UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

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

For the quarterly period ended March 31, 2020

OR

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

Commission File Number 1-4694

R.R. DONNELLEY & SONS COMPANY

(Exact name of registrant as specified in its charter)

Delaware	**36-1004130**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
35 West Wacker Drive, Chicago, Illinois	**60601**
(Address of principal executive offices)	**(Zip code)**

(312) 326-8000

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.01 per share	RRD	New York Stock Exchange
Preferred Stock Purchase Rights		New York Stock Exchange

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

Yes ☒ No ☐

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

Yes ☒ No ☐

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.

Large Accelerated filer	☐	Accelerated filer	☒
Non-Accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

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

Yes ☐ No ☒

As of April 27, 2020, 71.3 million shares of common stock were outstanding.

R.R. DONNELLEY & SONS COMPANY

QUARTERLY REPORT ON FORM 10-Q
FOR THE QUARTERLY PERIOD ENDED MARCH 31, 2020

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PART I. FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements

R.R. DONNELLEY & SONS COMPANY AND SUBSIDIARIES ("RRD")

CONDENSED CONSOLIDATED BALANCE SHEETS
(in millions, except per share data)
(UNAUDITED)

	March 31, 2020	December 31, 2019
ASSETS		
Cash and cash equivalents	$ 450.7	$ 190.8
Receivables, less allowances for credit losses of $23.8 in 2020 (2019 - $20.5)	1,063.2	1,161.6
Inventories (Note 3)	300.7	301.8
Prepaid expenses and other current assets	105.1	98.6
Total current assets	1,919.7	1,752.8
Property, plant and equipment-net (Note 4)	475.8	500.0
Goodwill (Note 5)	432.5	457.8
Other intangible assets-net (Note 5)	93.3	99.7
Deferred income taxes	62.1	57.8
Operating lease assets	211.0	205.5
Other noncurrent assets	243.1	256.5
Total assets	$ 3,437.5	$ 3,330.1
LIABILITIES		
Accounts payable	$ 690.5	$ 852.2
Accrued liabilities and other	302.2	334.2
Short-term operating lease liabilities	65.8	68.7
Short-term and current portion of long-term debt (Note 14)	208.1	71.2
Total current liabilities	1,266.6	1,326.3
Long-term debt (Note 14)	1,960.3	1,747.2
Pension liabilities	106.5	113.6
Other postretirement benefits plan liabilities	58.5	61.7
Long-term income tax liability	75.8	75.8
Long-term operating lease liabilities	150.0	141.0
Other noncurrent liabilities	236.4	234.8
Total liabilities	3,854.1	3,700.4
Commitments and Contingencies (Note 13)		
EQUITY (Note 9)		
RRD stockholders' equity		
Preferred stock, $1.00 par value		
Authorized: 2.0 shares; Issued: None	—	—
Common stock, $0.01 par value		
Authorized: 165.0 shares;		
Issued: 89.0 shares in 2020 and 2019	0.9	0.9
Additional paid-in-capital	3,267.1	3,348.0
Accumulated deficit	(2,352.2)	(2,336.8)
Accumulated other comprehensive loss	(207.2)	(176.2)
Treasury stock, at cost, 17.7 shares in 2020 (2019 - 18.1 shares)	(1,137.8)	(1,219.6)
Total RRD stockholders' equity	(429.2)	(383.7)
Noncontrolling interests	12.6	13.4
Total equity	(416.6)	(370.3)
Total liabilities and equity	$ 3,437.5	$ 3,330.1

See Notes to Condensed Consolidated Financial Statements

R.R. DONNELLEY & SONS COMPANY AND SUBSIDIARIES ("RRD")

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in millions, except per share data)
(UNAUDITED)

	Three Months Ended March 31,	
	2020	**2019**
Products net sales	$ 1,145.5	$ 1,230.9
Services net sales	264.0	291.0
Total net sales	1,409.5	1,521.9
Products cost of sales (exclusive of depreciation and amortization)	922.8	1,008.8
Services cost of sales (exclusive of depreciation and amortization)	212.9	234.8
Total cost of sales	1,135.7	1,243.6
Products gross profit	222.7	222.1
Services gross profit	51.1	56.2
Total gross profit	273.8	278.3
Selling, general and administrative expenses (exclusive of depreciation and amortization)	179.1	199.6
Restructuring, impairment and other expense-net (Note 6)	31.9	17.1
Depreciation and amortization	40.8	42.7
Other operating expense (income)	13.2	(4.4)
Income from operations	8.8	23.3
Interest expense-net	33.9	40.1
Investment and other income-net	(3.8)	(4.5)
Gain on debt extinguishment	(0.2)	—
Loss before income taxes	(21.1)	(12.3)
Income tax benefit	(8.2)	(3.8)
Net loss	(12.9)	(8.5)
Less: income attributable to noncontrolling interests	0.1	0.3
Net loss attributable to RRD common stockholders	$ (13.0)	$ (8.8)
Net loss per share attributable to RRD common stockholders (Note 10):		
Basic net loss per share	$ (0.18)	$ (0.12)
Diluted net loss per share	$ (0.18)	$ (0.12)
Weighted average number of common shares outstanding:		
Basic	71.6	70.8
Diluted	71.6	70.8

See Notes to Condensed Consolidated Financial Statements

R.R. DONNELLEY & SONS COMPANY AND SUBSIDIARIES ("RRD")

CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(in millions)
(UNAUDITED)

	Three Months Ended March 31,	
	2020	**2019**
Net loss	$ (12.9)	$ (8.5)
Other comprehensive (loss) income, net of tax (Note 11):		
Translation adjustments	(20.0)	1.2
Adjustments for net periodic pension and postretirement benefits plan cost	0.8	(0.2)
Changes in fair value of derivatives	(12.0)	—
Other	—	0.6
Other comprehensive (loss) income	(31.2)	1.6
Comprehensive loss	(44.1)	(6.9)
Less: comprehensive income attributable to non-controlling interests	(0.1)	0.5
Comprehensive loss attributable to RRD common stockholders	$ (44.0)	$ (7.4)

See Notes to Condensed Consolidated Financial Statements

R.R. DONNELLEY & SONS COMPANY AND SUBSIDIARIES ("RRD")

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)
(UNAUDITED)

	Three Months Ended March 31,	
	2020	**2019**
OPERATING ACTIVITIES		
Net loss	$ (12.9)	$ (8.5)
Adjustments to reconcile net loss to net cash used in operating activities:		
Impairment charges and other-net	20.6	0.1
Depreciation and amortization	40.8	42.7
Provision for credit losses	4.4	3.9
Share-based compensation	1.4	3.4
Deferred income taxes	(1.8)	1.8
Net pension and other postretirement benefits plan income	(3.4)	(4.0)
Loss on disposition of business and other assets	6.6	(4.7)
Gain on debt extinguishments	(0.2)	—
Other	1.3	5.7
Changes in operating assets and liabilities:		
Accounts receivable-net	62.7	88.6
Inventories	(4.1)	1.4
Prepaid expenses and other current assets	(4.9)	(6.9)
Accounts payable	(143.3)	(213.3)
Current income taxes	(13.5)	(30.9)
Accrued liabilities and other	(29.3)	(7.3)
Pension and other postretirement benefits plan contributions	(4.0)	(2.0)
Net cash used in operating activities	(79.6)	(130.0)
INVESTING ACTIVITIES		
Capital expenditures	(17.7)	(37.4)
Disposition of businesses	12.9	(0.7)
Proceeds from sales of investments and other assets	2.9	0.3
Proceeds related to company-owned life insurance	1.6	(0.3)
Net cash used in investing activities	(0.3)	(38.1)
FINANCING ACTIVITIES		
Payments on other short-term debt	—	(6.5)
Payments of current maturities and long-term debt	(58.7)	(173.7)
Proceeds from credit facility borrowings	578.0	512.0
Payments on credit facility borrowings	(170.0)	(253.0)
Dividends paid	(2.1)	(2.1)
Payments of withholding taxes on share-based compensation	(0.6)	(0.9)
Other financing activities	(0.7)	(1.0)
Net cash provided by financing activities	345.9	74.8
Effect of exchange rate on cash, cash equivalents and restricted cash	(6.0)	2.5
Net increase (decrease) in cash, cash equivalents and restricted cash	260.0	(90.8)
Cash, cash equivalents and restricted cash at beginning of year	223.8	403.6
Cash, cash equivalents and restricted cash at end of period	$ 483.8	$ 312.8

See Notes to Condensed Consolidated Financial Statements

1. Basis of Presentation

The accompanying unaudited condensed consolidated interim financial statements include the accounts of R.R. Donnelley & Sons Company and its subsidiaries ("RRD," the "Company," "we," "us," and "our") and have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP") for interim financial information and in accordance with the rules and regulations of the United States Securities and Exchange Commission (the "SEC"). Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statements. These unaudited condensed consolidated interim financial statements reflect all normal and recurring adjustments that are, in the opinion of management, necessary for a fair presentation of the results for the interim periods and should be read in conjunction with the consolidated financial statements and the related notes thereto included in our latest Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on February 26, 2020. Operating results for the three months ended March 31, 2020 are not necessarily indicative of the results that may be expected for the fiscal year ending December 31, 2020. All significant intercompany transactions have been eliminated in consolidation. These unaudited condensed consolidated interim financial statements include estimates and assumptions of management that affect the amounts reported in the condensed consolidated financial statements. Actual results could differ from these estimates.

Cash, Cash Equivalents and Restricted Cash

The following table provides a reconciliation of cash, cash equivalents and restricted cash at March 31, 2020 and December 31, 2019 reported within the Condensed Consolidated Balance Sheets that sum to the total of the same such amounts shown in the Condensed Consolidated Statement of Cash Flows.

	March 31, 2020	December 31, 2019
Cash and cash equivalents	$ 450.7	$ 190.8
Restricted cash - current (a)	33.0	32.9
Restricted cash - noncurrent (b)	0.1	0.1
Total cash, cash equivalents and restricted cash	$ 483.8	$ 223.8

(a) Included within Prepaid expenses and other current assets within the Condensed Consolidated Balance Sheets
(b) Included within Other noncurrent assets within the Condensed Consolidated Balance Sheets

Cash payments for income taxes were $8.5 million and $26.4 million for the three months ended March 31, 2020 and 2019, respectively. Cash refunds for income taxes were $2.4 million and $0.7 million for the three months ended March 31, 2020 and 2019, respectively. Income taxes receivable of $15.4 million and $12.0 million as of March 31, 2020 and December 31, 2019, respectively, are included within Prepaid expenses and other current assets.

Allowance for credit losses

We recognize an allowance for credit losses for financial assets carried at amortized cost to present the net amount expected to be collected as of the balance sheet date. Such allowance is based on credit losses expected to arise over the life of the asset's contractual term, which includes consideration of prepayments. Assets are written off when we determine that such financial assets are deemed uncollectible and are recognized as a deduction from the allowance for credit losses. Expected recoveries of amounts previously written off, not to exceed the aggregate of the amount previously written off, are included in determining the necessary reserve at the balance sheet date. We pool financial assets based on similar risk characteristics to estimate expected credit losses. We estimate expected credit losses on financial assets individually when those assets do not share similar risk characteristics. We closely monitor our accounts receivable including timely account reconciliations, detailed reviews of past due accounts, updated credit limits, and monthly analysis of the adequacy of our reserve for credit losses.

We utilize a loss rate approach to determine lifetime expected credit losses for our financial assets. This method is used for calculating an estimate of losses based primarily on our historical loss experience. In determining loss rates, we evaluate information related to historical losses, adjusted for current conditions and further adjusted for the period of time that we can reasonably forecast. We have concluded that we can reasonably support a forecast period for the contractual life of our financial assets. Qualitative and quantitative adjustments related to current conditions and the reasonable and supportable forecast period consider the following: the customer or vendor's creditworthiness, changes in our policy and procedures to establish customer credit limits, changes in the payment terms of receivables, existence and effect of any concentration of credit and changes in the level of such concentrations, and the effects of other external forces such as the current and forecasted direction of the economic and business environment. We have considered the current and expected economic and market conditions as a result of COVID-19 in determining credit loss expense for the period ended March 31, 2020.

The allowance for credit losses as of December 31, 2019 and March 31, 2020, was as follows:

	Beginning Balance December 31, 2019	Additional Allowance Recognized Due to Adoption of Topic ASC326	Credit Loss Expense for the period	Write offs During the Period	Ending Balance March 31, 2020
Trade receivables	$ 20.5	0.2	4.3	(1.2)	$ 23.8
Notes receivables	0.1	—	—	—	0.1
Rebates from vendors	—	0.1	0.1	—	0.2

Recoveries in the quarter ended March 31, 2020 were immaterial.

2. Revenue Recognition

Disaggregation of Revenue

The following table presents net sales disaggregated by products and services:

	Three Months Ended March 31,	
	2020	2019
Products		
Commercial print	$ 363.4	$ 422.4
Direct marketing	182.8	148.5
Statements	126.9	149.5
Labels	121.6	120.5
Packaging	115.1	139.5
Digital print and fulfillment	113.6	109.6
Supply chain management	69.7	78.5
Forms	52.4	62.4
Total products net sales	$ 1,145.5	$ 1,230.9
Services		
Logistics	$ 195.2	$ 201.7
Business process outsourcing	41.4	61.8
Digital and creative solutions	27.4	27.5
Total services net sales	$ 264.0	$ 291.0
Total net sales	$ 1,409.5	$ 1,521.9

Variable Consideration

Certain clients may receive volume-based rebates or early payment discounts, which are accounted for as variable consideration. We estimate these amounts based on the expected amount to be earned by our clients and reduce revenue accordingly. We do not expect significant changes to estimates of variable consideration. Given the nature of our products and the history of returns, product returns are not significant.

Contract Balances

The following table provides information about contract assets and liabilities from contracts with clients:

	Contract Assets	Contract Liabilities	
	Short-Term	Short-Term	Long-Term
Balance at December 31, 2019	$ 2.0	$ 18.9	$ 0.2
Balance at March 31, 2020	3.7	13.5	0.2

Contract liabilities primarily relate to client advances received prior to completion of performance obligations. Reductions in contract liabilities are a result of our completion of performance obligations.

Revenue recognized during the three months ended March 31, 2020 from amounts included in contract liabilities at the beginning of the period was approximately $13.6 million. During the three months ended March 31, 2020, we reclassified $2.0 million of contract assets to receivables as a result of the completion of the performance obligation and the right to the consideration becoming unconditional.

3. Inventories

The components of inventories, net of excess and obsolescence reserves for raw materials and finished goods, at March 31, 2020 and December 31, 2019 were as follows:

	March 31, 2020	December 31, 2019
Raw materials and manufacturing supplies	$ 140.5	$ 139.4
Work in process	57.1	64.6
Finished goods	121.9	116.4
LIFO reserve	(18.8)	(18.6)
Total inventories	$ 300.7	$ 301.8

4. Property, Plant and Equipment

The components of property, plant and equipment at March 31, 2020 and December 31, 2019 were as follows:

	March 31, 2020	December 31, 2019
Land	$ 47.2	$ 47.8
Buildings	375.3	379.9
Machinery and equipment	1,683.1	1,704.7
	2,105.6	2,132.4
Less: Accumulated depreciation	(1,629.8)	(1,632.4)
Total property, plant and equipment-net	$ 475.8	$ 500.0

During the three months ended March 31, 2020 and 2019 depreciation expense was $28.2 million and $28.3 million, respectively.

During the fourth quarter of 2017, we entered into an agreement to sell a printing facility in Shenzhen, China and transfer the related land use rights. As of March 31, 2020, we have received non-refundable deposits in accordance with the terms of the agreement of approximately $98.2 million which is recorded in Other noncurrent liabilities on the Consolidated Balance Sheets. As of March 31, 2020, the carrying cost of the building and land use rights is recorded in Other noncurrent assets and is not material. Additional deposits will be paid to us in accordance with the agreement. Gross proceeds from the sale, including non-refundable deposits, are expected to be approximately $250.0 million, subject to changes in the exchange rate, and we expect the transaction to close in 2022 after closing conditions are satisfied and government approvals are obtained.

5. Goodwill and Other Intangible Assets

The carrying amount of goodwill at March 31, 2020 and December 31, 2019 were as follows:

	Business Services	Marketing Solutions	Total
Net book value as of December 31, 2019			
Goodwill	$ 2,210.9	$ 519.5	$ 2,730.4
Accumulated impairment losses	(2,018.5)	(254.1)	(2,272.6)
Total	192.4	265.4	457.8
Impairment	(20.6)	—	(20.6)
Disposition	(3.9)	—	(3.9)
Foreign exchange	(0.8)	—	(0.8)
Net book value as of March 31, 2020			
Goodwill	2,180.0	519.5	2,699.5
Accumulated impairment losses	(2,012.9)	(254.1)	(2,267.0)
Total	$ 167.1	$ 265.4	$ 432.5

During the three months ended March 31, 2020, we recorded a non-cash charge of $20.6 million to recognize the impairment of goodwill in the logistics reporting unit. See Note 6, *Restructuring, Impairment and Other*, for further discussion regarding goodwill impairment charges.

The components of other intangible assets at March 31, 2020 and December 31, 2019 were as follows:

	March 31, 2020			December 31, 2019		
	Gross Carrying Amount	Accumulated Amortization	Net Book Value	Gross Carrying Amount	Accumulated Amortization	Net Book Value
Client relationships	$ 430.5	$ (352.4)	$ 78.1	$ 433.9	$ (350.0)	$ 83.9
Patents	2.0	(2.0)	—	2.0	(2.0)	—
Trademarks, licenses and agreements	24.4	(24.3)	0.1	24.6	(24.5)	0.1
Trade names	31.7	(16.6)	15.1	31.8	(16.1)	15.7
Total other intangible assets	$ 488.6	$ (395.3)	$ 93.3	$ 492.3	$ (392.6)	$ 99.7

Amortization expense for other intangible assets was $5.3 million and $6.4 million for the three months ended March 31, 2020 and 2019, respectively.

6. Restructuring, Impairment and Other

For the three months ended March 31, 2020 and 2019, we recorded the following net restructuring, impairment and other expenses (income):

	Three Months Ended March 31, 2020				
	Employee Terminations	Other Restructuring Charges	Multi-Employer Pension Plan Charges	Impairment and Other	Total
Business Services	$ 5.8	$ 1.1	$ 0.6	$ 18.9	$ 26.4
Marketing Solutions	0.4	—	0.1	—	0.5
Corporate	1.9	3.1	—	—	5.0
Total	$ 8.1	$ 4.2	$ 0.7	$ 18.9	$ 31.9

	Three Months Ended March 31, 2019				
	Employee Terminations	Other Restructuring Charges	Multi-Employer Pension Plan Charges	Other	Total
Business Services	$ 7.8	$ 4.7	$ 0.6	$ 0.1	$ 13.2
Marketing Solutions	0.1	—	0.1	—	0.2
Corporate	0.2	3.5	—	—	3.7
Total	$ 8.1	$ 8.2	$ 0.7	$ 0.1	$ 17.1

Restructuring, Impairment and Other

For the three months ended March 31, 2020, we recorded net restructuring charges of $8.1 million for employee termination costs. These charges primarily relate to the closure of the Chilean operations and other announced facility closures in the Business Services segment and the reorganization of selling, general and administrative functions across each segment. We also incurred $4.2 million of other restructuring charges and $0.7 million of multi-employer pension plan ("MEPP") withdrawal obligation charges during the three months ended March 31, 2020.

For the three months ended March 31, 2020, we recorded a non-cash charge of $20.6 million to recognize the impairment of goodwill in the logistics reporting unit within the Business Services segment. The goodwill impairment charge resulted from reductions in the estimated fair value for this reporting unit based on lower expectations for future revenue, profitability and cash flows as compared to the expectations of the 2019 annual goodwill impairment test. Although the Logistics reporting unit reported increases in both net sales and income from operations in the first quarter of 2020, the lower future expectations were driven by expected reduced demand in the near term due to the COVID-19 pandemic. The goodwill impairment charge was determined using Level 3 inputs, including discounted cash flow analysis and comparable marketplace fair value data. The discounted cash flow analysis assumes a modest recovery in the logistics reporting unit in the third and fourth quarters of 2020. If the severity and duration of the impacts of the pandemic exceed our current expectations, additional impairment charges could be recorded. In addition, we recorded net gains of $1.7 million on the sale of restructured facilities for the three months ended March 31, 2020.

For the three months ended March 31, 2019, we recorded net restructuring charges of $8.1 million for employee termination costs. These charges primarily related to the planned relocation of a printing facility in Shenzhen, China, other facility closures in the Business Services segment and the reorganization of selling, general and administrative functions across each segment. We also incurred other restructuring charges of $8.2 million and MEPP withdrawal obligation charges of $0.7 million for the three months ended March 31, 2019. We also recorded impairment charges related to facility closures of $0.1 million for the three months ended March 31, 2019.

Restructuring and MEPP Reserves

Restructuring and MEPP reserves as of December 31, 2019 and March 31, 2020, and changes during the three months ended March 31, 2020, were as follows:

	December 31, 2019	Restructuring and Other Charges	Foreign Exchange and Other	Cash Paid	March 31, 2020
Employee terminations	$ 3.4	$ 8.1	$ —	$ (6.2)	$ 5.3
MEPP withdrawal obligations	40.6	0.7	—	(1.7)	39.6
Other	8.6	4.2	(0.7)	(3.9)	8.2
Total	$ 52.6	$ 13.0	$ (0.7)	$ (11.8)	$ 53.1

The current portion of restructuring reserves of $16.4 million at March 31, 2020 was included in Accrued liabilities and other, while the long-term portion of $36.7 million, related to MEPP withdrawal obligations, employee terminations in litigation and other, was included in Other noncurrent liabilities at March 31, 2020. The liabilities for the withdrawal obligations associated with our previous decision to withdraw from all MEPPs included in Accrued liabilities and other and Other noncurrent liabilities are $6.5 million and $33.1 million, respectively, as of March 31, 2020.

We anticipate that payments associated with the employee terminations reflected in the above table will be fully completed by March 2021, excluding employee terminations in litigation within the Business Services segment.

Payments on all of our MEPP withdrawal obligations are scheduled to be substantially completed by 2034. Changes based on uncertainties in these estimated withdrawal obligations could affect the ultimate charges related to MEPP withdrawals.

The restructuring liabilities classified as "other" primarily consisted of reserves for employee termination litigation and environmental matters. Any potential recoveries or additional charges could affect amounts reported in our consolidated financial statements.

7. Retirement Plans

Components of net pension and other postretirement benefits plan ("OPEB") income for the three months ended March 31, 2020 and 2019 were as follows:

	Three Months Ended March 31,	
	2020	2019
Pension income:		
Service cost	$ 0.3	$ 0.2
Interest cost	6.9	8.4
Expected return on plan assets	(10.2)	(11.6)
Amortization, net	2.5	1.5
Net pension income	$ (0.5)	$ (1.5)
OPEB income:		
Interest cost	1.8	2.6
Expected return on plan assets	(3.2)	(3.3)
Amortization, net	(1.5)	(1.8)
Net OPEB income	$ (2.9)	$ (2.5)

During the three months ended March 31, 2020 and 2019, we contributed $4.0 million and $2.0 million, respectively, to our retirement plans.

8. Share-Based Compensation

Share-based compensation expense was $1.4 million and $3.4 million for the three months ended March 31, 2020 and 2019, respectively.

In March 2020, we awarded our annual share-based compensation grants, which consisted of 0.8 million restricted stock units with a grant date fair value of $1.61 per unit and 0.8 million performance share units also with a grant date fair value of $1.61 per unit. The restricted stock units are subject to a three year graded vesting period and the performance share units are subject to a 34 month cliff vesting period. Dividends are not paid on restricted stock units.

In addition, in March 2020 we granted 1.5 million cash-settled restricted stock units ("phantom restricted stock units") and 1.5 million cash-settled performance stock units ("phantom performance stock units"). Our share price on the date of grant was $1.88. The phantom restricted stock units vest and are payable in three equal installments over a period of three years after the grant date. The phantom performance stock units are subject to a 34 month cliff vesting period. Phantom stock units are not shares of our common stock and therefore the recipients of these awards do not receive ownership interest in the Company or stockholder voting rights. Phantom stock unit awards are subject to forfeiture upon termination of employment prior to vesting, subject in some cases to early vesting upon specified events, including death or permanent disability of the grantee, termination of the grantee's employment under certain circumstances or a change in control of the Company. All phantom stock unit awards are classified as liability awards due to their expected settlement in cash and are included in Accrued liabilities and other in the Condensed Consolidated Balance Sheets. Compensation expense for these awards is measured based upon the fair value of the awards at the end of each reporting period. Dividends are not paid on phantom stock units.

9. Equity

Our equity as of December 31, 2019 and March 31, 2020, and changes during the three months ended March 31, 2020, were as follows:

	Common Stock	Additional Paid-in-Capital	Treasury Stock	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total RRD's Stockholders' Equity	Noncontrolling Interests	Total Equity
Balance at December 31, 2019	$ 0.9	$ 3,348.0	$ (1,219.6)	$ (2,336.8)	$ (176.2)	$ (383.7)	$ 13.4	$ (370.3)
Net (loss) income				(13.0)		(13.0)	0.1	(12.9)
Other comprehensive loss					(31.0)	(31.0)	(0.2)	(31.2)
Share-based compensation		1.4				1.4		1.4
Issuance of share-based awards, net of withholdings and other		(82.3)	81.8			(0.5)		(0.5)
Cash dividends paid				(2.1)		(2.1)		(2.1)
Cumulative impact of adopting ASU 2016-03				(0.3)		(0.3)		(0.3)
Distributions to noncontrolling interests						—	(0.7)	(0.7)
Balance at March 31, 2020	$ 0.9	$ 3,267.1	$ (1,137.8)	$ (2,352.2)	$ (207.2)	$ (429.2)	$ 12.6	$ (416.6)

Our equity as of December 31, 2018 and March 31, 2019, and changes during three months ended March 31, 2019, were as follows:

	Common Stock	Additional Paid-in-Capital	Treasury Stock	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total RRD's Stockholders' Equity	Noncontrolling Interests	Total Equity
Balance at December 31, 2018	$ 0.9	$ 3,404.0	$ (1,285.5)	$ (2,225.7)	$ (153.8)	$ (260.1)	$ 14.7	$ (245.4)
Net (loss) income				(8.8)		(8.8)	0.3	(8.5)
Other comprehensive income					1.4	1.4	0.2	1.6
Share-based compensation		3.4				3.4		3.4
Issuance of share-based awards, net of withholdings and other		(54.7)	53.8			(0.9)		(0.9)
Cash dividends paid				(2.1)		(2.1)		(2.1)
Cumulative impact of adopting ASU 2016-02, net of tax				2.6		2.6		2.6
Distributions to noncontrolling interests						—	(0.7)	(0.7)
Balance at March 31, 2019	$ 0.9	$ 3,352.7	$ (1,231.7)	$ (2,234.0)	$ (152.4)	$ (264.5)	$ 14.5	$ (250.0)

10. Earnings per Share

Basic earnings per share is calculated by dividing net earnings attributable to RRD common stockholders by the weighted average number of common shares outstanding for the period. In computing diluted earnings per share, basic earnings per share is adjusted for the assumed issuance of all potentially dilutive share-based awards, including stock options, restricted stock units and performance share units. Performance share units are excluded if the performance targets upon which the issuance of the shares is contingent have not been achieved and the respective performance period has not been completed as of the end of the current period. Additionally, stock options are considered anti-dilutive when the exercise price exceeds the average market value of our stock price during the applicable period. In periods when we are in a net loss, share-based awards are excluded from the calculation of earnings per share as their inclusion would have an anti-dilutive effect.

During the three months ended March 31, 2020 and 2019, no shares of common stock were purchased by us; however, shares were withheld for tax liabilities upon the vesting of equity awards.

The reconciliation of the numerator and denominator of the basic and diluted earnings per share calculation and the anti-dilutive share-based awards for the three months ended March 31, 2020 and 2019 were as follows:

	Three Months Ended March 31,	
	2020	2019
Net loss per share attributable to RRD common stockholders:		
Basic	$ (0.18)	$ (0.12)
Diluted	$ (0.18)	$ (0.12)
Numerator:		
Net loss attributable to RRD common stockholders	$ (13.0)	$ (8.8)
Denominator:		
Basic weighted average number of common shares outstanding	71.6	70.8
Dilutive options and awards	—	—
Diluted weighted average number of common shares outstanding	71.6	70.8
Weighted average number of anti-dilutive share-based awards:		
Stock options	0.4	0.6
Restricted stock units	1.0	0.7
Total	1.4	1.3
Dividends declared per common share	$ 0.03	$ 0.03

11. Other Comprehensive (Loss) Income

The components of other comprehensive (loss) income and income tax (benefit) expense allocated to each component for the three months ended March 31, 2020 and 2019 were as follows:

	Three Months Ended March 31, 2020		
	Before Tax Amount	Income Tax	Net of Tax Amount
Translation adjustments	$ (20.0)	$ —	$ (20.0)
Adjustments for net periodic pension and OPEB cost	1.0	0.2	0.8
Change in fair value of derivatives	(15.7)	(3.7)	(12.0)
Other comprehensive loss	$ (34.7)	$ (3.5)	$ (31.2)

	Three Months Ended March 31, 2019		
	Before Tax Amount	Income Tax	Net of Tax Amount
Translation adjustments	$ 1.2	$ —	$ 1.2
Adjustments for net periodic pension and OPEB cost	(0.3)	(0.1)	(0.2)
Other	—	(0.6)	0.6
Other comprehensive income	$ 0.9	$ (0.7)	$ 1.6

Accumulated other comprehensive (loss) income by component as of December 31, 2019 and March 31, 2020, and changes during the three months ended March 31, 2020, were as follows:

	Changes in the Fair Value of Derivatives	Pension and OPEB Cost	Translation Adjustments	Total
Balance at December 31, 2019	$ 1.0	$ (185.7)	$ 8.5	$ (176.2)
Other comprehensive loss before reclassifications	(11.8)	—	(19.8)	(31.6)
Amounts reclassified from accumulated other comprehensive loss	(0.2)	0.8	—	0.6
Net change in accumulated other comprehensive (loss) income	(12.0)	0.8	(19.8)	(31.0)
Balance at March 31, 2020	$ (11.0)	$ (184.9)	$ (11.3)	$ (207.2)

Accumulated other comprehensive (loss) income by component as of December 31, 2018 and March 31, 2019, and changes during the three months ended March 31, 2019, were as follows:

	Pension and OPEB Cost	Translation Adjustments	Other	Total
Balance at December 31, 2018	$ (155.2)	$ 1.4	$ —	$ (153.8)
Other comprehensive income before reclassifications	—	5.5	0.6	6.1
Amounts reclassified from accumulated other comprehensive income	(0.2)	(4.5)	—	(4.7)
Net change in accumulated other comprehensive (loss) income	(0.2)	1.0	0.6	1.4
Balance at March 31, 2019	$ (155.4)	$ 2.4	$ 0.6	$ (152.4)

Reclassifications from accumulated other comprehensive loss for the three months ended March 31, 2020 and 2019 were as follows:

	Three Months Ended March 31,		Classification in the Condensed Consolidated Statements of Operations
	2020	2019	
Translation Adjustments:			
Net realized gain, before tax	$ —	$ (4.5)	Other operating expense (income)
Reclassification, net of tax	$ —	$ (4.5)	
Amortization of pension and OPEB cost:			
Net actuarial loss	$ 1.6	$ 1.5	Investment and other income-net
Net prior service credit	(0.6)	(1.8)	Investment and other income-net
Reclassifications before tax	1.0	(0.3)	
Income tax expense (benefit)	0.2	(0.1)	
Reclassification, net of tax	0.8	(0.2)	
Derivatives:			
Net realized gain	$ (0.2)	$ —	Interest expense-net
Reclassification, net of tax	(0.2)	—	
Total reclassifications, net of tax	$ 0.6	$ (4.7)	

12. Segment Information

Our segments and their product and service offerings are summarized below:

Business Services

Business Services provides customized solutions at scale to help clients inform, service and transact with their customers. The segment's primary product and service offerings include commercial print, logistics, statement printing, labels, packaging, supply chain management, forms and business process outsourcing. This segment also includes all of our operations in Asia, Europe, Canada and Latin America.

Marketing Solutions

Marketing Solutions leverages an integrated portfolio of data analytics, creative services and multichannel execution to deliver comprehensive, end-to-end solutions. The segment's primary product and service offerings include direct marketing, in-store marketing, digital print, kitting, fulfillment, digital and creative solutions and list services.

Corporate

Corporate consists of unallocated selling, general and administrative activities and associated expenses including, in part, executive, legal, finance, communications, certain facility costs and last-in-first-out inventory provisions. In addition, certain costs and earnings of employee benefit plans, such as pension and OPEB expense (income) and share-based compensation, are included in Corporate and not allocated to the operating segments. Corporate also manages our cash pooling structures, which enables participating international locations to draw on our international cash resources to meet local liquidity needs.

Information by Segment

We have disclosed income (loss) from operations as the primary measure of segment earnings (loss). This is the measure of profitability used by our chief operating decision-maker and is most consistent with the presentation of profitability reported within the Condensed Consolidated Financial Statements.

	Three Months Ended March 31, 2020						
	Total Sales	Intersegment Sales	Net Sales	Income (Loss) from Operations	Depreciation and Amortization	Capital Expenditures	Assets of Operations As of March 31, 2020
Business Services	$ 1,102.2	$ (16.5)	$ 1,085.7	$ 19.6	$ 26.0	$ 10.7	$ 2,153.0
Marketing Solutions	330.4	(6.6)	323.8	24.9	14.2	1.6	699.6
Total operating segments	1,432.6	(23.1)	1,409.5	44.5	40.2	12.3	2,852.6
Corporate	—	—	—	(35.7)	0.6	5.4	584.9
Total operations	$ 1,432.6	$ (23.1)	$ 1,409.5	$ 8.8	$ 40.8	$ 17.7	$ 3,437.5

	Three Months Ended March 31, 2019						
	Total Sales	Intersegment Sales	Net Sales	Income (Loss) from Operations	Depreciation and Amortization	Capital Expenditures	Assets of Operations As of December 31, 2019
Business Services	$ 1,255.9	$ (19.6)	$ 1,236.3	$ 28.6	$ 29.3	$ 23.5	$ 2,329.7
Marketing Solutions	291.9	(6.3)	285.6	8.5	12.1	9.2	748.1
Total operating segments	1,547.8	(25.9)	1,521.9	37.1	41.4	32.7	3,077.8
Corporate	—	—	—	(13.8)	1.3	4.7	252.3
Total operations	$ 1,547.8	$ (25.9)	$ 1,521.9	$ 23.3	$ 42.7	$ 37.4	$ 3,330.1

Net restructuring, impairment and other expenses (income) by segment are described in Note 6, *Restructuring, Impairment and Other*.

13. Commitments and Contingencies

We are subject to laws and regulations relating to the protection of the environment. We provide for expenses associated with environmental remediation obligations when such amounts are probable and can be reasonably estimated. Such accruals are adjusted as new information develops or circumstances change and are generally not discounted. We have been designated as a potentially responsible party or have received claims in three active federal and state Superfund and other multiparty remediation sites. In addition to these sites, we may also have the obligation to remediate six other previously and currently owned facilities. At the Superfund sites, the Comprehensive Environmental Response, Compensation and Liability Act provides that our liability could be joint and several, meaning that we could be required to pay an amount in excess of our proportionate share of the remediation costs.

Our understanding of the financial strength of other potentially responsible parties at the multiparty sites and of other liable parties at the previously owned facilities has been considered, where appropriate, in the determination of our estimated liability. We believe that our recorded accruals, recorded in Accrued liabilities and other and Other noncurrent liabilities, are adequate to cover our share of the potential costs of remediation at each of the multiparty sites and the previously and currently owned facilities. It is not possible to quantify with certainty the potential impact of actions regarding environmental matters, particularly remediation and other compliance efforts that we may undertake in the future. However, in our opinion, compliance with the present environmental protection laws, before taking into account estimated recoveries from third parties, will not have a material effect on our consolidated results of operations, financial position or cash flows.

In April 2019, we received a subpoena from the SEC related to previous business dealings with the Brazilian Ministry of Education. The SEC and Department of Justice ("DOJ") are investigating the matter, and we are cooperating as they conduct their investigations. In addition, the Brazil authorities are also investigating the matter.

From time to time, our clients and others file voluntary petitions for reorganization under United States bankruptcy laws. In such cases, certain pre-petition payments received by us from these parties could be considered preference items and subject to return. In addition, we may be party to certain litigation arising in the ordinary course of business. We believe that the final resolution of these preference items and litigation will not have a material effect on our consolidated results of operations, financial position or cash flows.

Leases

We determine if an arrangement is a lease at inception. Operating leases are recorded in Operating lease assets, Short-term operating lease liabilities and Long-term operating lease liabilities on the Condensed Consolidated Balance Sheets. Operating lease assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease assets and liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. In determining the present value of lease payments, we use our incremental borrowing rate based on the information available at the lease commencement date. Operating lease assets reflects lease payments and are reduced by any lease incentives received. Our lease terms may include options to extend or not terminate the lease when we are reasonably certain that we will exercise any such options. Leases with an expected term of 12 months or less are not recorded on the balance sheet. Lease expense is recognized on a straight-line basis over the expected lease term.

Our most significant leases are real estate leases for plants, warehouses, storage facilities, offices and other facilities. For real estate leases, we elected the practical expedient permitted under Topic 842 to combine lease and non-lease components. As a result, non-lease components, such as common area maintenance charges, are accounted for as a single lease element. Our remaining operating leases are primarily comprised of leases of machinery and technology equipment. Finance leases are not material.

Certain of our operating lease agreements include variable payments that are passed-through by the landlord, such as insurance, taxes and common area maintenance, payments based on the usage of the asset and rental payments adjusted periodically for inflation. Pass-through charges, payments due to change in usage of the asset and payments due to changes in inflation are included within variable rent expense.

Our lease agreements do not contain material residual value guarantees, restrictions or covenants.

Subsequent to the spinoff of LSC Communications, Inc. ("LSC") and Donnelley Financial Solutions ("Donnelley Financial") on October 1, 2016, we may be contingently liable for obligations under various operating leases for office, warehouse and manufacturing locations of LSC and Donnelley Financial. In the event that LSC or Donnelley Financial, or any successor lessee, fail to make lease payments or fail to pay other obligations under these lease agreements, we may be required to satisfy those obligations to the lessor. Under various agreements executed at the time of the spinoff, LSC and Donnelley Financial agreed to fully indemnify us in the event that we would be required to make a payment on their behalf; however, there can be no assurance that the indemnities from LSC and Donnelley Financial will be sufficient to satisfy the full amount of any such contingent obligations. Our exposure to these potential contingent liabilities will decrease over time as LSC and Donnelley Financial pay monthly lease obligations and as the leases expire. As of March 31, 2020 and December 31, 2019, these potential contingent obligations were approximately $72.0 million and $78.8 million, respectively for LSC, and $4.8 million and $5.5 million, respectively for Donnelley Financial. On April 13, 2020, LSC announced that it, along with most of its U.S. subsidiaries, voluntarily filed for business reorganization under Chapter 11 of the U.S. Bankruptcy Code. At the time of this filing, no plan of reorganization has been filed and we cannot assess the potential impact of any such plan on our contingent liabilities related to the spin-off of LSC.

14. Debt

Debt at March 31, 2020 and December 31, 2019 consisted of the following:

	March 31, 2020	December 31, 2019
Borrowings under the ABL Credit Facility	$ 450.0	$ 42.0
7.625% notes due June 15, 2020	64.5	65.8
7.875% notes due March 15, 2021	138.1	167.1
8.875% debentures due April 15, 2021	59.5	60.2
7.000% notes due February 15, 2022	133.4	140.0
6.500% notes due November 15, 2023	275.2	290.6
Term Loan due January 15, 2024 (a)	539.2	540.3
6.000% notes due April 1, 2024	251.8	298.3
6.625% debentures due April 15, 2029	149.8	157.9
8.500% notes due April 15, 2029	49.7	—
8.820% debentures due April 15, 2031	69.0	69.0
Unamortized debt issuance costs	(11.8)	(12.8)
Total debt	2,168.4	1,818.4
Less: current portion	208.1	71.2
Long-term debt	$ 1,960.3	$ 1,747.2

(a) As of March 31, 2020 and December 31, 2019, the interest rate on the Term Loan due January 15, 2024 was 6.60% and 6.80%, respectively.

The fair values of the notes and debentures, which were determined using the market approach based upon quoted prices or interest rates available to us for debt obligations with similar terms and maturities, were determined to be Level 2 under the fair value hierarchy. The fair value of our total debt was less than its book value by approximately $35.9 million at March 31, 2020 and greater than its book value by approximately $29.3 million at December 31, 2019.

In March 2020, we entered into privately negotiated agreements with the largest holder of our outstanding notes (the "Seller") to effect a series of refinancing transactions that address a significant portion of the Company's 2023 and 2024 debt maturities. The agreements included the repurchase of $6.6 million of the 7.00% notes due 2022 and $20.0 million of the 6.00% notes due 2024. We funded these repurchases with a draw from our ABL Credit Facility. We recorded a gain of $0.2 million on these repurchases.

The agreements also included an exchange of $277.0 million aggregate principal amount of notes owned by the Seller, consisting of $54.0 million of the 6.50% notes due 2023 (the "2023 Notes"), $177.4 million of the 6.00% notes due in 2024 (the "2024 Notes"), and $45.6 million of the 6.625% debentures due 2029 (the "2029 Debentures") for $297.0 million aggregate principal amount of newly issued unsecured 8.50% notes due 2029 (the "New 2029 Notes"). Other than the interest rate, the terms of the New 2029 Notes are substantially similar to the terms of the 2029 Debentures. As of March 31, 2020, only a portion of this exchange was completed including $15.4 million of the 2023 Notes, $26.5 million of the 2024 Notes, and $8.1 million of the 2029 Debentures, which were exchanged for $53.6 million aggregate principal of New 2029 Notes. We treated the transaction as a debt modification, which resulted in a discount on the New 2029 Notes of $3.9 million, inclusive of $0.3 million of fees paid to the Seller in the first quarter of 2020. The remaining $227 million of the exchange was executed in a series of transactions that were completed on April 8, 2020.

In addition to the aforementioned transactions, during the quarter ended March 31, 2020, we also repurchased from other parties on the open market $1.3 million of 7.625% notes due 2020, $29.1 million of the 7.875% notes due 2021, and $0.8 million of the 8.875% debentures due 2021 using availability under our ABL Credit Facility. We recorded a gain on debt extinguishment of $0.3 million, offset by approximately $0.3 million in unamortized debt issuance costs in the first quarter of 2020 on the repurchase of these notes.

On October 15, 2018, we entered into a $550.0 million senior secured term loan B (the "Term Loan") pursuant to a credit agreement (the "Term Loan Credit Agreement"). The Term Loan is scheduled to mature on January 15, 2024, at which time the remaining outstanding balance under the Term Loan will be due and payable. Principal payments of $1.4 million are due quarterly. The Term Loan bears interest based on the London Interbank Offered Rate (LIBOR) plus a margin of 5% or a base rate plus a margin of 4%.

We entered into an $800.0 million senior secured asset-based revolving credit facility (the "ABL Credit Facility") on September 29, 2017, pursuant to a credit agreement (the "ABL Credit Agreement"), which replaced our prior $800.0 million senior secured revolving credit facility dated September 30, 2016. The ABL Credit Facility is scheduled to mature on September 29, 2022, at which time all outstanding amounts under the ABL Credit Facility will be due and payable.

The amount available to be borrowed under the ABL Credit Facility is equal to the lesser of (a) $800.0 million and (b) a borrowing base formula based on the amount of accounts receivable, inventory, machinery, equipment and, if we were to so elect in the future subject to the satisfaction of certain conditions, fee-owned real estate of ours and our material domestic subsidiaries, subject to certain eligibility criteria and advance rates (collectively, the "Borrowing Base"). The aggregate amount of real estate, machinery and equipment that can be included in the Borrowing Base formula cannot exceed $200.0 million.

Borrowings under the ABL Credit Facility bear interest at a rate dependent on the average quarterly availability and is calculated according to a base rate (except in certain circumstances, based on the prime rate) or a Eurocurrency rate (except in certain circumstances, based on LIBOR) plus an applicable margin. The applicable margin for base rate loans ranges from 0.25% to 0.50% and the applicable margin for Eurocurrency loans ranges from 1.25% to 1.50%. In addition, a fee is payable quarterly on the unused portion of the total commitments. This fee accrues at a rate of either 0.25% or 0.375% depending upon the average usage of the facility. Borrowings under the ABL Credit Facility may be used for working capital and general corporate purposes.

During the first quarter of 2020, we increased our borrowings under the ABL Credit Facility to $450 million as a proactive measure in response to the COVID-19 pandemic. Based on our Borrowing Base as of March 31, 2020 and outstanding borrowings, we had approximately $192.9 million borrowing capacity available under the ABL Credit Facility. The weighted average interest rate on borrowings under our ABL Credit Facility was 2.7% and 3.9% during the three months ended March 31, 2020 and 2019, respectively.

The ABL Credit Agreement and Term Loan Credit Agreement contain customary affirmative and negative covenants including negative covenants restricting, among other things, our ability to incur debt, make investments, make certain restricted payments (including payments on certain other debt and external dividends), incur liens securing other debt, consummate certain fundamental transactions, enter into transactions with affiliates and consummate asset sales. The ABL Credit Agreement contains a covenant which requires us to maintain a minimum fixed charge coverage ratio of 1.0 to 1.0 if availability under the ABL Credit Facility declines below certain levels. The Term Loan Credit Agreement requires that the net cash proceeds of significant asset sales be used to prepay the Term Loan to the extent that the net cash proceeds are not used for reinvestment in assets useful to our business, certain acquisitions and investments, repayment of certain borrowings under our ABL Credit Facility or the funding of debt repayments, redemptions or tenders of certain existing notes maturing prior to the maturity of the Term Loan, in each case, subject to certain restrictions and limitations set forth in the Term Loan Credit Agreement.

Interest paid was $23.5 million for the three months ended March 31, 2020 and $38.6 million for the three months ended March 31, 2019.

Interest income was $0.5 million for the three months ended March 31, 2020 and $0.8 million for the three months ended March 31, 2019.

15. Derivatives

All derivatives are recorded as other current or noncurrent assets or other current or noncurrent liabilities in the Condensed Consolidated Balance Sheets at their respective fair values. Unrealized gains and losses related to derivatives are recorded in the Condensed Consolidated Statements of Operations, or in other comprehensive income (loss), net of applicable income taxes, depending on the purpose for which the derivative is held. At the inception of a hedge transaction, we formally document the hedge relationship and the risk management objective for undertaking the hedge. In addition, we assess both at inception of the hedge and on an ongoing basis, whether the derivative in the hedging transaction has been highly effective in offsetting changes in fair value or cash flows of the hedged item and whether the derivative is expected to continue to be highly effective. The impact of any ineffectiveness is also recognized in the Condensed Consolidated Statements of Operations.

We are exposed to the impact of foreign currency fluctuations based on our global operations. Foreign currency fluctuations affect the U.S. dollar value of revenues earned and expenses incurred in foreign currencies. We are also exposed to currency risk to the extent we own assets or incur liabilities, or enter into other transactions that are not in the functional currency of the subsidiary in which we operate. We employ different practices to manage these risks, including where appropriate the use of derivative instruments, such as foreign currency forwards. To the extent the gains and losses associated with the fair values of foreign currency derivatives are recognized in the Consolidated Statements of Operations, they are generally offset by gains and losses on underlying payables and receivables. We do not use derivative financial instruments for trading or speculative purposes. The aggregate notional value of the forward contracts at March 31, 2020 and December 31, 2019 was $158.9 million and $179.9 million, respectively. The fair values of foreign currency contracts were determined to be Level 2 under the fair value hierarchy and are valued using market exchange rates.

In 2019 and 2020, we entered into interest rate swap agreements to manage interest rate risk exposure, effectively changing the interest rate on $400.0 million of our floating-rate Term Loan based on LIBOR to a fixed-rate. The interest rate swaps, with a notional value of $400.0 million, were designated as cash flow hedges against the variability of cash flows associated with our Term Loan scheduled to mature on January 15, 2024, which are attributable to changes in the benchmark interest rate.

The fair values of interest rate swaps were determined to be Level 2 under the fair value hierarchy and were developed using the market standard methodology of netting the discounted future variable cash payments and the discounted expected fixed cash receipts. Credit valuation adjustments, which consider the impact of any credit enhancements to the contracts, are incorporated in the fair values to account for potential nonperformance risk. We evaluate the credit value adjustments of the interest rate swap agreements, which take into account the possibility of counterparty and our own default, on at least a quarterly basis.

Our foreign currency contracts and interest rate swaps are subject to master netting agreements that allow us to settle positive and negative positions with the respective counterparties. Under these master netting agreements, net settlement generally permits us or the counterparty to determine the net amount payable for contracts due on the same date and in the same currency for similar types of derivative transactions. The master netting agreements generally also provide for net settlement of all outstanding contracts with a counterparty in the case of an event of default or a termination event.

We manage credit risk for our derivative positions on a counterparty-by-counterparty basis, considering the net portfolio exposure with each counterparty, consistent with our risk management strategy for such transactions. Our agreements with each of our counterparties contain a provision where we could be declared in default on our derivative obligations if we either default or, in certain cases, are capable of being declared in default of any of our indebtedness greater than specified thresholds. These agreements also contain a provision where we could be declared in default subsequent to a merger or restructuring type event if the creditworthiness of the resulting entity is materially weakened.

As of March 31, 2020 and December 31, 2019, the fair values of our derivative financial instruments and their classifications on the Condensed Consolidated Balance Sheets were as follows:

	Classification on Consolidated Balance Sheets	March 31, 2020	December 31, 2019
Derivative assets			
Foreign currency contracts:			
Not designated as hedging instruments	Prepaid expenses and other current assets	$ 0.7	$ 0.9
Interest rate swap agreements:			
Designated as cash flow hedges	Other noncurrent assets	—	1.0
Derivative liabilities			
Foreign currency contracts:			
Not designated as hedging instruments	Accrued liabilities and other	$ 2.2	$ 0.1
Interest rate swap agreements:			
Designated as cash flow hedges	Accrued liabilities and other	4.0	—
Designated as cash flow hedges	Other noncurrent liabilities	10.7	—

The pre-tax losses (gains) recognized on derivative financial instruments in the Condensed Consolidated Statements of Operations for the three months ended March 31, 2020 and March 31, 2019 were as follows:

		Three months ended	
	Classification of Loss (Gain) Recognized in the Consolidated Statements of Operations	March 31, 2020	March 31, 2019
Derivatives not designated as hedges			
Foreign currency contracts	Selling, general and administrative expenses	$ 1.2	$ (3.7)
Derivatives designated as cash flow hedges			
Interest rate swap agreements	Interest expense, net	(0.2)	—

The pre-tax losses recognized on derivative financial instruments in the Condensed Consolidated Statements of Comprehensive Loss for the three months ended March 31, 2020 and March 31, 2019 were as follows:

	Three months ended	
	March 31, 2020	March 31, 2019
Derivatives designated as cash flow hedges		
Interest rate swap agreements	$ 15.5	$ —

16. Dispositions and Acquisition

2020 Disposition

On March 2, 2020, we sold our Logistics Courier business within the Business Services segment for net proceeds of $9.7 million, subject to a working capital adjustment. The disposition of this business resulted in a loss of $8.3 million during the three months ended March 31, 2020, which was recorded in Other operating expense (income) in the Condensed Consolidated Statements of Operations.

2019 Dispositions

On October 25, 2019, we completed the sale of substantially all of the Global Document Solutions ("GDS") business for approximately $47.3 million, subject to a working capital adjustment. GDS primarily provides statements and print management services in Europe. The disposition resulted in a loss of $0.9 million during 2019, which was recorded in Other operating expense (income) in the Consolidated Statements of Operations.

On May 8, 2019, we sold the R&D business within the Business Services segment for net proceeds of $11.6 million. The disposition resulted in a gain of $6.1 million during 2019, which was recorded in Other operating expense (income) in the Consolidated Statements of Operations.

On March 31, 2019, our subsidiary, RR Donnelley Editora e Grafica Ltda. ("RRD Brazil"), filed for bankruptcy liquidation in bankruptcy court in Brazil. The bankruptcy petition was approved by the court shortly thereafter and a bankruptcy trustee was appointed. As a result of the bankruptcy liquidation, we recorded a gain of $4.0 million in Other operating expense (income) during 2019, primarily reflecting the reclassification of cumulative currency translation adjustments into earnings and ongoing expenses associated with the bankruptcy proceedings. Subsequent to March 31, 2019, the operating results of RRD Brazil are no longer included in our consolidated results of operations except for legal fees associated with the bankruptcy proceedings. The operations of RRD Brazil had been included in the Business Services segment.

2019 Acquisition

On August 1, 2019, we completed an acquisition within the Business Services segment for a purchase price of $14.6 million consisting of $3.0 million in cash paid at closing, a $3.0 million note paid in January 2020 and $8.6 million in contingent consideration based on the future performance of the acquired business. The cost of the acquisition is primarily allocated to intangible assets related to client relationships based on the fair value at the acquisition date.

17. New Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In June 2016, the FASB issued ASU No. 2016-13 "Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments" ("ASU 2016-13"), which changes the impairment model for most financial assets and certain other instruments. Under the new guidance, entities are required to measure expected credit losses for financial instruments, including trade receivables, based on historical experience, current conditions and reasonable forecasts. ASU 2016-13 is effective for public entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. We established a cross-functional implementation team to analyze the effect of Topic 326. The analysis included identifying pools of receivables, developing and assessing estimation methodologies, policy elections, and evaluating our business processes and internal controls to meet the accounting, reporting and disclosure requirements. On January 1, 2020, we adopted and applied Topic 326 using the modified retrospective method. The cumulative adjustment to retained earnings was $0.3 million.

Accounting Pronouncements Issued and Not Yet Adopted

In March 2020, the FASB issued ASU 2020-04, Reference Rate Reform, which provides companies with optional guidance, including expedients and exceptions for applying generally accepted accounting principles to contracts and other transactions affected by reference rate reform, such as the London Interbank Offered Rate (LIBOR). This new standard was effective upon issuance and generally can be applied to applicable contract modifications through December 31, 2022. We are currently evaluating the impact of ASU 2020-04 on the consolidated financial statements.

In December 2019, the FASB issued ASU No. 2019-12 "Simplifying the Accounting for Income Taxes (Topic 740)" ("ASU 2019-12"), which simplifies the accounting for income taxes by eliminating certain exceptions to the guidance in Accounting Standards Codification ("ASC") 740 related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. The standard also simplifies aspects of the accounting for franchise taxes and enacted changes in tax laws or rates and clarifies the accounting for transactions that result in a step-up in the tax basis of goodwill. ASU 2019-12 will be effective for public entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020, however early adoption is permitted. We are currently evaluating the impact of ASU 2019-12 on the consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-14 "Compensation—Retirement Benefits—Defined Benefit Plans—General (Subtopic 715-20): Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans" ("ASU 2018-14"), which removes certain disclosures that are no longer cost beneficial and also includes additional disclosures to improve the overall usefulness of the disclosure requirements to financial statement users. ASU 2018-14 will be effective for public entities for fiscal years beginning after December 15, 2020, however early adoption is permitted. We are currently evaluating the impact of ASU 2018-14 on the consolidated financial statements.

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

Company Overview

R.R. Donnelley & Sons Company ("RRD," the "Company," "we," "us," and "our"), a Delaware corporation, helps organizations communicate more effectively by working to create, manage, produce, distribute and process content on behalf of our clients. We assist clients in developing and executing multichannel communication strategies that engage audiences, reduce costs, drive revenues and enhance compliance. Our innovative content management offering, production platform, logistics services, supply chain management, outsourcing capabilities and customized consultative expertise assists our clients in the delivery of integrated messages across multiple media to highly targeted audiences at optimal times to their customers in virtually every private and public sector. We have strategically located operations that provide local service and responsiveness while leveraging the economic, geographic and technological advantages of a global organization.

Segment Descriptions

Our segments and their product and service offerings are summarized below:

Business Services

Business Services provides customized solutions at scale to help clients inform, service and transact with their customers. The segment's primary product and service offerings include commercial print, logistics, statement printing, labels, packaging, supply chain management, forms and business process outsourcing. This segment also includes all of our operations in Asia, Europe, Canada and Latin America.

Marketing Solutions

Marketing Solutions leverages an integrated portfolio of data analytics, creative services and multichannel execution to deliver comprehensive, end-to-end solutions. The segment's primary product and service offerings include direct marketing, in-store marketing, digital print, kitting, fulfillment, digital and creative solutions and list services.

Corporate

Corporate consists of unallocated selling, general and administrative activities and associated expenses including, in part, executive, legal, finance, communications, certain facility costs and last-in-first-out inventory provisions. In addition, certain costs and earnings of employee benefit plans, such as pension and other postretirement benefits plan ("OPEB") expense (income) and share-based compensation, are included in Corporate and not allocated to the operating segments. Corporate also manages our cash pooling structures, which enables participating international locations to draw on our international cash resources to meet local liquidity needs.

Products and Services

We separately report our net sales, related costs of sales and gross profit for our product and service offerings. Our product offerings primarily consist of commercial print, statements, direct marketing, packaging, labels, digital print and fulfillment, supply chain management and forms. Our service offerings primarily consist of logistics, business process outsourcing and digital and creative solutions.

Executive Overview

Response to COVID-19

The COVID-19 pandemic has created significant business challenges for companies around the world, including many of our clients across the broad number of industries we serve. We have therefore initiated a series of actions to protect our employees, meet client commitments, and preserve financial flexibility in response to the COVID-19 crisis.

We have activated our business continuity plans and are leveraging our strong supply chain partnerships to continue to meet the ongoing needs of our 50,000 global clients. To date, with the exception of a few small facilities in the Caribbean and Mexico, all of our printing and distribution operations have been classified as essential and therefore remain open.

Protecting the health and safety of our employees is our highest priority, and we are continually evolving our policies and procedures to adhere to the latest best practices being provided by the Centers for Disease Control ("CDC") and World Health Organization ("WHO"). To date we have taken several actions to protect our workforce, including the development of a cross-functional Task Force fully committed to the development of safety measures, policies and communications; the suspension of all international and domestic business travel; and the implementation of flexible working policies, including telecommuting and staggered shifts, while allowing for voluntary leaves of absence. Currently, approximately 10,000 employees, including those providing essential services are working from home. We are also enforcing social distancing policies within our manufacturing facilities, and we are providing training for adherence to personal hygiene best practices in line with CDC and WHO guidelines. In response to the CDC recommendation that all individuals in the U.S. wear face masks, we are supplying our essential employees with a combination of disposable and cloth masks, as well as face shields, to ensure their safety and protection. With personal protective equipment in short supply around the world, our teams have exercised ingenuity and leadership to develop protective equipment within our own operations using our own equipment.

The extent the outbreak will ultimately impact our business, results of operations, financial position and cash flows will depend on future developments which are highly uncertain and cannot be fully predicted or estimated at this time. However, amidst the global uncertainty posed by COVID-19, we are positioning the company to weather an economic downturn and protect the short and long-term interests of our stakeholders. These decisions are difficult but critical to preserving the short-term financial flexibility of the Company as COVID-19 presents increasing challenges across the industries we serve. We are freeing up capital to ensure we are prepared for the range of scenarios we may experience as a result of the virus. As a result, we implemented several business actions, including the implementation of an employee furlough program with RRD paid medical benefits. We have temporarily closed those production facilities most heavily impacted by client volume decreases, shifting that production to other facilities to lower costs while continuing to meet client requirements. We suspended all 2020 employee merit increases. We accelerated cost reduction initiatives, and will continue to assess opportunities for further reduction, and have delayed capital projects and reduced consulting and other discretionary spend. We suspended our quarterly dividend effective April 6, 2020.

During the first quarter of 2020, we increased our borrowings to $450 million as a proactive measure and entered into a series of debt transactions to preserve our financial flexibility.

First Quarter Overview

Net sales decreased by $112.4 million, or 7.4%, for the three months ended March 31, 2020 compared to the same period in 2019. Net sales decreased $87.7 million due to business dispositions, primarily the Global Document Solutions ("GDS") business and our Logistics Courier business, and $6.6 million due to changes in foreign exchange rates. Net sales also decreased $43.4 million due to the impact of COVID-19 in our China business within the Business Services segment, partially offset by higher volume in direct marketing primarily attributable to the 2020 Census contract.

We continue to assess opportunities to reduce our cost structure and enhance productivity throughout the business. During the three months ended March 31, 2020, we realized cost savings from previous restructuring activities including the reorganization of administrative and support functions across all segments, as well as the Chile facility closure and other facility consolidations.

Net cash used in operating activities for the three months ended March 31, 2020 was $79.6 million as compared to $130.0 million for the three months ended March 31, 2019. The significant improvement is primarily due to lower tax and interest payments and working capital improvements versus the prior year.

While we have a diversified client base with limited concentration, we do have clients that operate in industries hard-hit by the effects of COVID-19, including airlines, hotel chains, cruise lines, and restaurants. In late March, we began to see the cancellation of some programmatic projects from these clients as they worked to mitigate the impact of the virus on their business. At the same time, we also saw important opportunities to stand by our clients and help them navigate the new conditions and realities.

The Company continues to aggressively accelerate both permanent and temporary cost reduction actions to lessen the impact from lower sales volume as a result of the COVID-19 pandemic. In addition, the Company is also receiving pandemic-related orders in many parts of its business, including special notification letters, government mailings, product packaging, labels, signage, mail-in ballots, test kit assembly, emergency kits, digital creative and COVID-19 specific consumer research and analytics. These orders further mitigate the impact from COVID-19. The extent the outbreak will ultimately impact our business, results of operations, financial position and cash flows will depend on future developments which are highly uncertain and cannot be fully predicted or estimated at this time. In the nearer term, the Company expects second quarter sales to be $300 to $375 million lower than the prior year which includes an approximate $94 million reduction due to recent business dispositions.

In late March and early April, the Company opportunistically repurchased $51 million of Senior Notes and Debentures due in 2020 and 2021 to reduce future interest and principal payments. The 2020 and 2021 maturities have now been reduced to $65 million and $178 million, respectively.

In March of 2020, the Company increased its borrowings under the revolving credit facility as a proactive measure to preserve financial flexibility. As of March 31, the Company had $644 million of total liquidity consisting of $451 million of cash on hand and $193 million of availability under the revolving credit facility.

RESULTS OF OPERATIONS FOR THE THREE MONTHS ENDED MARCH 31, 2020 AS COMPARED TO THE THREE MONTHS ENDED MARCH 31, 2019

The following table shows the results of operations for the three months ended March 31, 2020 and 2019:

	Three Months Ended March 31,			
	2020	2019	$ Change	% Change
	(in millions, except percentages)			
Products net sales	$ 1,145.5	$ 1,230.9	$ (85.4)	(6.9%)
Services net sales	264.0	291.0	(27.0)	(9.3%)
Total net sales	1,409.5	1,521.9	(112.4)	(7.4%)
Products cost of sales (exclusive of depreciation and amortization)	922.8	1,008.8	(86.0)	(8.5%)
Services cost of sales (exclusive of depreciation and amortization)	212.9	234.8	(21.9)	(9.3%)
Total cost of sales	1,135.7	1,243.6	(107.9)	(8.7%)
Products gross profit	222.7	222.1	0.6	0.3%
Services gross profit	51.1	56.2	(5.1)	(9.1%)
Total gross profit	273.8	278.3	(4.5)	(1.6%)
Selling, general and administrative expenses (exclusive of depreciation and amortization)	179.1	199.6	(20.5)	(10.3%)
Restructuring, impairment and other expense-net	31.9	17.1	14.8	86.5%
Depreciation and amortization	40.8	42.7	(1.9)	(4.4%)
Other operating expense (income)	13.2	(4.4)	17.6	nm
Income from operations	$ 8.8	$ 23.3	$ (14.5)	(62.2%)

Consolidated

Net sales of products for the three months ended March 31, 2020 decreased $85.4 million, or 6.9%, to $1,145.5 million versus the same period in 2019. The first quarter of 2020 included a $55.3 million decrease due to business dispositions and a $6.5 million decrease due to changes in foreign exchange rates. Net sales of products also decreased due to the impact of COVID-19 in our China business of approximately $43.4 million, lower volume in remaining commercial print due to ongoing secular pressure and continued planned reduction in low margin sales, partially offset by higher volume in direct marketing primarily attributable to the 2020 Census contract.

Net sales from services for the three months ended March 31, 2020 decreased $27.0 million, or 9.3%, to $264.0 million versus the same period in 2019. The first quarter of 2020 included a $32.4 million decrease due to business dispositions.

Products cost of sales for the three months ended March 31, 2020 decreased $86.0 million, or 8.5%, to $922.8 million versus the same period in 2019. Products cost of sales decreased primarily due to business dispositions, cost control initiatives across both segments and lower volume in commercial print and packaging, partially offset by cost inflation and higher volume in direct marketing primarily attributable to the 2020 Census contract. As a percentage of net sales, products cost of sales decreased 1.4 percentage points for the three months ended March 31, 2020 versus the same period in 2019.

Services cost of sales decreased $21.9 million, or 9.3%, for the three months ended March 31, 2020 versus the same period in 2019, primarily due to the disposition of the GDS business and cost control initiatives, partially offset by cost inflation. As a percentage of net sales, services cost of sales remained essentially unchanged for the three months ended March 31, 2020.

Products gross profit increased $0.6 million to $222.7 million for the three months ended March 31, 2020 versus the same period in 2019, primarily due to favorable product mix and cost control initiatives, partially offset by cost inflation. Products gross margin increased from 18.0% in 2019 to 19.4% in 2020.

Services gross profit decreased $5.1 million to $51.1 million for the three months ended March 31, 2020 versus the same period in 2019, primarily due to the reduction in sales. Services gross margin increased slightly from 19.3% in 2019 to 19.4% in 2020.

Selling, general and administrative expenses decreased $20.5 million to $179.1 million for the three months ended March 31, 2020 versus the same period in 2019 reflecting cost control initiatives and business dispositions. As a percentage of net sales, selling, general and administrative expenses decreased from 13.1% to 12.7% for the three months ended March 31, 2020 versus the same period in 2019.

For the three months ended March 31, 2020, net restructuring, impairment and other charges of $31.9 million primarily included a non-cash charge of $20.6 million to recognize the impairment of goodwill in the logistics reporting unit within the Business Services segment, $8.1 million for employee termination costs and $4.2 million for other restructuring charges. See Note 6, *Restructuring, Impairment and Other*, within the Notes to the Condensed Consolidated Financial Statements for further discussion.

Depreciation and amortization decreased $1.9 million to $40.8 million for the three months ended March 31, 2020 compared to the same period in 2019. Depreciation and amortization included $5.3 million and $6.4 million of amortization of other intangible assets related to client relationships, trade names, trademarks, licenses and agreements for the three months ended March 31, 2020 and 2019, respectively.

Other operating expense (income) for the three months ended March 31, 2020 was $13.2 million compared to $(4.4) million in the same period in 2019. During the three-month period ended March 31, 2020 we recorded a $8.3 million loss on the sale of our Logistics Courier business. The prior year period included a $4.0 million gain on the Brazil bankruptcy liquidation.

Income from operations for the three months ended March 31, 2020 was $8.8 million, a decrease of $14.5 million, or 62.2%, compared to the three months ended March 31, 2019.

	Three Months Ended March 31,			
	2020	2019	$ Change	% Change
	(in millions, except percentages)			
Interest expense-net	$ 33.9	$ 40.1	$ (6.2)	(15.5%)
Investment and other income-net	(3.8)	(4.5)	0.7	(15.6%)
Gain on debt extinguishment	(0.2)	—	(0.2)	nm

Net interest expense decreased by $6.2 million for the three months ended March 31, 2020 versus the same period in 2019, primarily due to lower average interest rates and lower average debt outstanding during the three months ended March 31, 2020.

Investment and other income, net for the three months ended March 31, 2020 and 2019 was $3.8 million and $4.5 million, respectively, and principally comprised of net OPEB and pension income.

Gain on debt extinguishment for the three months ended March 31, 2020 was $0.2 million. See Note 14, *Debt*, within the Notes to the Condensed Consolidated Financial Statements for further discussion.

	Three Months Ended March 31,			
	2020	2019	$ Change	% Change
	(in millions, except percentages)			
Loss before income taxes	$ (21.1)	$ (12.3)	$ (8.8)	71.5%
Income tax benefit	(8.2)	(3.8)	(4.4)	nm
Effective income tax rate	38.9%	30.9%		

The effective income tax rate was a benefit of 38.9% and 30.9% for the three months ended March 31, 2020 and 2019, respectively.

During the three months ended March 31, 2020, the Company reflected a benefit from the recently enacted CARES Act whereby additional interest expense is now deductible for 2019 (approximately $6.9 million) and 2020.

Income attributable to noncontrolling interests was $0.1 million and $0.3 million for the three months ended March 31, 2020 and 2019, respectively.

Net loss attributable to RRD common stockholders was $13.0 million for the three months ended March 31, 2020 compared to $8.8 million for the three months ended March 31, 2019.

Information by Segment

Business Services

	Three Months Ended March 31,	
	2020	2019
	(in millions, except percentages)	
Net sales	$ 1,085.7	$ 1,236.3
Income from operations	19.6	28.6
Operating margin	1.8%	2.3%
Restructuring, impairment and other expense-net	26.4	13.2
Other operating expense (income)	0.9	(0.1)

Net sales for the Business Services segment for the three months ended March 31, 2020 were $1,085.7 million, a decrease of $150.6 million, or 12.2%, compared to 2019. Net sales decreased $87.7 million due to business dispositions, primarily the GDS and Logistics Courier business, and $6.6 million due to changes in foreign exchange rates. Net sales also decreased due to the impact of COVID-19 in our China business of approximately $43.4 million, lower volume in remaining commercial print due to ongoing secular pressure as well as continued planned reduction in low margin sales and modest price pressures across the segment. The following table summarizes net sales by products and services in the Business Services segment:

	Three Months Ended March 31,			
Products and Services	2020	2019	$ Change	% Change
	(in millions, except percentages)			
Commercial print	$ 363.4	$ 422.4	$ (59.0)	(14.0%)
Logistics	195.2	201.7	(6.5)	(3.2%)
Statements	126.9	149.5	(22.6)	(15.1%)
Labels	121.6	120.5	1.1	0.9%
Packaging	115.1	139.5	(24.4)	(17.5%)
Supply chain management	69.7	78.5	(8.8)	(11.2%)
Forms	52.4	62.4	(10.0)	(16.0%)
Business process outsourcing	41.4	61.8	(20.4)	(33.0%)
Total Business Services	$ 1,085.7	$ 1,236.3	$ (150.6)	(12.2%)

Business Services segment income from operations decreased $9.0 million to $19.6 million for the three months ended March 31, 2020, primarily due to higher restructuring and impairment expense, lower volume, price pressures and cost inflation, partially offset by cost control initiatives.

Marketing Solutions

	Three Months Ended March 31,	
	2020	2019
	(in millions, except percentages)	
Net sales	$ 323.8	$ 285.6
Income from operations	24.9	8.5
Operating margin	7.7%	3.0%
Restructuring and other expense-net	0.5	0.2

Net sales for the Marketing Solutions segment for the three months ended March 31, 2020 were $323.8 million, an increase of $38.2 million, or 13.4%, compared to 2019. Net sales increased primarily due to higher volume in direct marketing attributable to the 2020 Census contract. The following table summarizes net sales by products and services in the Marketing Solutions segment:

Products and Services	Three Months Ended March 31, 2020	2019	$ Change	% Change
	(in millions, except percentages)			
Direct marketing	$ 182.8	$ 148.5	$ 34.3	23.1%
Digital print and fulfillment	113.6	109.6	4.0	3.6%
Digital and creative solutions	27.4	27.5	(0.1)	(0.4%)
Total Marketing Solutions	$ 323.8	$ 285.6	$ 38.2	13.4%

Marketing Solutions segment income from operations increased $16.4 million to $24.9 million for the three months ended March 31, 2020, primarily due to higher volume in direct marketing attributable to the 2020 Census contract.

Corporate

Corporate operating expenses during the three months ended March 31, 2020 were $35.7 million, an increase of $21.9 million compared to the same period in 2019. The increase was primarily driven by higher other operating expense which related to a loss from disposition of our Logistics Courier business and the ongoing SEC and DOJ investigations. The following table summarizes unallocated operating expenses and certain items impacting comparability within the activities presented as Corporate:

	Three Months Ended March 31, 2020	2019
	(in millions)	
Operating expenses	$ 35.7	$ 13.8
Restructuring and other expense-net	5.0	3.7
Other operating expense (income)	12.3	(4.3)
Acquisition-related expenses	0.2	0.3

LIQUIDITY AND CAPITAL RESOURCES

We believe that we have sufficient liquidity to support our ongoing operations and to invest in future growth to create value for our stockholders. Our operating cash flows, existing cash balances and available capacity under our asset-based senior secured revolving credit facility (the "ABL Credit Facility") are our primary sources of liquidity and are expected to be used for, among other things, capital expenditures necessary to support productivity, completion of restructuring programs and payment of interest and principal on our long-term debt obligations.

The following describes our cash flows for the three months ended March 31, 2020 and 2019.

	Three Months Ended March 31, 2020	2019	$ Change
	(in millions)		
Net cash used in operating activities	$ (79.6)	$ (130.0)	$ 50.4
Net cash used in investing activities	(0.3)	(38.1)	37.8
Net cash provided by financing activities	345.9	74.8	271.1
Effect of exchange rates on cash, cash equivalents and restricted cash	(6.0)	2.5	(8.5)
Net increase (decrease) in cash, cash equivalents and restricted cash	$ 260.0	$ (90.8)	$ 350.8

Operating cash inflows are largely attributable to sales of our products and services. Operating cash outflows are largely attributable to recurring expenditures for raw materials, labor, rent, interest, taxes and other operating activities.

Net cash used in operating activities for the three months ended March 31, 2020 was $50.4 million lower than in the same period in 2019, primarily due to lower tax and interest payments and working capital improvements versus the prior year.

Included in net cash used in operating activities were the following operating cash outflows:

	Three Months Ended March 31,		
	2020	2019	$ Change
	(in millions)		
Income tax payments, net of tax refunds	$ 6.1	$ 25.7	$ (19.6)
Interest payments	23.5	38.6	(15.1)
Performance-based compensation payments	27.5	29.8	(2.3)
Restructuring and MEPP payments	11.8	7.5	4.3
Pension and other postretirement benefits plan contributions	4.0	2.0	2.0

Significant cash (outflows) inflows included in investing and financing activities for each period were as follows:

	Three Months Ended March 31,		
	2020	2019	$ Change
	(in millions)		
Capital expenditures	$ (17.7)	$ (37.4)	$ 19.7
Proceeds from sale of investments and other assets	2.9	0.3	2.6
Disposition of businesses	12.9	(0.7)	13.6
Payments of current maturities and long-term debt	(58.7)	(173.7)	115.0
Net borrowings under credit facilities	408.0	259.0	149.0
Dividends paid	(2.1)	(2.1)	—

Proceeds from disposition of businesses in 2020 reflect the sale of the Logistics Courier business and a working capital adjustment received from the sale of GDS in the fourth quarter of 2019.

Payments of current maturities and long-term debt in 2020 primarily reflect repurchases of outstanding debt with maturities from 2020 to 2024. In the first three months of 2019, we repaid $172.2 million of outstanding notes at maturity using availability under our ABL Credit Facility. Net borrowing under our ABL Credit Facility increased as compared to the same quarter in 2019. The additional borrowings are part of an effort to retain financial flexibility in light of the COVID-19 outbreak. See Item 2 Management's Discussion and Analysis of Financial Condition and Results of Operations, Executive Overview, *Response to COVID*-19 section and *Note 14 - Debt* to the Condensed Consolidated Financial Statements for further discussion.

LIQUIDITY

Cash and cash equivalents of $450.7 million as of March 31, 2020 included $289.2 million in the U.S. and $161.5 million at international locations. As a result of the Tax Act, we have opportunities to repatriate foreign cash, primarily generated from current year earnings, in a tax efficient manner. The previously taxed earnings from the transition tax and annual GILTI inclusion, as well as certain foreign earnings that receive a one hundred percent dividends received deduction may be repatriated with minimal additional tax consequences. As such, we are no longer permanently reinvested on certain foreign earnings yet remain permanently reinvested on all other foreign earnings and other outside basis differences. We record foreign withholding tax liabilities related to the certain foreign earnings for repatriation. We have recognized deferred tax liabilities of $5.3 million as of March 31, 2020, related to local taxes on certain foreign earnings which are not considered to be permanently reinvested.

Included in Cash and cash equivalents at March 31, 2020 were $39.2 million of short-term investments, which primarily consisted of short-term deposits and money market funds. These investments are held at institutions with sound credit ratings and are expected to be highly liquid.

During the quarter we entered into several debt repurchase transactions aimed to improve liquidity and financial flexibility. See Note 14, *Debt*, to the Condensed Consolidated Financial Statements.

The current availability under the ABL Credit Facility as of March 31, 2020 is shown in the table below:

	March 31, 2020 (in millions)
Availability	
ABL Credit Facility	$ 800.0
Availability reduction due to available borrowing base	118.0
	$ 682.0
Usage	
Borrowings under the ABL Credit Facility	$ 450.0
Outstanding letters of credit	39.1
	$ 489.1
Current availability at March 31, 2020	$ 192.9
Cash and cash equivalents	450.7
Total available liquidity (a)	$ 643.6

(a) Total available liquidity does not include credit facilities of non-U.S. subsidiaries, which are uncommitted facilities.

The failure of a financial institution supporting the ABL Credit Facility would reduce the size of our committed facility unless a replacement institution was added. Currently, the ABL Credit Facility is supported by eight U.S. financial institutions.

On March 18th, 2020, Moody's Investor Service Inc. (“Moody’s) affirmed our credit ratings but changed our outlook from stable to negative. Our credit ratings from Moody’s and S&P Global Ratings (“S&P”) as of March 31, 2020 are shown in the table below.

	S&P	Moody's
Long-term corporate credit rating	B, Neg	B2, Neg
Senior unsecured debt	B-	B3
Term Loan	B+	B1

Dispositions

During the three months ended March 31, 2020, we sold the Logistics Courier business for net proceeds of $9.7 million, subject to a working capital adjustment.

During the fourth quarter of 2017, we entered into an agreement to sell a printing facility in Shenzhen, China and transfer the related land use rights. As of March 31, 2020, we have received non-refundable deposits in accordance with the terms of the agreement of approximately $98.2 million which is recorded in Other noncurrent liabilities on the Condensed Consolidated Balance Sheets. Additional deposits will be paid to us in accordance with the agreement. Gross proceeds from the sale, including non-refundable deposits, are expected to be approximately $250.0 million, subject to changes in the exchange rate, and we expect the transaction to close in 2022 after closing conditions are satisfied and government approvals are obtained. As of March 31, 2020, the carrying cost of the building and land use rights is recorded in Other noncurrent assets and is not material.

Dividends

During the three months ended March 31, 2020, we paid cash dividends of $2.1 million. On April 6, 2020, the Board of Directors of the Company made a decision to suspend all dividends payments as part of the Company’s response to the COVID-19 outbreak. See Item 2**.** Management’s Discussion and Analysis of Financial Condition and Results of Operations*, Executive Overview, Response to COVID-19* Section for further discussion.

MANAGEMENT OF MARKET RISK

We are exposed to interest rate risk on our variable debt and price risk on our fixed-rate debt. Including the effect of the floating-to-fixed interest rate swaps (see Note 15, *Derivatives*, to the Consolidated Financial Statements), approximately 73.0% of our outstanding debt was comprised of fixed-rate debt as of March 31, 2020.

We assess market risk based on changes in interest rates utilizing a sensitivity analysis that measures the potential loss in earnings, fair values and cash flows based on a hypothetical 10% change in interest rates. Using this sensitivity analysis, such changes would not have a material effect on interest income or expense and cash flows and would change the fair values of fixed-rate debt at March 31, 2020 and December 31, 2019 by approximately $28.3 million and $25.8 million, respectively.

We are exposed to the impact of foreign currency fluctuations based on our global operations. Foreign currency fluctuations affect the U.S. dollar value of revenues earned and expenses incurred in foreign currencies. We are also exposed to currency risk to the extent we own assets or incur liabilities, or enter into other transactions that are not in the functional currency of the subsidiary in which we operate. We employ different practices to manage these risks, including where appropriate the use of derivative instruments, such as foreign currency forwards. As of March 31, 2020 and December 31, 2019, the aggregate notional amount of outstanding foreign currency contracts was approximately $158.9 million and $179.9 million , respectively (see Note 15, *Derivatives*, to the Condensed Consolidated Financial Statements). Net unrealized losses from these foreign currency contracts were $1.5 million at March 31, 2020 and net unrealized gains were $0.8 million at December 31, 2019. We do not use derivative financial instruments for trading or speculative purposes.

OTHER INFORMATION

Litigation and Contingent Liabilities

For a discussion of certain litigation, see Note 13, *Commitments and Contingencies,* to the Condensed Consolidated Financial Statements.

New Accounting Pronouncements and Pending Accounting Standards

Recently issued accounting standards and their estimated effect on our consolidated financial statements are described in Note 17, *New Accounting Pronouncements*, to the Condensed Consolidated Financial Statements.

CAUTIONARY STATEMENT

This Quarterly Report on Form 10-Q and any documents incorporated by reference contain forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. These statements are subject to risks and uncertainties and are based on our beliefs and assumptions. Generally, forward-looking statements include information concerning possible or assumed future actions, events, or results of operations of ours. These statements may include, or be preceded or followed by, the words “may,” “will,” “should,” “might,” “could,” “would,” “potential,” “possible,” “believe,” “expect,” “anticipate,” “intend,” “plan,” “estimate,” “hope” or similar expressions. We claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995 for all forward-looking statements.

Forward-looking statements are not guarantees of performance. The factors identified below are believed to be significant factors, but not necessarily all of the significant factors, that could cause actual results to differ materially from those expressed in any forward-looking statement. Unpredictable or unknown factors could also have material effects on us.

The following important factors, in addition to those discussed elsewhere in this Quarterly Report on Form 10-Q and under the “Risk Factors” section of our Annual Report on Form 10-K for the fiscal year ended December 31, 2019, could affect our future results and could cause those results or other outcomes to differ materially from those expressed or implied in our forward-looking statements:

- The severity and length of the economic downturn due to COVID-19
- adverse changes in global economic conditions and the resulting effect on the businesses of our clients;
- changes in customer preferences or a failure to otherwise manage relationships with our significant clients;
- loss of brand reputation and decreases in quality of client support and service offerings;
- political and regulatory risks and uncertainty in the countries in which we operate or sell our products and services;
- taxation related risks in multiple jurisdictions;
- adverse credit market conditions and other issues that may affect our ability to obtain future financing on favorable terms;
- limitations on our borrowing capacity in our credit facilities;
- increases in interest rates;
- our ability to make payments on, reduce or extinguish any of our material indebtedness;
- impairment of assets as a result of a decline in our individual reporting units’ expected profitability;
- changes in the availability or costs of key materials (such as ink, paper and fuel) or increases in shipping costs;
- our ability to improve operating efficiency rapidly enough to meet market conditions;

- impairment of assets as a result of a decline in our individual reporting units' expected profitability;
- our ability and/or our vendors' ability to implement and maintain information technology and security measures sufficient to protect against breaches and data leakage or the failure to properly use and protect customer, Company and employee information and data;
- a failure in or breach of data held in the computer systems we and our vendors maintain;
- increased pricing pressure as a result of the competitive environment in which we operate;
- successful negotiation, execution and integration of acquisitions;
- our ability to execute on our portfolio optimization strategies, including potential sales of non-core assets;
- increasing health care and benefits costs for employees and retirees;
- changes in our pension and OPEB obligations;
- adverse trends or events in our operations outside of the United States;
- the effect of inflation, changes in currency exchange rates and changes in interest rates;
- catastrophic events which may damage our facilities or otherwise disrupt the business;
- the effect of changes in laws and regulations, including changes in accounting standards, trade, tax, environmental compliance, health and welfare benefits, price controls and other regulatory matters and the cost, which could be substantial, of complying with these laws and regulations;
- changes in the regulations applicable to our clients, which may adversely impact demand for our products and services;
- factors that affect client demand, including changes in postal rates, postal regulations and service levels, changes in the capital markets, changes in advertising markets, clients' budgetary constraints and changes in clients' short-range and long-range plans;
- failures or errors in our products and services;
- changes in technology, including electronic substitution and migration of paper based documents to digital data formats, and our ability to adapt to these changes;
- inability to hire and retain employees;
- potential contingent obligations related to leases;
- the spinoffs resulting in significant tax liability; and
- other risks and uncertainties detailed from time to time in our filings with the SEC.

Because forward-looking statements are subject to assumptions and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. Undue reliance should not be placed on such statements, which speak only as of the date of this document or the date of any document that may be incorporated by reference into this document.

Consequently, readers of this Quarterly Report on Form 10-Q should consider these forward-looking statements only as our current plans, estimates and beliefs. We do not undertake and specifically disclaims any obligation to publicly release the results of any revisions to these forward-looking statements that may be made to reflect future events or circumstances after the date of such statements or to reflect the occurrence of anticipated or unanticipated events. We undertake no obligation to update or revise any forward-looking statements in this Quarterly Report on Form 10-Q to reflect any new events or any change in conditions or circumstances.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

See Item 2 of Part I under "Management of Market Risk." Other than COVID-19 discussed in Part 2 – *Risk Factors*, Section 1A, there have been no significant changes to our market risk since December 31, 2019. For a discussion of exposure to market risk, refer to Part II, Item 7A – Quantitative and Qualitative Disclosures about Market Risk, set forth in our 2019 Form 10-K.

Item 4. Controls and Procedures

(a) Disclosure controls and procedures.

As required by Rule 13a-15(b) and Rule 15d-15(e) of the Securities Exchange Act of 1934, the Company's management, including the Chief Executive Officer and Chief Financial Officer, is responsible for establishing and maintaining effective disclosure controls and procedures, as defined under Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934. As of March 31, 2020, an evaluation was performed under the supervision and with the participation of management, including the Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that disclosure controls and procedures as of March 31, 2020 were effective in ensuring information required to be disclosed in our SEC reports was recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and that such information was accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

(b) Changes in internal control over financial reporting.

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934) that occurred during the quarter ended March 31, 2020 that had materially affected, or were reasonably likely to materially affect, our internal control over financial reporting.

PART II— OTHER INFORMATION

Item 1. Legal Proceedings

For a discussion of certain litigation, see Note 13, *Commitments and Contingencies,* to the Condensed Consolidated Financial Statements.

Item 1A. Risk Factors

There is no material change in the information reported under "Part 1 -Items 1A Risk Factors" contained in our annual Report on Form 10-K for the fiscal year ended December 31, 2019 with the exception of the following:

COVID-19

In December 2019, a novel strain of coronavirus (COVID-19) emerged in Wuhan, Hubei Province, China. While initially the outbreak was largely concentrated in China and caused significant disruptions to its economy, during and subsequent to the first quarter of 2020, COVID-19 continued to spread across the globe at an increasing rate including a significant outbreak in the U.S. The outbreak in the U.S and most other countries forced governments to close non-essential businesses and substantially restrict the lives of most people. Measures taken by various governmental authorities, including the U.S government, to limit the spread of this virus has created tremendous business challenges for us and for other companies around the world, including many of our clients and suppliers. We have taken a number of proactive measures to manage through the impact of the growing pandemic. The extent to which the coronavirus impacts our operations and the operations of our suppliers and our customers will depend on future developments, which are highly uncertain at this time, including the duration of the outbreak, the degree and ultimate success of government intervention in stabilizing economies around the world, and other actions to contain the coronavirus or treat its impact, among others. The continued spread of COVID-19 and ongoing governmental efforts to contain the pandemic has significantly impacted the global economy, resulting in decreased demand for some of our products and services. While the Company continues to implement measures to mitigate the effects of COVID-19, this decreased demand has adversely affected our business, operating results, financial condition and cash flows and we expect such adverse impacts to continue for the foreseeable future. Depending on the severity and duration of the global economic decline, revenue declines from decreased client demand could materially adversely affect our business, operating results, financial condition and cash flows. Additionally, declining operating results and cash flows may also cause impairments of tangible and intangible assets and an increase in allowance for doubtful accounts as a result of our inability to collect customer accounts receivable balances.

Contingent Lease Obligations

Subsequent to the spinoff of LSC Communications, Inc. (“LSC”) and Donnelley Financial Solutions, Inc. (“Donnelley Financial”), we may be contingently liable for obligations under various operating leases for office, warehouse and manufacturing locations of LSC and Donnelley Financial. In the event that LSC or Donnelley Financial, or any successor lessee, fail to make lease payments or fail to pay other obligations under these lease agreements, we may be required to satisfy those obligations to the lessor. Under various agreements executed at the time of the spinoff, LSC and Donnelley Financial agreed to fully indemnify us in the event that we would be required to make a payment on their behalf; however, there can be no assurance that the indemnities from LSC and Donnelley Financial will be sufficient to satisfy the full amount of any such contingent obligations. Our exposure to these potential contingent liabilities will decrease over time as LSC and Donnelley Financial pay monthly lease obligations and as the leases expire. As of March 31, 2020, these potential contingent obligations were approximately $72.0 million and $4.8 million for LSC and Donnelley Financial, respectively. On April 13, 2020, LSC announced that it, along with most of its U.S. subsidiaries, voluntarily filed for business reorganization under Chapter 11 of the U.S. Bankruptcy Code. At the time of this filing, no plan of reorganization has been filed and we cannot assess the potential impact of any such plan on our contingent liabilities related to the spin-off of LSC. If we are required to make payments in connection with these contingent liabilities, it may adversely affect our results of operations, financial condition or cash flows.

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

ISSUER PURCHASES OF EQUITY SECURITIES

Period	Total Number of Shares Purchased (a)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Dollar Value of Shares that May Yet be Purchased Under the Plans or Programs
January 1, 2020 - January 31, 2020	—	$ —	—	$ —
February 1, 2020 - February 29, 2020	—	—	—	$ —
March 1, 2020 - March 31, 2020	295,407	1.90	—	$ —
Total	295,407	$ 1.90	—	

a) Shares withheld for tax liabilities upon vesting of equity awards.

The ABL Credit Agreement and Term Loan Credit Agreement contain customary affirmative and negative covenants including negative covenants restricting, among other things, our ability to incur debt, make investments, make certain restricted payments (including payments on certain other debt and external dividends), incur liens securing other debt, consummate certain fundamental transactions, enter into transactions with affiliates and consummate asset sales.

Item 4. Mine Safety Disclosures

Not applicable

Item 6. Exhibits

31.1*	Certification by Daniel L. Knotts, President and Chief Executive Officer, required by Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934
31.2*	Certification by Terry D. Peterson, Executive Vice President and Chief Financial Officer, required by Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934
32.1**	Certification by Daniel L. Knotts, President and Chief Executive Officer, required by Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and Section 1350 of Chapter 63 of Title 18 of the United States Code
32.2**	Certification by Terry D. Peterson, Executive Vice President and Chief Financial Officer, required by Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and Section 1350 of Chapter 63 of Title 18 of the United States Code
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed herewith

** Furnished herewith

SIGNATURES

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

R.R. DONNELLEY & SONS COMPANY

By: /s/ TERRY D. PETERSON

Terry D. Peterson
Executive Vice President and Chief Financial Officer

Date: April 29, 2020

Exhibit 31.1

Certification Pursuant to Rule 13a-14(a) and Rule 15d-14(a)
of the Securities Exchange Act of 1934

I, Daniel L. Knotts, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of R.R. Donnelley & Sons Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 29, 2020

/s/ DANIEL L. KNOTTS
Daniel L. Knotts
President and Chief Executive Officer

Exhibit 31.2

Certification Pursuant to Rule 13a-14(a) and Rule 15d-14(a)
of the Securities Exchange Act of 1934

I, Terry D. Peterson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of R.R. Donnelley & Sons Company;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 29, 2020

/s/ TERRY D. PETERSON

Terry D. Peterson
Executive Vice President and Chief Financial Officer

Exhibit 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

**CERTIFICATION PURSUANT TO RULE 13a-14(b) OR RULE 15d-14(b)
AND SECTION 1350 OF CHAPTER 63 OF TITLE 18
OF THE UNITED STATES CODE (18 U.S.C. 1350),
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of R. R. Donnelley & Sons Company (the "Company") on Form 10-Q for the period ended March 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Daniel L. Knotts, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

April 29, 2020

/s/ DANIEL L. KNOTTS
Daniel L. Knotts
President and Chief Executive Officer

Exhibit 32.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER

**CERTIFICATION PURSUANT TO RULE 13a-14(b) OR RULE 15d-14(b)
AND SECTION 1350 OF CHAPTER 63 OF TITLE 18
OF THE UNITED STATES CODE (18 U.S.C. 1350),
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report of R. R. Donnelley & Sons Company (the "Company") on Form 10-Q for the period ended March 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Terry D. Peterson, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

April 29, 2020

/s/ TERRY D. PETERSON
Terry D. Peterson
Executive Vice President and Chief Financial Officer