.7%, compared to \$70 million for the nine months ended September 30, 2018. Small Business segment Operating income increased primarily due to higher gross profit dollars partially offset by higher payroll expense. Small Business segment operating margin percentage remained flat at 7.0% for the nine months ended September 30, 2019 and 2018.

Public segment Operating income was \$374 million for the nine months ended September 30, 2019, an increase of \$56 million, or 17.5%, compared to \$318 million for the nine months ended September 30, 2018. Public segment Operating income increased primarily due to higher gross profit dollars partially offset by higher sales payroll expenses. Public segment operating margin percentage increased 40 basis points to 7.1% for the nine months ended September 30, 2019, from 6.7% for the nine months ended September 30, 2018 due to product margin improvement partially offset by higher payroll expenses.

Other Operating income was \$67 million for the nine months ended September 30, 2019, an increase of \$6 million, or 9.7%, compared to \$61 million for the nine months ended September 30, 2018. Other Operating income increased primarily due to higher gross profit dollars partially offset by higher payroll expenses, which was due to the inclusion of Scalar expenses, and the unfavorable translation of the British pound and Canadian dollar to US dollar. Other operating margin percentage decreased 10 basis points to 4.2% for the nine months ended September 30, 2019, from 4.3% for the nine months ended September 30, 2018.

Interest expense, net

Interest expense, net for the nine months ended September 30, 2019 was \$121 million, an increase of \$9 million compared to \$112 million for the nine months ended September 30, 2018. This increase was primarily due to paying an effective interest rate on the term loan in 2019 that exceeded the capped rate in 2018.

Other (expense) income, net

During the nine months ended September 30, 2019, there was a \$16 million net loss on extinguishment of long-term debt. For additional details, see Note 7 (Long-Term Debt) to the accompanying Consolidated Financial Statements.

Income tax expense

Income tax expense was \$162 million for the nine months ended September 30, 2019, compared to \$150 million for the same period of the prior year. The effective tax rate, expressed by calculating the income tax expense as a percentage of Income before income taxes, was 22.8% and 23.7% for the nine months ended September 30, 2019 and 2018, respectively, and differed from the US federal statutory rate of 21.0% primarily due to state income taxes partially offset by excess tax benefits on equity-based compensation.

The lower effective tax rate for the nine months ended September 30, 2019 as compared to the same period of the prior year was primarily attributable to higher excess tax benefits on equity-based compensation and a discrete tax benefit related to CDW Canada's acquisition of Scalar.

Non-GAAP Financial Measure Reconciliations

We have included reconciliations of Non-GAAP operating income, Non-GAAP income before income taxes, Non-GAAP net income and Net sales growth on a constant currency basis for the nine months ended September 30, 2019 and 2018 below.

Non-GAAP operating income

Non-GAAP operating income was \$1,026 million for the nine months ended September 30, 2019, an increase of \$109 million, or 11.9%, compared to \$917 million for the nine months ended September 30, 2018. As a percentage of Net sales, Non-GAAP operating income was 7.6% and 7.5% for the nine months ended September 30, 2019 and 2018.

	 Nine Months Er	Ended September 30,		
(dollars in millions)	 2019		2018	
Operating income	\$ 849.8	\$	744.4	
Amortization of intangibles ⁽¹⁾	133.7		138.6	
Equity-based compensation	37.7		29.9	
Scalar acquisition and integration expenses	2.0		_	
Other adjustments ⁽²⁾	2.9		4.2	
Non-GAAP operating income	\$ 1,026.1	\$	917.1	
Non-GAAP operating income margin	7.6%		7.5%	

- (1) Includes amortization expense for acquisition-related intangible assets, primarily customer relationships, customer contracts and trade names.
- (2) Includes other expenses such as payroll taxes on equity-based compensation.

Non-GAAP net income

Non-GAAP net income was \$673 million for the nine months ended September 30, 2019, an increase of \$79 million, or 13.4%, compared to \$594 million for the nine months ended September 30, 2018.

	Nine Months Ended September 30,											
		2019 201						2018				
(in millions)		ome before ome taxes		expense ⁽¹⁾	N	let income		ome before come taxes		ncome tax expense ⁽¹⁾	Ne	et income
GAAP (as reported)	\$	713.7	\$	(162.5)	\$	551.2	\$	633.9	\$	(150.2)	\$	483.7
Amortization of intangibles ⁽²⁾		133.7		(33.8)		99.9		138.6		(36.0)		102.6
Equity-based compensation		37.7		(28.7)		9.0		29.9		(23.8)		6.1
Net loss on extinguishment of long-term debt		16.1		(4.0)		12.1		_		_		_
Scalar acquisition and integration expenses ⁽³⁾		2.0		(3.4)		(1.4)		_		_		_
Other adjustments ⁽⁴⁾		2.9		(0.7)		2.2		4.2		(3.0)		1.2
Non-GAAP	\$	906.1	\$	(233.1)	\$	673.0	\$	806.6	\$	(213.0)	\$	593.6

- (1) Income tax on non-GAAP adjustments includes excess tax benefits associated with equity-based compensation and the impact of GILTI due to equity-based compensation and amortization of intangibles.
- (2) Includes amortization expense for acquisition-related intangible assets, primarily customer relationships, customer contracts and trade names.
- (3) Includes a \$3 million discrete tax benefit related to CDW Canada's acquisition of Scalar.
- (4) Includes other expenses such as payroll taxes on equity-based compensation.

Net sales growth on a constant currency basis

Net sales increased \$1,330 million, or 10.9%, to \$13,495 million for the nine months ended September 30, 2019, compared to \$12,166 million for the nine months ended September 30, 2018. Net sales on a constant currency basis, which excludes the impact of foreign currency translation, increased \$1,399 million, or 11.6%.

	Nine Months Ended September 30,				
(dollars in millions)		2019		2018	% Change
Net sales, as reported	\$	13,495.5	\$	12,165.7	10.9%
Foreign currency translation ⁽²⁾		_		(68.9)	
Net sales, on a constant currency basis	\$	13,495.5	\$	12,096.8	11.6%

- (1) There were 191 selling days for both the nine months ended September 30, 2019 and 2018.
- (2) Represents the effect of translating the prior year results of CDW UK and CDW Canada at the average exchange rates applicable in the current year.

Seasonality

While we have not historically experienced significant seasonality throughout the year, sales in our Corporate segment, which primarily serves US private sector business customers with more than 250 employees, are typically higher in the fourth quarter than in other quarters due to customers spending their remaining technology budget dollars at the end of the year. Additionally, sales in our Public segment have historically been higher in the third quarter than in other quarters primarily due to the buying patterns of the federal government and education customers.

Liquidity and Capital Resources

Overview

We finance our operations and capital expenditures with internally generated cash from operations. As of September 30, 2019, we also have \$1.1 billion of availability for borrowings under our senior secured asset-based revolving credit facility and an

additional £50 million (\$61 million at September 30, 2019) under the CDW UK revolving credit facility. Our liquidity and borrowing plans are established to align with our financial and strategic planning processes and ensure we have the necessary funding to meet our operating commitments, which primarily include the purchase of inventory, payroll and general expenses. We also take into consideration our overall capital allocation strategy, which includes investment for future growth, dividend payments, acquisitions and share repurchases. We believe we have adequate sources of liquidity and funding available for at least the next year; however, there are a number of factors that may negatively impact our available sources of funds. The amount of cash generated from operations will be dependent upon factors such as the successful execution of our business plan and general economic conditions.

Long-Term Debt and Financing Arrangements

On September 26, 2019, we refinanced our 2023 Senior Notes through the issuance of 2028 Senior Notes. For additional details, see Note 7 (Long-Term Debt) to the accompanying Consolidated Financial Statements. On October 11, 2019, we extended the maturity date of the Term Loan from August 2023 to October 2026.

As of September 30, 2019, we had total indebtedness of \$3.3 billion, of which \$1.5 billion was secured indebtedness. At September 30, 2019, we were in compliance with the covenants under our various credit agreements and indentures.

Inventory Financing Agreements

We have entered into agreements with certain financial intermediaries to facilitate the purchase of inventory from various suppliers under certain terms and conditions. These amounts are classified separately as Accounts payable-inventory financing on the Consolidated Balance Sheets. We do not incur any interest expense associated with these agreements as balances are paid when they are due. For additional details, see Note 4 (Inventory Financing Agreements) to the accompanying Consolidated Financial Statements.

Share Repurchase Program

During the nine months ended September 30, 2019, we repurchased 4.8 million shares of our common stock for \$493 million under the previously announced share repurchase program. For additional details on our share repurchase program, see Part II, Item 2, Unregistered Sales of Equity Securities and Use of Proceeds.

Dividends

A summary of 2019 dividend activity for our common stock is as follows:

Dividend Amount	Declaration Date	Record Date	Payment Date
\$0.295	February 7, 2019	February 25, 2019	March 12, 2019
\$0.295	May 1, 2019	May 24, 2019	June 11, 2019
\$0.295	July 31, 2019	August 26, 2019	September 10, 2019

On October 31, 2019, we announced that our Board of Directors declared a quarterly cash dividend of \$0.380 per common share. The dividend will be paid on December 10, 2019 to all stockholders of record as of the close of business on November 25, 2019.

The payment of any future dividends will be at the discretion of our Board of Directors and will depend upon our results of operations, financial condition, business prospects, capital requirements, contractual restrictions, any potential indebtedness we may incur, restrictions imposed by applicable law, tax considerations and other factors that our Board of Directors deems relevant. In addition, our ability to pay dividends on our common stock will be limited by restrictions on our ability to pay dividends or make distributions to our stockholders and on the ability of our subsidiaries to pay dividends or make distributions to us, in each case, under the terms of our current and any future agreements governing our indebtedness.

Cash Flows

Cash flows from operating, investing and financing activities are as follows:

	 Nine Months Ended September 30,		
(in millions)	 2019		2018
Net cash provided by (used in):			
Operating activities	\$ 682.3	\$	602.3
Investing activities	(150.0)		
Net change in accounts payable-inventory financing	(17.4)		(90.1)
Other financing activities	(551.1)		(345.2)
Financing activities	 (568.5)		(435.3)
Effect of exchange rate changes on cash and cash equivalents	(2.7)		(2.7)
Net (decrease) increase in cash and cash equivalents	\$ (38.9)	\$	110.9

Operating Activities

	Nine Months Ended September 30,				
(in millions)	2019	2018	Change		
Net income	\$ 551.2	\$ 483.7	\$ 67.5		
Adjustments for the impact of non-cash items(1)	226.9	198.1	28.8		
Net income adjusted for the impact of non-cash items ⁽²⁾	778.1	681.8	96.3		
Changes in assets and liabilities:					
Accounts receivable ⁽³⁾	(171.8)	(334.3)	162.5		
Merchandise inventory ⁽⁴⁾	(151.1)	(72.1)	(79.0)		
Accounts payable-trade ⁽⁵⁾	264.0	300.6	(36.6)		
Other ⁽⁶⁾	(36.9)	26.3	(63.2)		
Net cash provided by operating activities	\$ 682.3	\$ 602.3	\$ 80.0		

- (1) Includes items such as deferred income taxes, depreciation and amortization, and equity-based compensation expense.
- (2) The change is primarily due to stronger operating results driven by Net sales and Gross profit growth.
- (3) The change is due to favorable timing of collections.
- (4) The change is due to higher customer-driven stocking positions.
- (5) The change is due to timing of payments, partially offset by increased sales in 2019.
- (6) The change is due to a higher increase in the receivables from vendors due to the growth in business and a lower increase in accrued compensation expense.

In order to manage our working capital and operating cash needs, we monitor our cash conversion cycle, defined as days of sales outstanding in Accounts receivable and certain receivables due from vendors plus days of supply in Merchandise inventory minus days of purchases outstanding in Accounts payable and Accounts payable-inventory financing, based on a rolling three-month average. Components of our cash conversion cycle are as follows:

	September 30,	
(in days)	2019	2018
Days of sales outstanding ("DSO")(1)	56	55
Days of supply in inventory ("DIO") ⁽²⁾	13	12
Days of purchases outstanding ("DPO")(3)	(52)	(49)
Cash conversion cycle	17	18

- (1) Represents the rolling three-month average of the balance of Accounts receivable, net at the end of the period, divided by average daily Net sales for the same three-month period. Also incorporates components of other miscellaneous receivables.
- (2) Represents the rolling three-month average of the balance of Merchandise inventory at the end of the period divided by average daily Cost of sales for the same three-month period.
- (3) Represents the rolling three-month average of the combined balance of Accounts payable-trade, excluding cash overdrafts, and Accounts payable-inventory financing at the end of the period divided by average daily Cost of sales for the same three-month period.

The cash conversion cycle decreased to 17 days at September 30, 2019, compared to 18 days at September 30, 2018. DSO, DIO and DPO increased 1 day, 1 day and 3 days, respectively, compared to September 30, 2018. The increase in DSO was primarily driven by higher Net sales and third-party services such as Software as a Service and warranties. These sales have an unfavorable impact on DSO as the receivable is recognized on the Consolidated Balance Sheets on a gross basis while the corresponding sales amount in the Consolidated Statement of Operations is recorded on a net basis. This was partially offset by favorable timing of collections. Higher Net sales and third-party services also result in a favorable impact on DPO as the payable is recognized on the Consolidated Balance Sheets without a corresponding Cost of sales in the Statement of Operations because the cost paid to the vendor or third-party service provider is recorded as a reduction to Net sales. Additionally, DIO increased due to higher customer-driven stocking positions.

Investing Activities

Net cash used in investing activities increased \$97 million in the nine months ended September 30, 2019 compared to September 30, 2018. The increase was primarily due to the completion of our acquisition of Scalar on February 1, 2019 for \$75 million. Additionally, Capital expenditures increased \$22 million primarily due to investments for improvements to our information technology systems.

Financing Activities

Net cash used in financing activities increased \$133 million in the nine months ended September 30, 2019 compared to September 30, 2018. The increase was primarily driven by our share repurchases and increasing dividends per share during the nine months ended September 30, 2019, which were partially offset by refinancing of our 2023 Senior Notes through the issuance of 2028 Senior Notes, further leveraging of our inventory financing arrangements and borrowings under our revolving credit facilities. For additional details regarding our debt activities, see Note 7 (Long-Term Debt) to the accompanying Consolidated Financial Statements.

Contractual Obligations

Except as disclosed above under "Long-Term Debt and Financing Arrangements," there have been no material changes to our contractual obligations from those reported in our Annual Report on Form 10-K for the year ended December 31, 2018.

Off-Balance Sheet Arrangements

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

Commitments and Contingencies

The information set forth in Note 11 (Commitments and Contingencies) to the accompanying Consolidated Financial Statements is incorporated herein by reference.

Critical Accounting Policies and Estimates

Our critical accounting policies have not changed from those reported in Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended December 31, 2018.

Recent Accounting Pronouncements

The information set forth in Note 2 (Recent Accounting Pronouncements) to the accompanying Consolidated Financial Statements is incorporated herein by reference.

Forward-Looking Statements

This report contains forward-looking statements within the meaning of the federal securities laws. All statements other than statements of historical fact included in this report are forward-looking statements. These statements relate to analyses and other information, which are based on forecasts of future results and estimates of amounts not yet determinable. These statements also relate to our future prospects, developments and business strategies. We claim the protection of The Private Securities Litigation Reform Act of 1995 for all forward-looking statements in this report.

These forward-looking statements are identified by the use of terms and phrases such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "predict," "project," "should," "will" and similar terms and phrases, including references to assumptions. However, these words are not the exclusive means of identifying such statements. Although we believe that our plans, intentions and expectations reflected in or suggested by such forward-looking statements are reasonable, we cannot assure you that we will achieve those plans, intentions or expectations. All forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those that we expected.

Important factors that could cause actual results to differ materially from our expectations, or cautionary statements, are disclosed under the section entitled "Risk Factors" included in our Annual Report on Form 10-K for the year ended December 31, 2018 and from time to time in our subsequent Quarterly Reports on Form 10-Q and our other US Securities and Exchange Commission ("SEC") filings. These factors include, among others, global and regional economic and political conditions; decreases in spending on technology products and services; CDW's relationships with vendor partners and availability of their products; continued innovations in hardware, software and services offerings by CDW's vendor partners; substantial competition that could reduce CDW's market share; CDW's substantial indebtedness and ability to generate sufficient cash to service such indebtedness; restrictions imposed by agreements relating to CDW's indebtedness on its operations and liquidity; changes in, or the discontinuation of, CDW's share repurchase program or dividend payments; the continuing development, maintenance and operation of CDW's information technology systems; potential breaches of data security and failure to protect our information technology systems from cybersecurity threats; potential failures to comply with Public segment contracts or applicable laws and regulations; potential failures to provide high-quality services to CDW's customers; potential losses of any key personnel; potential interruptions of the flow of products from suppliers; potential adverse occurrences at one of CDW's primary facilities or customer data centers; increases in the cost of commercial delivery services or disruptions of those services; CDW's exposure to accounts receivable and inventory risks; fluctuations in foreign currency; future acquisitions or alliances; fluctuations in CDW's operating results; current and future legal proceedings and audits; changes in laws, including regulations or interpretations thereof; and other risk factors or uncertainties identified from time to time in CDW's filings with the SEC. All written and oral forward-looking statements attributable to us, or persons acting on our behalf, are expressly qualified in their entirety by the cautionary statements contained in the section entitled "Risk Factors" included in our Annual Report on Form 10-K for the year ended December 31, 2018 and elsewhere in this report as well as other cautionary statements that are made from time to time in our other SEC filings and public communications. You should evaluate all forward-looking statements made in this report in the context of these risks and uncertainties.

We caution you that the important factors referenced above may not contain all of the factors that could cause actual results to differ from our expectations. In addition, we cannot assure you that we will realize the results or developments we expect or anticipate or, even if substantially realized, that they will result in the consequences or affect us or our operations in the way we expect. The forward-looking statements included in this report are made only as of the date hereof. We undertake no obligation to publicly update or revise any forward-looking statement as a result of new information, future events or otherwise, except as otherwise required by law.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

See "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Quantitative and Qualitative Disclosures of Market Risks" in the Company's Annual Report on Form 10-K for the year ended December 31, 2018. As of September 30, 2019, there have been no material changes in this information.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

The Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures (as such term is defined in Rule 13a-15(e) or Rule 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of the end of the period covered by this report. Based on such evaluation, the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, has concluded that, as of the end of such period, the Company's disclosure controls and procedures were effective in recording, processing, summarizing and reporting, on a timely basis, information required to be disclosed by the Company in

the reports that it files or submits under the Exchange Act, and that information is accumulated and communicated to the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely discussions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There have been no changes in the Company's internal control over financial reporting during the three months ended September 30, 2019 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II—OTHER INFORMATION

Item 1. Legal Proceedings

The information set forth in Note 11 (Commitments and Contingencies) to the accompanying Consolidated Financial Statements included in Part I, Item 1 "Financial Statements", of this report is incorporated herein by reference.

Item 1A. Risk Factors

See "Risk Factors" in the Company's Annual Report on Form 10-K for the year ended December 31, 2018.

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

Unregistered Sales of Equity Securities

None.

Issuer Purchases of Equity Securities

Information relating to the Company's purchases of its common stock during the three months ended September 30, 2019 is as follows:

Period	Total Number of Shares Purchased (in millions)	Ave	erage Price Paid per Share	Total Number of Shares Purchased as Part of a Publicly Announced Program (in millions)	num Dollar Value of Shares ay Yet be Purchased Under the Program ⁽¹⁾ (in millions)
July 1 through July 31, 2019	0.5	\$	113.12	0.5	\$ 946.4
August 1 through August 31, 2019	0.5	\$	112.96	0.5	\$ 884.6
September 1 through September 30, 2019	0.4	\$	117.72	0.4	\$ 842.3
Total	1.4			1.4	

(1) The amounts presented in this column are the remaining total authorized value to be spent after each month's repurchases. On August 3, 2017, the Company announced that its Board of Directors authorized a \$750 million increase to the share repurchase program under which the Company may repurchase shares of its common stock in the open market through privately negotiated or other transactions, depending on share price, market conditions and other factors. On February 7, 2019, the Company announced that its Board of Directors authorized a \$1.0 billion increase to the share repurchase program.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit	Description
4.1	Supplemental Indenture, dated as of September 26, 2019, by and among the Co-Issuers, the Company, the Guarantors and the Trustee, previously filed as Exhibit 4.2 with the Company's Current Report on Form 8-K filed on September 26, 2019.
4.2	Form of 4.250% Senior Note (included as Exhibit A to Exhibit 4.1).
10.1*	Third Amendment to Amended and Restated Term Loan Agreement, dated as of October 11, 2019, among CDW LLC, the lenders party thereto, Barclays Bank PLC, as administrative agent and collateral agent, and the other loan parties party thereto.
31.1*	Certification of Chief Executive Officer Pursuant to Rule 15d-14(a) under the Securities Exchange Act of 1934.
31.2*	Certification of Chief Financial Officer Pursuant to Rule 15d-14(a) under the Securities Exchange Act of 1934.
32.1**	Certification of Chief Executive Officer Pursuant to 18 U.S.C. 1350.
32.2**	Certification of Chief Financial Officer Pursuant to 18 U.S.C. 1350.
101.INS*	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document.
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document.
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document.
104*	Cover Page Interactive Data File (embedded within the Inline XBRL document).
* Filad	harawith

^{*} Filed herewith

^{**} These items are furnished and not filed.

SIGNATURES

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

CDW CORPORATION

Date: October 31, 2019 By: /s/ Collin B. Kebo

Collin B. Kebo

Senior Vice President and Chief Financial Officer (Duly authorized officer and principal financial officer)

THIRD AMENDMENT TO AMENDED AND RESTATED TERM LOAN AGREEMENT

THIRD AMENDMENT (this "<u>Amendment</u>"), dated as of October 11, 2019, among CDW LLC, an Illinois limited liability company (the "<u>Borrower</u>"), each of the other Loan Parties, the Consenting Lenders and the Replacement Lenders (in each case, as defined below) executing this Amendment on the signature pages hereto, and Barclays Bank PLC, in its capacity as Administrative Agent under the Credit Agreement.

WHEREAS, the parties hereto (other than the Replacement Lenders) are party to an Amended and Restated Term Loan Agreement, dated as of August 17, 2016 (as amended by the First Amendment to Amended and Restated Term Loan Agreement, dated as of February 28, 2017, and the Second Amendment to Amended and Restated Term Loan Agreement, dated as of April 3, 2018, and as otherwise heretofore modified and supplemented and in effect on the date hereof, the "<u>Credit Agreement</u>");

WHEREAS, the terms used herein, including in the preamble and recitals hereto, not otherwise defined herein or otherwise amended hereby shall have the meanings ascribed thereto in the Credit Agreement;

WHEREAS, the parties hereto desire to amend the Credit Agreement in certain respects as set forth herein;

WHEREAS, each Lender party to the Credit Agreement immediately prior to the effectiveness of this Amendment which is executing a counterpart of this Amendment (each, a "Consenting Lender") desires to consent to the amendments set forth herein;

WHEREAS, each Lender party to the Credit Agreement immediately prior to the effectiveness of this Amendment which is not executing a counterpart of this Amendment (each, a "Non-Consenting Lender") will be replaced by Replacement Lenders (as defined below) in accordance with the terms of Section 2.21 of the Credit Agreement and will cease to be a party to the Credit Agreement as a "Lender" thereunder; and

WHEREAS, each Lender that is either not a party to the Credit Agreement immediately prior to the effectiveness of this Amendment or that is increasing its Term Loans under the Credit Agreement in connection with an assignment from a Non-Consenting Lender, and which is executing a counterpart of this Amendment (each, a "Replacement Lender") wishes to consent to the amendments set forth herein.

NOW, THEREFORE, the parties hereto agree that the Credit Agreement shall be amended as set forth herein, and the parties hereto otherwise agree as follows:

- **SECTION 1.** <u>Definitions</u>. Except as otherwise defined herein, terms defined in the Credit Agreement are used herein as defined therein.
- **SECTION 2.** <u>Amendments</u>. Effective as of the Amendment Effective Date (as defined below), the Credit Agreement is hereby amended as follows:
- 2.01. General; Replacement Lenders. References in the Loan Documents to "this Agreement" or the "Credit Agreement" or the like (and indirect references such as "hereunder", "hereby", "herein" and "hereof") shall be deemed to be references to the Credit Agreement as amended hereby. Each

Replacement Lender shall be deemed to be a "Lender" under and for all purposes of the Credit Agreement and each reference therein to "Lender" shall be deemed to include such Replacement Lender. This Amendment shall additionally constitute a "Loan Document".

2.02. Other Amendments.

- (a) Section 1.01 of the Credit Agreement is hereby amended by adding the following definitions in proper alphabetical sequence:
 - "2024 Senior Notes" shall mean the \$575,000,0000 aggregate principal amount of the Senior Notes of the Borrower and CDW Finance issued on December 1, 2014 and maturing on December 1, 2024.
 - "2025 Senior Notes" shall mean the \$600,000,0000 aggregate principal amount of the Senior Notes of the Borrower and CDW Finance issued on March 2, 2017 and maturing on September 1, 2025.
 - "Third Amendment" shall mean that certain Third Amendment to this Agreement, dated as of October 11, 2019, among the Borrower, each of the other Loan Parties, the Consenting Lenders and the Replacement Lenders (each as defined therein) and the Administrative Agent.
 - "Third Amendment Effective Date" shall mean October 11, 2019.
- (b) The definition of "Borrowing" in Section 1.01 of the Credit Agreement is hereby amended to read in its entirety as follows:
 - "Borrowing" shall mean Term Loans of the same Type made, converted or continued on the same date, having the same Term Loan Maturity Date and, in the case of Eurodollar Term Loans, as to which a single Interest Period is in effect.
- (c) Clause (ff) of the definition of "Permitted Lien" in Section 1.01 of the Credit Agreement is hereby amended to read in its entirety as follows:
 - "(ff) other Liens securing obligations which obligations do not exceed \$150,000,000 at any one time outstanding."
- (d) The definition of "<u>Term Loan Maturity Date</u>" in Section 1.01 of the Credit Agreement is hereby amended to read in its entirety as follows:
 - "Term Loan Maturity Date" shall mean the earliest to occur of (i) the seventh anniversary of the Third Amendment Effective Date, (ii) August 30, 2024 unless, prior to such date, the 2024 Senior Notes (other than 2024 Senior Notes in an aggregate principal amount not exceeding \$100,000,000) shall have been redeemed or repurchased and cancelled or defeased and, pursuant to the terms of the indenture governing the 2024 Senior Notes, shall have ceased to be outstanding, and (iii) June 2, 2025 unless, prior to such date, the 2025 Senior Notes (other than 2025 Senior Notes in an aggregate principal amount not exceeding \$100,000,000) shall have been redeemed or repurchased and cancelled or defeased and, pursuant to the

terms of the indenture governing the 2025 Senior Notes, shall have ceased to be outstanding.

- (e) Section 2.01 of the Credit Agreement is hereby amended to read in its entirety as follows:
- "SECTION 2.01. *Continuation of Term Loans*. On the Third Amendment Effective Date, the Term Loans of each Consenting Lender and Non-Consenting Lender (each as defined in the Third Amendment) outstanding on the Third Amendment Effective Date (immediately prior to giving effect thereto) are hereby continued and, immediately after giving effect to the Third Amendment Effective Date and the assignments contemplated by Section 6 of the Third Amendment, shall be held by Consenting Lenders and Replacement Lenders (as defined in the Third Amendment) in accordance with the terms of the Third Amendment and shall constitute and remain outstanding as Term Loans hereunder. Amounts prepaid or repaid in respect of Term Loans may not be reborrowed."
- (f) Section 2.08 of the Credit Agreement is hereby amended to read in its entirety as follows:
- "SECTION 2.08. Alternate Rate of Interest. In the event, and on each occasion, that (i) the Administrative Agent shall have reasonably determined that the rates at which deposits in the principal amounts and denominations of the Term Loans comprising any Borrowing are being offered in the London interbank market will not adequately and fairly reflect the cost to any Lender of making or maintaining its Eurodollar Term Loan during the applicable Interest Period, or that reasonable means do not exist for ascertaining the Adjusted LIBO Rate for such Interest Period or (ii) the Required Lenders notify the Administrative Agent that the Adjusted LIBO Rate for any Interest Period will not adequately reflect the cost to the Lenders of making or maintaining such Term Loans for such Interest Period, the Administrative Agent shall, as soon as practicable thereafter, give written or fax notice of such determination to the Borrower and the Lenders. In the event of any such determination, until the Administrative Agent shall have advised the Borrower and the Lenders that the circumstances giving rise to such notice no longer exist (which the Administrative Agent agrees to give promptly after such circumstances no longer exist), each affected Eurodollar Term Loan shall automatically, on the last day of the current Interest Period for such Term Loan, convert into an ABR Term Loan and the obligations of the Lenders to make Eurodollar Term Loans denominated in dollars or to convert ABR Term Loans into Eurodollar Term Loans shall be suspended until the Administrative Agent shall notify the Borrower that the Required Lenders have determined that the circumstances causing such suspension no longer exist. Each determination by the Administrative Agent under this Section 2.08 shall be conclusive absent manifest error."
- (g) Section 2.09 of the Credit Agreement is hereby amended to read in its entirety as follows:

"SECTION 2.09. Benchmark Replacement for Term Loans.

(a) *Benchmark Replacement*. Notwithstanding anything to the contrary herein (including <u>Section 2.08</u>) or in any other Loan Document, upon the occurrence

of a Benchmark Transition Event or an Early Opt-in Election, as applicable, the Administrative Agent and the Borrower may amend this Agreement to replace the Adjusted LIBO Rate with a Benchmark Replacement. Any such amendment with respect to a Benchmark Transition Event will become effective at 5:00 p.m. on the fifth (5th) Business Day after the Administrative Agent has posted such proposed amendment to all Lenders and the Borrower so long as the Administrative Agent has not received, by such time, written notice of objection to such amendment from the Required Lenders. Any such amendment with respect to an Early Opt-in Election will become effective on the date that the Required Lenders have delivered to the Administrative Agent written notice that such Required Lenders accept such amendment. No replacement of the Adjusted LIBO Rate with a Benchmark Replacement pursuant to this Section 2.09 will occur prior to the applicable Benchmark Transition Start Date.

- (b) Benchmark Replacement Conforming Changes. In connection with the implementation of a Benchmark Replacement, the Administrative Agent will have the right to make Benchmark Replacement Conforming Changes from time to time and, notwithstanding anything to the contrary herein or in any other Loan Document, any amendments implementing such Benchmark Replacement Conforming Changes will become effective without any further action or consent of any other party to this Agreement, other than the consent of the Borrower (which consent shall not be unreasonably withheld or delayed).
- (c) *Notices; Standards for Decisions and Determinations*. The Administrative Agent will promptly notify the Borrower and the Lenders of (i) any occurrence of a Benchmark Transition Event or an Early Opt-in Election, as applicable, and its related Benchmark Replacement Date and Benchmark Transition Start Date, (ii) the implementation of any Benchmark Replacement, (iii) the effectiveness of any Benchmark Replacement Conforming Changes and (iv) the commencement or conclusion of any Benchmark Unavailability Period. Any determination, decision or election that may be made by the Administrative Agent or Lenders pursuant to this Section 2.09, including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action, will be conclusive and binding absent manifest error and may be made in its or their sole discretion and without consent from any other party hereto, except, in each case, as expressly required pursuant to this Section 2.09.
- (d) *Benchmark Unavailability Period*. Upon the Borrower's receipt of notice of the commencement of a Benchmark Unavailability Period, the Borrower may revoke any request for a Eurodollar Borrowing of, conversion to or continuation of Eurodollar Term Loans to be made, converted or continued during any Benchmark Unavailability Period and, failing that, the Borrower will be deemed to have converted any such request into a request for a Borrowing of or conversion to ABR Term Loans. During any Benchmark Unavailability Period, the component of the Alternate Base Rate based upon the Adjusted LIBO Rate will not be used in any determination of the Alternate Base Rate.

(e) Certain Defined Terms. As used in this Section 2.09:

"Benchmark Replacement" means the sum of: (a) the alternate benchmark rate (which may include Term SOFR) that has been selected by the Administrative Agent and the Borrower giving due consideration to (i) any selection or recommendation of a replacement rate or the mechanism for determining such a rate by the Relevant Governmental Body or (ii) any evolving or then-prevailing market convention for determining a rate of interest as a replacement to the LIBO Rate for U.S. dollar-denominated syndicated credit facilities and (b) the Benchmark Replacement Adjustment; provided, that, if the Benchmark Replacement as so determined would be less than zero, the Benchmark Replacement will be deemed to be zero for the purposes of this Agreement.

"Benchmark Replacement Adjustment" means, with respect to any replacement of the Adjusted LIBO Rate with an Unadjusted Benchmark Replacement for each applicable Interest Period, the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected by the Administrative Agent and the Borrower giving due consideration to (i) any selection or recommendation of a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the LIBO Rate with the applicable Unadjusted Benchmark Replacement by the Relevant Governmental Body or (ii) any evolving or then-prevailing market convention for determining a spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the LIBO Rate with the applicable Unadjusted Benchmark Replacement for U.S. dollar-denominated syndicated credit facilities at such time.

"Benchmark Replacement Conforming Changes" means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definition of "Alternate Base Rate," the definition of "Interest Period," the definition of "Adjusted LIBO Rate," the definition of "LIBO Rate," timing and frequency of determining rates and making payments of interest and other administrative matters) that the Administrative Agent decides may be appropriate to reflect the adoption and implementation of such Benchmark Replacement and to permit the administration thereof by the Administrative Agent in a manner substantially consistent with market practice (or, if the Administrative Agent decides that adoption of any portion of such market practice is not administratively feasible or if the Administrative Agent determines that no market practice for the administration of the Benchmark Replacement exists, in such other manner of administration as the Administrative Agent decides is reasonably necessary in connection with the administration of this Agreement).

"Benchmark Replacement Date" means the earlier to occur of the following events with respect to the LIBO Rate:

(1) in the case of clause (1) or (2) of the definition of "Benchmark Transition Event," the later of (a) the date of the public statement or publication of information referenced therein and (b) the date on which the administrator of the LIBO Rate permanently or indefinitely ceases to provide the LIBO Rate; or

(2) in the case of clause (3) of the definition of "Benchmark Transition Event," the date of the public statement or publication of information referenced therein.

"Benchmark Transition Event" means the occurrence of one or more of the following events with respect to the LIBO Rate:

- (1) a public statement or publication of information by or on behalf of the administrator of the LIBO Rate announcing that such administrator has ceased or will cease to provide the LIBO Rate, permanently or indefinitely; <u>provided</u>, that, at the time of such statement or publication, there is no successor administrator that will continue to provide the LIBO Rate;
- (2) a public statement or publication of information by the regulatory supervisor for the administrator of the LIBO Rate, the U.S. Federal Reserve System, an insolvency official with jurisdiction over the administrator for the LIBO Rate, a resolution authority with jurisdiction over the administrator for the LIBO Rate or a court or an entity with similar insolvency or resolution authority over the administrator for the LIBO Rate, which states that the administrator of the LIBO Rate has ceased or will cease to provide the LIBO Rate permanently or indefinitely; provided, that, at the time of such statement or publication, there is no successor administrator that will continue to provide the LIBO Rate; or
- (3) a public statement or publication of information by the regulatory supervisor for the administrator of the LIBO Rate announcing that the LIBO Rate is no longer representative.

"Benchmark Transition Start Date" means (a) in the case of a Benchmark Transition Event, the earlier of (i) the applicable Benchmark Replacement Date and (ii) if such Benchmark Transition Event is a public statement or publication of information of a prospective event, the 90th day prior to the expected date of such event as of such public statement or publication of information (or if the expected date of such prospective event is fewer than 90 days after such statement or publication, the date of such statement or publication) and (b) in the case of an Early Opt-in Election, the date specified by the Administrative Agent or the Required Lenders, as applicable, by notice to the Borrower, the Administrative Agent (in the case of such notice by the Required Lenders) and the Lenders.

"Benchmark Unavailability Period" means, if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to the LIBO Rate and solely to the extent that the LIBO Rate has not been replaced with a Benchmark Replacement, the period (x) beginning at the time that such Benchmark Replacement Date has occurred if, at such time, no Benchmark Replacement has replaced the Adjusted LIBO Rate for all purposes hereunder in accordance with this Section 2.09 and (y) ending at the time that a Benchmark Replacement has replaced the Adjusted LIBO Rate for all purposes hereunder pursuant to this Section 2.09.

"Early Opt-in Election" means the occurrence of:

- (1) (i) a determination by the Administrative Agent or (ii) a notification by the Required Lenders to the Administrative Agent (with a copy to the Borrower) that the Required Lenders have determined that U.S. dollar-denominated syndicated credit facilities being executed at such time, or that include language similar to that contained in this Section 2.09, are being executed or amended, as applicable, to incorporate or adopt a new benchmark interest rate to replace the LIBO Rate, and
- (2) (i) the election by the Administrative Agent or (ii) the election by the Required Lenders to declare that an Early Opt-in Election has occurred and the provision, as applicable, by the Administrative Agent of written notice of such election to the Borrower and the Lenders or by the Required Lenders of written notice of such election to the Administrative Agent.

"Federal Reserve Bank of New York's Website" means the website of the Federal Reserve Bank of New York at http://www.newyorkfed.org, or any successor source.

"Relevant Governmental Body" means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto.

"SOFR" with respect to any day means the secured overnight financing rate published for such day by the Federal Reserve Bank of New York, as the administrator of the benchmark, (or a successor administrator) on the Federal Reserve Bank of New York's Website.

"Term SOFR" means the forward-looking term rate based on SOFR that has been selected or recommended by the Relevant Governmental Body.

"<u>Unadjusted Benchmark Replacement</u>" means the Benchmark Replacement excluding the Benchmark Replacement Adjustment."

- (h) Section 2.12(b) of the Credit Agreement is hereby amended to read in its entirety as follows"
- "(b) Optional prepayments of the Term Loans shall be applied against the remaining scheduled installments of principal due in respect of such Term Loans under Section 2.11 in the manner specified by the Borrower or, if not so specified on or prior to the date of such optional prepayment, in direct order of maturity. Optional prepayments of any Term Loans and any Incremental Term Loans shall be applied ratably among such outstanding Term Loans and Incremental Term Loans. For the avoidance of doubt, the Borrower may specify that any optional prepayment of Term Loans under this Section 2.12 be applied solely to one or more tranches of Term Loans."
- (i) Section 2.12(d) of the Credit Agreement is hereby amended by replacing the two occurrences of "six months after the Second Amendment Effective Date" therein with "six months after the Third Amendment Effective Date."

- (j) Clause (iv) of Section 6.01(b) of the Credit Agreement is hereby amended to read in its entirety as follows:
- "(iv) Indebtedness (including Capitalized Lease Obligations), Disqualified Stock and Preferred Stock incurred by the Borrower or any of its Restricted Subsidiaries, to finance the purchase, lease or improvement of property (real or personal) or equipment that is used or useful in the business of the Borrower and its Restricted Subsidiaries, whether through the direct purchase of assets or the Capital Stock of any Person owning such assets in an aggregate principal amount, together with any Refinancing Indebtedness in respect thereof and all other Indebtedness, Disqualified Stock and/or Preferred Stock incurred and outstanding under this clause (iv), not to exceed \$150,000,000 at any time outstanding; so long as such Indebtedness exists at the date of such purchase, lease or improvement, or is created within 270 days thereafter;"
- (k) Clause (xviii) of Section 6.01(b) of the Credit Agreement is hereby amended to read in its entirety as follows:
- "(xviii) Indebtedness, Disqualified Stock, or Preferred Stock of any Foreign Subsidiary or of any foreign Persons that are acquired by the Borrower or any Restricted Subsidiary or merged into a Restricted Subsidiary that is a Foreign Subsidiary in accordance with the terms of this Agreement; <u>provided</u>, that the aggregate amount outstanding of any such Indebtedness, Disqualified Stock, or Preferred Stock shall not at any time exceed \$300,000,000;"
- (l) Clause (y) of Section 6.01(g) of the Credit Agreement is hereby amended to read in its entirety as follows:
- "(y) the amount that would not cause the Consolidated Non-Guarantor Debt Ratio to exceed on a *pro forma* basis 3.50 to 1.00;"
- **SECTION 3.** Representations and Warranties. The Borrower represents and warrants to the Lenders that the representations and warranties set forth in Article III of the Credit Agreement and in each other Loan Document are true and correct in all material respects on and as of the date hereof with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date, in which case they were true and correct in all material respects as of such earlier date.
- **SECTION 4.** <u>Conditions Precedent.</u> The amendments to the Credit Agreement contemplated hereby shall become effective as of the date hereof (the "<u>Amendment Effective Date</u>"), upon the satisfaction of the following conditions precedent:
- (a) The Administrative Agent shall have received duly executed and delivered counterparts (or written evidence thereof reasonably satisfactory to the Administrative Agent, which may include electronic transmission of, as applicable, a signed signature page) of this Amendment from (i) each Loan Party, (ii) the Consenting Lenders representing the Required Lenders under the Credit Agreement (as in effect immediately prior to the effectiveness of this Amendment) and (iii) each Replacement Lender.
- (b) At the time of and immediately after the Amendment Effective Date, no Default or Event of Default shall have occurred and be continuing.

- (c) The representations and warranties set forth in Article III of the Credit Agreement and in each other Loan Document shall be true and correct in all material respects on and as of the Amendment Effective Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date, in which case they shall be true and correct in all material respects as of such earlier date.
- (d) The Administrative Agent shall have received (i) evidence satisfactory to it that the outstanding principal amount of and accrued and unpaid interest on the Term Loans of, and all other amounts owing under or in respect of, the Credit Agreement to any Non-Consenting Lender shall have been (or shall simultaneously be) paid to such Non-Consenting Lender in accordance with Section 2.21(a) of the Credit Agreement and (ii) duly executed (or shall have received such other information as it may require to process) Assignment and Acceptances in accordance with Section 2.21(a) in respect of each Non-Consenting Lender's Term Loans.
- (e) The Administrative Agent shall have received (i) a copy of the articles of organization, including all amendments thereto, of the Borrower, certified as of a recent date by the Secretary of State of the state of its organization, and a certificate as to the good standing of the Borrower as of a recent date, from such Secretary of State or similar Governmental Authority and (ii) an Officer's Certificate of the Secretary or Assistant Secretary of the Borrower dated the Amendment Effective Date and certifying (A) that attached thereto is a true and complete copy of the limited liability company agreement of the Borrower as in effect on the Amendment Effective Date, (B) that attached thereto is a true and complete copy of resolutions duly adopted by the Governing Board of the Borrower authorizing the execution, delivery and performance of this Amendment, and that such resolutions have not been modified, rescinded or amended and are in full force and effect, (C) that the articles of organization of the Borrower have not been amended since the date of the last amendment thereto shown on the certificate of good standing furnished pursuant to clause (i) above, and (D) as to the incumbency and specimen signature of the Secretary or Assistant Secretary executing the certificate pursuant to clause (ii) above.
- (f) The Administrative Agent shall have received an Officer's Certificate, dated the Amendment Effective Date and signed by a Financial Officer of the Borrower, certifying compliance with the conditions precedent set forth in <u>paragraphs (b)</u> and <u>(c)</u> of this <u>Section</u> 4.
- (g) The Administrative Agent shall have received an opinion of Paul Hastings LLP, special counsel for the Borrower, dated the Amendment Effective Date and addressed to the Administrative Agent and the Consenting Lenders, in form and substance reasonably satisfactory to the Administrative Agent.
- (h) The Administrative Agent shall have received, for the account of each Consenting Lender and each Replacement Lender, a fee equal to 0.125% of the aggregate principal amount of the Term Loans held by such Consenting Lender or Replacement Lender, as the case may be, immediately after giving effect to the consummation of the transactions specified in Section 5 and Section 6 hereof. The fees payable pursuant to this Section 4(h) will be paid in dollars in immediately available funds on the Amendment Effective Date.
- (i) The Administrative Agent and the Arrangers shall have received all other fees and other amounts due and payable on or prior to the Amendment Effective Date, including, to the extent invoiced at least three Business Days prior to the Amendment Effective Date, reimbursement or payment of all

reasonable out-of-pocket expenses required to be reimbursed or paid by the Borrower hereunder or under any other Loan Document or as may have been separately agreed by the Borrower with the Arrangers.

SECTION 5. Consenting Lenders.

As described in the Memorandum for Lenders dated September 23, 2019 posted to Lenders in connection with this Amendment (the "Memorandum"), Consenting Lenders have elected a consent and cashless roll as described in the Memorandum. Such election shall be made by each Consenting Lender as to all of its Term Loans by such Consenting Lender's signature on the signature page hereto.

SECTION 6. Non-Consenting Lenders.

The parties hereto acknowledge that pursuant to Section 2.21(a) of the Credit Agreement, the Borrower may, upon notice to the Administrative Agent and any Non-Consenting Lender, cause such Non-Consenting Lender to assign, at par, 100% of its outstanding Term Loans plus any accrued and unpaid interest on such Term Loans to one or more Replacement Lenders in accordance with the provisions of Section 9.04 of the Credit Agreement, and each Non-Consenting Lender has authorized the Administrative Agent to execute and deliver such documentation on behalf of such Lender as may be required to give effect to such assignment. Subject to the satisfaction of the conditions precedent specified in Section 4 above, but effective as of the Amendment Effective Date, each Non-Consenting Lender shall cease to be, and shall cease to have any of the rights and obligations of, a "Lender" under the Credit Agreement (except for those provisions that provide for their survival, which provisions shall survive and remain in full force and effect for the benefit of the Non-Consenting Lenders).

SECTION 7. Acknowledgement and Ratification.

The Borrower and each other Loan Party hereby acknowledges that it has reviewed the terms and provisions of this Amendment and consents to the modifications effected pursuant to this Amendment. The Borrower and each other Loan Party hereby confirms that each Loan Document, as amended hereby, to which it is a party or otherwise bound and all collateral encumbered thereby will continue to guarantee or secure, as the case may be, to the fullest extent possible in accordance with the Loan Documents, as amended hereby, the payment and performance of all Obligations, and confirms its grants to the Collateral Agent of a continuing lien on and security interest in and to all collateral as collateral security for the prompt payment and performance in full when due of the Obligations. The Borrower and each other Loan Party hereby agrees and admits that as of the date hereof it has no defenses to or offsets against any of its obligations to the Administrative Agent or any Lender under the Loan Documents. Each Loan Party other than the Borrower, in its capacity as a Guarantor, hereby ratifies and confirms its guarantees, pledges, grants and other undertakings under the Guarantee and Collateral Agreement (as defined in the Credit Agreement) and the other Loan Documents to which it is a party.

SECTION 8. Reference to and Effect on the Credit Agreement and the Other Loan Documents.

(a) On and after the Amendment Effective Date, each reference in the Credit Agreement to "this Agreement", "hereunder", "hereof", "herein" or words of like import referring to the Credit Agreement, and each reference in the other Loan Documents to the "Credit Agreement", "thereunder", "thereunder", "thereof" or words of like import referring to the Credit Agreement shall mean and be a reference to the Credit Agreement as amended by this Amendment.

- (b) Except as specifically amended by this Amendment, the Credit Agreement and the other Loan Documents shall remain in full force and effect and are hereby ratified and confirmed.
- (c) The execution, delivery and performance of this Amendment shall not constitute a waiver of any provision of, or operate as a waiver of any right, power or remedy of any Agent or Lender under, the Credit Agreement or any of the other Loan Documents.
- (d) This Amendment shall constitute a Loan Document for all purposes of the Credit Agreement and shall be administered and construed pursuant to the terms of the Credit Agreement.
- (e) For the avoidance of doubt, the Term Loans of each Consenting Lender and Replacement Lender on and after the Amendment Effective Date shall not constitute a new tranche, but shall continue as the same tranche as in existence immediately prior to the Amendment Effective Date and all Eurodollar Term Loans and ABR Term Loans shall continue as the same Eurodollar Term Loans in respect of any then-outstanding Interest Period and ABR Term Loans, in each case, as in existence immediately prior to the Amendment Effective Date.

Section 9. Miscellaneous.

- 9.01. <u>Instruction; Counterparts</u>. Each Lender by its signature hereto instructs the Administrative Agent to execute this Amendment. Except as herein provided, the Credit Agreement and the other Loan Documents shall remain unchanged and in full force and effect. This Amendment may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Delivery of an executed counterpart of a signature page to this Amendment by electronic transmission shall be effective as delivery of a manually executed counterpart of this Amendment.
- 9.02. <u>Expenses; Indemnity</u>. Section 9.05 of the Credit Agreement is hereby incorporated, *mutatis mutandis*, by reference as if such section was set forth in full herein.
- 9.03. <u>Governing Law.</u> THIS AMENDMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES UNDER THIS AMENDMENT SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.
- 9.04. <u>WAIVERS OF JURY TRIAL</u>. EACH OF THE LOAN PARTIES, THE ADMINISTRATIVE AGENT, THE REPLACEMENT LENDER AND EACH CONSENTING LENDER HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVE TRIAL BY JURY IN ANY LEGAL ACTION OR PROCEEDING RELATING TO THIS AMENDMENT AND FOR ANY COUNTERCLAIM THEREIN.
- 9.05. <u>Jurisdiction; Consent to Service of Process</u>. Section 9.15 of the Credit Agreement is hereby incorporated, *mutatis mutandis*, by reference as if such section was set forth in full herein.

[Signature pages follow]

	IN WITNESS	WHEREOF, the	e parties hereto	have caused th	is Amendment t	o be duly	executed and	delivered as	of the day
and y	vear first above written.								

BORROWER

CDW LLC

By: /s/ Robert J. Welyki
Name: Robert J. Welyki
Title: Vice President, Treasurer and Assistant Secretary ______

GUARANTORS

Acknowledged and accepted:

CDW CORPORATION
CDW DIRECT, LLC
CDW GOVERNMENT LLC
CDW TECHNOLOGIES LLC
CDW LOGISTICS, INC.

By: <u>/s/ Robert J. Welyki</u> Name: Robert J. Welyki

Title: Vice President, Treasurer and Assistant Secretary

ADMINISTRATIVE AGENT

BARCLAYS BANK PLC

By: /s/ Martin Corrigan Name: Martin Corrigan Title: Vice President

CONSENTING LENDERS

[Signatures of Consenting Lenders on file with the Administrative Agent.]						

REPLACEMENT LENDER

JPMORGAN CHASE BANK, N.A.

By: <u>/s/ Daniel Luby</u> Name: Daniel Luby Title: Vice President

CERTIFICATION PURSUANT TO RULE 13a-14(a) or 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Christine A. Leahy, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of the registrant;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Christine A. Leahy

Christine A. Leahy
President and Chief Executive Officer
CDW Corporation
October 31, 2019

CERTIFICATION PURSUANT TO RULE 13a-14(a) or 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Collin B. Kebo, certify that:

- 1. I have reviewed this quarterly report on Form 10-Q of the registrant;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Collin B. Kebo

Collin B. Kebo Senior Vice President and Chief Financial Officer CDW Corporation October 31, 2019

CERTIFICATION PURSUANT TO SECTION 1350 OF CHAPTER 63 OF TITLE 18 OF THE UNITED STATES CODE

I, Christine A. Leahy, the chief executive officer of CDW Corporation ("CDW"), certify that (i) the Quarterly Report on Form 10-Q for the three months ended September 30, 2019 (the "10-Q") of CDW fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and (ii) the information contained in the 10-Q fairly presents, in all material respects, the financial condition and results of operations of CDW.

/s/ Christine A. Leahy

Christine A. Leahy
President and Chief Executive Officer
CDW Corporation
October 31, 2019

CERTIFICATION PURSUANT TO SECTION 1350 OF CHAPTER 63 OF TITLE 18 OF THE UNITED STATES CODE

I, Collin B. Kebo, the chief financial officer of CDW Corporation ("CDW"), certify that (i) the Quarterly Report on Form 10-Q for the three months ended September 30, 2019 (the "10-Q") of CDW fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and (ii) the information contained in the 10-Q fairly presents, in all material respects, the financial condition and results of operations of CDW.

/s/ Collin B. Kebo

Collin B. Kebo Senior Vice President and Chief Financial Officer CDW Corporation October 31, 2019