

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

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2016

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____

Commission file number 1-4694

R. R. DONNELLEY & SONS COMPANY

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)
35 West Wacker Drive, Chicago, Illinois
(Address of principal executive offices)

36-1004130
(I.R.S. Employer
Identification No.)
60601
(ZIP Code)

Registrant's telephone number, including area code—(312) 326-8000

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

<u>Title of each Class</u>	<u>Name of each exchange on which registered</u>
Common Stock (Par Value \$0.01)	New York Stock Exchange

Indicated by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§229.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

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

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

The aggregate market value of the shares of common stock (based on the closing price of these shares on the NASDAQ Stock Exchange—Composite Transactions) on June 30, 2016, the last business day of the registrant's most recently completed second fiscal quarter, held by nonaffiliates was \$1,170,819,591.

As of February 23, 2017, 69,885,993 shares of common stock were outstanding.

Documents Incorporated By Reference

Portions of the registrant's proxy statement related to its annual meeting of stockholders scheduled to be held on May 19, 2017 are incorporated by reference into Part III of this Form 10-K.

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PART I

ITEM 1. BUSINESS

Company Overview

R.R. Donnelley & Sons Company (“RR Donnelley,” 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 customers. We assist customers in developing and executing multichannel communication strategies that engage audiences, reduce costs, drive revenues and increase compliance. Our innovative content management offering, production platform, logistics services, supply chain management, outsourcing capabilities and customized consultative expertise assists our customers in the delivery of integrated messages across multiple media to highly targeted audiences at optimal times for 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.

Competitive Strategy

Our long-standing customer relationships and comprehensive portfolio of capabilities allow us to focus on the following key strategies:

- *Driving Profitable Growth*: We intend to drive profitable growth in each of our core businesses.
- *Extending our Capabilities*: We intend to extend the range of our capabilities, products and service offerings to fuel organic growth from our global customer base.
- *Expanding Print and Digital Technology Platforms* : We intend to continue expanding our print and digital technology platforms, with innovative content management, data analytics, and multi-channel capabilities for targeted markets.
- *Pursuing Strategic Acquisitions* : We intend to strategically pursue acquisitions and business partnerships that will further enhance our digital technology, workflows and print capabilities.
- *Optimizing Business Performance* : We intend to optimize our business performance by focusing on service quality and operational excellence, while maintaining a disciplined approach to capital allocation.

Segment Descriptions

During the fourth quarter of 2016, management realigned the Company’s reportable segments to reflect the management reporting structure of the remaining businesses after the completion of the spinoff of Donnelley Financial Solutions, Inc. and LSC Communications, Inc. The revised management reporting structure more accurately reflects the manner in which the chief operating decision maker regularly assesses information for decision-making purposes. All prior year amounts have been reclassified to conform to the Company’s current reporting structure.

Our reportable segments and, where applicable, operating segments, their solutions and product and service offerings are summarized below.

Variable Print

The Variable Print segment includes our U.S. short-run and transactional printing operations and includes the following reporting units: commercial and digital print, direct mail, labels, statement printing and Forms. In 2016, the Variable Print segment accounted for 45.6% of our consolidated net sales.

Commercial and Digital Print

We provide various commercial printing and print-related services. These services consist of traditional print services, including electronic prepress, digital and offset printing, finishing, storage and delivery of high-quality printed documents which are custom manufactured to our customers’ design specifications. Our Print Fulfillment and Distribution solution allows us to combine Just-In-Time and Digital Print-On-Demand product with off-the-shelf inventory through a national platform of networked facilities in quantities and timeframes desired by the end user. Additionally, our product offerings include packaging, structural engineering and prototyping services, as well as in-store marketing, including in-store signage and point-of-purchase displays. We partner with our customers to help them re-imagine their in-store experience through providing creative and design services in order to present innovative, new ideas for complete store design or individual merchandising materials. Commercial and digital print accounted for 52.6% of the Variable Print segment’s net sales for the fiscal year ended December 31, 2016.

Direct Mail

We are an industry leader in creating and implementing fully integrated direct mail communications programs. We provide solutions ranging from guidance in overall copywriting, design and print production to postal optimization strategies. We have a diverse and comprehensive mail production platform with significant digital production capabilities. Our proprietary ProteusJetSM imaging systems, customized software and marketing strategies enable our customers to communicate to an audience of any size. We believe we are well positioned to meet our direct mail customers' specific needs by offering cadenced, multiple touch mailings and multi-media communications such as websites, email and mobile contact. Through advanced data analytics, we assist our customers in targeting their customers to deliver the right message at the right time and through the right channel to their intended audience. Direct mail accounted for 16.8% of the Variable Print segment's net sales for the fiscal year ended December 31, 2016.

Labels

We produce custom labels for customers across multiple industries including warehouse and distribution, retail, pharmaceutical, manufacturing and consumer packaging. Our manufacturing capabilities provide a diverse product offering, including distribution and shipping labels, healthcare and durable goods labels, promotional labels and consumer product goods packaging labels. Our network of production facilities enables the optimal combination of regional or national distribution. Labels accounted for 12.7% of the Variable Print segment's net sales for the fiscal year ended December 31, 2016.

Statement Printing

We enable enhanced relationships between our customers and their consumers by creating and managing critical business communications across multiple channels. These essential business communications include consumer billing, financial statements, healthcare communications and insurance documents. We support these communications according to customer preferences allowing customers to benefit from our offerings via hosted managed services or with a fully outsourced solution. The breadth of our capabilities includes design and composition, variable imaging, email, archival, digital mail interaction, and payment services, as well as our innovative RRDigital solution set, which we launched in 2016. Our platform, scale and breadth of offering combined with our technology and innovation provide our customers with low cost solutions that assist them in servicing their clients. Statement printing accounted for 12.1% of the Variable Print segment's net sales for the fiscal year ended December 31, 2016.

Forms

We produce a variety of forms including invoices, order and business forms that support both the private and public sectors. The primary industries we serve are financial, government, retail, healthcare and business services. Forms accounted for 5.8% of the Variable Print segment's net sales for the fiscal year ended December 31, 2016.

International

The International segment includes our operations in Asia, Latin America, Europe and Canada, as well as our Global Turnkey Solutions operations and Business Process Outsourcing business. This segment accounted for 29.3% of our consolidated net sales in 2016.

Asia

Our Asia reporting unit consists of a strategically integrated network of seven locations, which provides in-box materials, packaging, labels, and export and domestic book production to our major international customers. The Asia reporting unit accounted for 36.4% of the International segment's net sales for the year ended December 31, 2016.

Canada

Our Canada reporting unit provides commercial printing, statement printing, labels, forms, in-store marketing, sourcing and print fulfillment to major companies in the financial, insurance, transportation, retail, education and restaurant verticals across ten integrated locations. The Canada reporting unit accounted for 10.2% of the International segment's net sales for the fiscal year ended December 31, 2016.

Latin America

Our Latin America reporting unit has operations in Brazil, Chile, Central America and the Caribbean. We provide highly secure educational testing materials, inserts, books, statements, forms, labels and fulfillment to local and regional customers. The Latin America reporting unit accounted for 8.1% of the International segment's net sales for the fiscal year ended December 31, 2016.

Global Turnkey Solutions

Our Global Turnkey Solutions operations provide complex supply chain management and outsourcing capabilities, including product configuration, packaging, customized kitting and order fulfillment for companies around the world through its operations in Europe, North America, and Asia. The Global Turnkey Solutions reporting unit accounted for 24.6% of the International segment's net sales for the fiscal year ended December 31, 2016.

Business Process Outsourcing

Our Business Process Outsourcing business provides transactional print and outsourcing services including inbound and outbound document processing, creative services, research and analytics, financial management and other services for legal providers, insurance, telecommunications, utilities, retail and financial services companies. The Business Process Outsourcing reporting unit accounted for 20.7% of the International segment's net sales for the fiscal year ended December 31, 2016.

Strategic Services

The Strategic Services Segment accounted for 25.1% of our consolidated net sales in 2016 and includes the following reporting units: Logistics, Sourcing and Digital and Creative Solutions.

Logistics

RR Donnelley logistics services consist of a portfolio of specialized transportation and distribution services targeting a number of unique industry verticals. Our worldwide business is a leading third party logistics provider that utilizes a leveraged platform and a nationwide sales network to offer customers a full suite of freight services, including truckload, less-than-truckload, intermodal and international freight forwarding. We are a leading international mail and parcel distributor with an extensive 200 country network of postal and foreign distribution partners that we manage to meet the unique requirements of international mailers. Domestically, we are a leading provider of print logistics services in the U.S., with the scale, technology and expertise in USPS® rules and regulations to maximize distribution savings for our mail customers. We are also a leading distributor of retail and newsstand print materials, utilizing a nationwide network of consolidation facilities to provide unique distribution solutions for a number of customers. We offer our print and mail clients access to proprietary technology that is designed to determine the most efficient and cost-effective method of shipping depending on their needs. Our integrated distribution management business, last mile, is an extensive nationwide courier network that offers customized same day and next day delivery solutions with optimized route planning and web-based tracking. We continue to leverage our unique courier capabilities to build a position in the growing last-mile delivery sector. Logistics accounted for 71.2% of the Strategic Services segment's net sales for the fiscal year ended December 31, 2016.

Sourcing

Our sourcing solutions utilize ISO certified platforms to provide print management solutions including consulting and systems solutions to allow our customers to more efficiently and cost-effectively manage their print needs. We allow our customers to use our proprietary CustomBuy software for increased visibility, control and rationalization of expenditures, and consult our customers on supplier management, vendor consolidation and offshore production, as well as advising on paper management solutions and other cost optimization opportunities. We guide and support our customers with the development and fulfillment of promotional product strategies that meet their desired objectives within budgetary constraints. Sourcing accounted for 20.1% of the Strategic Services segment's net sales for the year ended December 31, 2016.

Digital and Creative Solutions

The digital and creative solutions reporting unit includes teams of photographers, videographers, web designers, writers, editors, designers and various digital experience experts who assist brands in creating, augmenting and managing content designed to speak directly to their targeted audiences. With our breadth of capabilities, we provide cost effective solutions to bring the creative concepts of our customers and their agencies to life. We assist our customers in facilitating a common creative approach to all of their communications needs, including print and digital advertising, direct marketing and direct mail design, packaging design, marketing and sales collateral and in-store marketing. We also advise on corporate communications and interactive experiences and services. Digital and creative solutions accounted for 8.7% of the Strategic Services segment's net sales for the year ended December 31, 2016.

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 expense and share-based compensation, are included in Corporate and not allocated to the operating segments. Corporate also manages the Company's cash pooling structures, which enables participating international locations to draw on our overseas cash resources to meet local liquidity needs.

Financial and other information related to these segments is included in Item 7, *Management's Discussion and Analysis of Financial Condition and Results of Operations*, Note 20, *Segment Information*, to the Consolidated Financial Statements and within Note 21, *Geographic Area and Products and Services Information*, to the Consolidated Financial Statements.

Spinoff Transactions

On October 1, 2016, we completed the previously announced separation of our financial communications and data services business (“Donnelley Financial Solutions, Inc.” or “Donnelley Financial”) and the publishing and retail-centric print services and office products business (“LSC Communications, Inc.” or “LSC”) into two separate publicly-traded companies (the “Separation”). We completed the tax free distribution of approximately 26.2 million shares, or 80.75%, of the outstanding common stock of Donnelley Financial and 26.2 million shares, or 80.75%, of the outstanding common stock of LSC, to our stockholders (the “Distribution”). The Distribution was made to our stockholders of record as of the close of business on September 23, 2016, who received one share of Donnelley Financial common stock and one share of LSC common stock for every eight shares of RR Donnelley common stock held as of the record date. As a result of the Distribution, Donnelley Financial and LSC are now independent public companies trading under the symbols “DFIN” and “LKSD”, respectively, on the New York Stock Exchange. Immediately following the Distribution and as of December 31, 2016, we held approximately 6.2 million shares of Donnelley Financial Solutions common stock and approximately 6.2 million shares of LSC common stock. These investments are accounted for as available-for-sale equity securities.

Beginning in the fourth quarter of 2016, the financial results of Donnelley Financial and LSC for periods prior to the Distribution have been reflected in our consolidated financial statements as discontinued operations. Sales from RR Donnelley to Donnelley Financial and LSC previously eliminated in consolidation have been recast and are now shown as external sales of RR Donnelley within the financial results of continuing operations. See Note 2, *Discontinued Operations*, to the Consolidated Financial Statements for additional information.

Business Acquisitions and Dispositions

On August 4, 2016, we acquired Precision Dialogue, a provider of email marketing, direct mail marketing and other services with operations in the United States.

On April 29, 2015, we sold our 50.1% interest in our Venezuelan operating entity.

On August 11, 2014, our subsidiary, RR Donnelley Argentina S.A. (“RRDA”), filed for bankruptcy liquidation in bankruptcy court in Argentina.

On January 31, 2014, we acquired Consolidated Graphics, Inc., a provider of digital and commercial printing, fulfillment services, print management and proprietary Internet-based technology solutions, with operations in North America, Europe and Asia.

For further information on the above acquisitions and dispositions, see Note 3, *Acquisitions and Dispositions*, to the Consolidated Financial Statements.

Competitive Environment

Our customers are in an evolving market. While the market is large and fragmented, there are tremendous changes occurring in how organizations need to create, manage, deliver and measure their communications. Key factors facing our customers include regulatory changes, sensitivity to economic conditions, raw material pricing volatility and USPS actions. However, technological changes, including the electronic distribution of documents and data, online distribution and hosting of media content, and advances in digital printing, print-on-demand and internet technologies, continue to impact the market for some of our products and services, such as statement printing and forms.

We work with our customers to create, manage, deliver and optimize their multi-channel communications strategies by providing innovative solutions to meet increasing customer demands in light of the large and evolving marketplace. One of our competitive strengths is that we offer a wide array of communications products and services, including print and content management, which provide differentiated solutions for our customers. We are also able to manage the storage and distribution of products for our customers by offering warehousing and inventory management solutions that allow customers to store printed materials and to efficiently ship them using our platform. Our logistics business offers our customers access to our proprietary technology that is designed to determine the most efficient and cost-effective method of shipping depending on our customers’ needs. We believe our breadth of offerings provides us with a distinct competitive advantage. We have and will continue to develop and expand our creative and design, content management, digital and print production, supply chain management and distribution services to address our customers’ evolving needs while supporting the strategic objective of becoming a leading global provider of integrated communication products and services.

The print and related services industry, in general, continues to have excess capacity and remains highly competitive and fragmented. According to the December 2015 IBISWorld industry report “Printing in the U.S.,” estimated total printing industry revenue was approximately \$85 billion in 2015, and the industry was comprised of approximately 49,000 establishments.

We believe that, across our range of products and services, competition is based primarily on quality and the ability to service the special needs of customers at a competitive price. Therefore, we believe we need to continue to differentiate our product and service offerings and aggressively manage our cost structure to remain competitive.

We also operate in a highly competitive and fragmented market for commercial freight transportation and third-party logistics services. Primary competitors to our services include other national non-asset based third-party logistics companies, as well as regional or niche freight brokerages, asset-based carriers offering brokerage and/or logistics services, wholesale intermodal transportation service providers and rail carriers. In addition, we may from time to time compete against carriers' internal sales forces or shippers' internal transportation departments.

We have made targeted acquisitions and investments, such as the acquisition of Consolidated Graphics, Inc., in our existing business to offer customers innovative services and solutions.

Seasonality

Advertising and consumer spending trends affect demand in several of the end-markets we serve. However, due to the breadth of our product and services offerings, we generally have not experienced significant seasonality in our businesses.

Raw Materials

The primary raw materials we use in our print businesses are paper and ink. We negotiate with leading suppliers to maximize our purchasing efficiencies. A substantial amount of the paper we use is supplied directly by customers. Variations in the cost and supply of certain paper grades and ink formulations used in the manufacturing process may affect the Company's consolidated financial results. Paper prices fluctuated during 2016, and volatility in the future is expected. Generally, customers directly absorb the impact of changing prices on customer-supplied paper. With respect to paper we purchased, we have historically passed most changes in price through to our customers. We believe contractual arrangements and industry practice will support our continued ability to pass on any future paper price increases, but there is no assurance that market conditions will continue to enable us to successfully do so. We believe that the paper supply is consolidating, and there may be shortfalls in the future in supplies necessary to meet the demands of the entire marketplace. Higher paper prices and tight paper supplies may have an impact on customers' demand for printed products. We resell waste paper and other print-related by-products. We also have undertaken various strategic initiatives to mitigate any foreseeable supply disruptions with respect to our ink requirements. We may be impacted by changes in prices for these by-products in the future.

We continue to monitor the impact of changes in the price of crude oil and other energy costs, which impact our ink suppliers, logistics operations and manufacturing costs. Crude oil and energy prices continue to be volatile. We believe our logistics operations will continue to be able to pass a substantial portion of any increases in fuel prices directly to our customers in order to offset the impact of related cost increases. Decreases in fuel prices are also passed on to customers which negatively impact sales. We generally cannot pass on to customers the impact of higher energy prices on our manufacturing costs. We cannot predict sudden changes in energy prices and the impact that possible future changes in energy prices might have upon either future operating costs or customer demand and the related impact either will have on our consolidated annual results of operations, financial position or cash flows.

Distribution

Our products are distributed to end-users through the U.S. or foreign postal services, through retail channels, electronically or by direct shipment to customer facilities. Through our logistics operations, we manage the distribution of most customer products we print in the U.S. and Canada to maximize efficiency and reduce costs for customers.

As a leading provider of print logistics and among the largest mailers of standard mail in the U.S., we work closely with our customers and the USPS to offer innovative products and mail preparation services to minimize postage costs. While we do not directly absorb the impact of higher postal rates on our customers' mailings, demand for products distributed through the U.S. or foreign postal services has been negatively impacted by increases in postal rates, as postal costs are a significant component of many customers' cost structures. Under the 2006 Postal Accountability and Enhancement Act ("PAEA"), it had been anticipated that postage for Market Dominant mail categories would increase annually by an amount equal to or slightly less than the Consumer Price Index (the "CPI"). On January 15, 2015, the USPS filed for a CPI rate increase of approximately 2.0%, which was approved by the Postal Regulatory Commission (the "PRC") on May 7, 2015, and became effective on May 31, 2015. On April 10, 2016, the USPS removed the exigent surcharge, which was approved in December 2013, resulting in a 4.3% decrease in postage rates for all significant mail categories. The USPS implemented a CPI postage increase on January 22, 2017 of approximately 1.0%. In addition, there is a pending bi-partisan legislative proposal that seeks to stabilize the financial condition of the USPS, which among other things calls for restoring a 2.15% increase (approximately half of the exigent surcharge) on market dominant mail categories. The USPS has temporarily suspended its previously announced plans to restructure its mail delivery network, including the closure of many post office facilities. Additionally, the Postal Regulatory Commission is undertaking a comprehensive review of the PAEA legislation after ten years to determine if it is having the desired effect. The study and their recommendations are due by the end of 2017. The impact of these actions cannot currently be estimated. Mail delivery services through the USPS accounted for approximately 37% of our logistics revenues during the fiscal year ended December 31, 2016.

Customers

We have more than 50,000 customers worldwide, including 97% of the Fortune 100, 94% of the Fortune 500 and 87% of the Fortune 1000. Our services enable the world's largest customers to create, manage and deliver comprehensive and cost-effective multi-channel communications around the world. In connection with the spinoff transactions, we entered into a number of agreements with LSC and Donnelley Financial (which we spun off effective October 1, 2016) with respect to our ongoing commercial relationships. For the year ended December 31, 2016, LSC and Donnelley Financial accounted for 9.4% of total net sales of our Strategic Services segment. For each of the years ended December 31, 2016, 2015 and 2014, no customer accounted for 10% or more of the Company's consolidated net sales.

Technology, Research and Development

We invest in technology, research and development as a key strategy for our business. We believe that investing in new technologies allows us to remain on the forefront of content management and data analytics, while also allowing us to support our customers' growing utilization of digital and print technologies. In addition, these technologies help expand our capabilities to provide additional services to customers as customers' needs evolve. We have a research facility in Grand Island, New York, that supports the development and implementation of new technologies to meet customer needs and improve operating efficiencies. We believe that proprietary technology is required where it will provide a competitive advantage or where the desired technology is not readily available in the marketplace, and as such, our proprietary technology portfolio contains an array of applications and technological capabilities which are developed to perform different functions, including digital ink jet printing. Our cost for research and development activities is not material to our consolidated annual results of operations, financial position or cash flows. In addition, while we consider our patent portfolio to be valuable, the Company does not believe that our business is dependent upon any single patent or group of patents. We actively monitor the registrations of our trademark and patent portfolio to ensure that our intellectual property is appropriately protected and maintained.

Cybersecurity

Our cybersecurity program is designed to meet the needs and expectations of our customers who entrust us with highly sensitive business information. Furthermore, our healthcare and insurance printing businesses are subject to industry-specific data regulations, including the Health Care Insurance Portability and Accountability Act of 1996, which could subject us and our customers to liability should sensitive customer or patient information be publicly disclosed. Our infrastructure and technology, expansive and highly trained global workforce and comprehensive security and compliance program make us qualified to safely process, store and protect customer information to ensure compliance with relevant regulations.

Our infrastructure and technology security capabilities are bolstered by our relationship with a leading data center services provider. Furthermore, our networks are monitored by intrusion detection services around the clock, and our systems and applications are routinely tested for vulnerabilities and are operated under a strict patch management program.

We employ a highly skilled IT workforce to implement our cybersecurity programs and to handle specific security responsibilities. As a result of annual mandatory security awareness training, our IT workforce is qualified to address security and compliance-related issues as they arise. Additionally, all of our IT employees are carefully screened, undergo a thorough background check and are bound by a nondisclosure agreement that details such employee's security and legal responsibilities with regards to information handling.

The Company believes our security and compliance team diminishes the risk of system compromise and data exposure by rapidly and effectively addressing security incidents as they arise.

Environmental Compliance

It is our policy to conduct our global operations in accordance with all applicable laws, regulations and other requirements. It is not possible to quantify with certainty the impact of potential failures regarding environmental matters, particularly remediation and other compliance efforts that the Company may undertake in the future. However, in management's opinion, compliance with the present environmental protection laws, before taking into account estimated recoveries from third parties, will not have a material adverse effect on the Company's consolidated annual results of operations, financial position or cash flows.

Employees

As of December 31, 2016, the Company had 44,360 employees.

As of December 31, 2016, 438 of our U.S. employees were covered by collective bargaining agreements at twelve of our U.S. facilities, representing 2.4% of our U.S. workforce. We have collective bargaining agreements with unionized employees in China,

Canada, Mexico and Europe. We have not experienced a work stoppage during the past five years. Management believes that our relationships with our employees and collective bargaining groups are good.

Available Information

We maintain an Internet website at www.rdonnelley.com where the Company's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports are available without charge, as soon as reasonably practicable following the time they are filed with, or furnished to, the Securities and Exchange Commission ("SEC"). Copies of the materials filed by the Company with the SEC are available at the Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Information regarding the operation of the Public Reference Room is available by calling the SEC at 1-800-SEC-0330. Reports, proxy and information statements and other information that is filed electronically with the SEC are available on the SEC's website at www.sec.gov.

The Principles of Corporate Governance of our Board of Directors, the charters of the Audit, Human Resources and Corporate Responsibility & Governance, Responsibility & Technology Committees of the Board of Directors and our Principles of Ethical Business Conduct are also available on the Investor Relations portion of www.rdonnelley.com, and will be provided, free of charge, to any stockholder who requests a copy. References to our website address do not constitute incorporation by reference of the information contained on the website, and the information contained on the website is not part of this document.

Forward-Looking Statements

This report and any documents incorporated by reference may include forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Statements, including financial disclosure, that are not historical fact are forward-looking statements within the meaning of such regulations as well as the Private Securities Litigation Reform Act of 1995. These statements are subject to risks and uncertainties and are based on the beliefs and assumptions of the Company. Generally, forward-looking statements include information concerning possible or assumed future actions, events, or results of operations of the Company. 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 the Company.

The following important factors, in addition to those discussed elsewhere in this Annual Report on Form 10-K, could affect the future results of the Company and could cause those results or other outcomes to differ materially from those expressed or implied in its forward-looking statements:

- adverse changes in global economic conditions and the resulting effect on the businesses of our customers;
- political and regulatory risks and uncertainty in the countries in which we operate or sell our products and services;
- loss of brand reputation and decreases in quality of customer support and service offerings;
- changes in consumer preferences or a failure to otherwise manage relationships with our significant customers;
- adverse credit market conditions and other issues that may affect the Company's ability to obtain future financing on favorable terms;
- the Company's ability to make payments on, reduce or extinguish any of its material indebtedness;
- changes in the availability or costs of key materials (such as ink, paper and fuel), increases in shipping costs or changes in prices received for the sale of by-products;
- the ability of the Company to improve operating efficiency rapidly enough to meet market conditions;
- successful negotiation, execution and integration of acquisitions;
- increased pricing pressure as a result of the competitive environment in which the Company operates;
- increasing health care and benefits costs for employees and retirees;
- changes in the Company's pension and other post-retirement obligations;
- catastrophic events which may damage the Company's facilities or otherwise disrupt the business;
- 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;
- the effect of changes in laws and regulations, including changes in accounting standards, trade, tax, environmental compliance (including the emission of greenhouse gases and other air pollution controls), health and welfare benefits (including the Patient Protection and Affordable Care Act, as modified by the Health Care and Education Reconciliation Act, and further healthcare reform initiatives), 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 the Company's customers, which may adversely impact demand for the Company's products and services;
- factors that affect customer demand, including changes in postal rates, postal regulations and service levels, changes in the capital markets, changes in advertising markets, customers' budgetary constraints and changes in customers' short-range and long-range plans;
- failures or errors in the Company's products and services;
- the ability by the Company and/or its vendors 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;
- changes in technology, including electronic substitution and migration of paper based documents to digital data formats, and the ability of the Company to adapt to these changes;
- the spinoff transactions achieving the intended results;
- the volatility of the price of the Company's common stock following completion of the spinoff;
- not realizing the benefits from the retained ownership interests in LSC and Donnelley Financial;
- increased costs resulting from a decrease in purchase power as a result of the spinoffs;
- inability to hire and retain employees;
- the spinoffs resulting in significant tax liability; and
- other risks and uncertainties detailed from time to time in the Company's 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 Annual Report on Form 10-K should consider these forward-looking statements only as the Company's current plans, estimates and beliefs. The Company does not undertake and specifically declines 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 Annual Report on Form 10-K to reflect any new events or any change in conditions or circumstances.

ITEM 1A. RISK FACTORS

Our consolidated results of operations, financial position and cash flows can be adversely affected by various risks. These risks include the principal factors listed below and the other matters set forth in this Annual Report on Form 10-K. You should carefully consider all of these risks.

Risks related to our business

Global market and economic conditions, as well as the effects of these conditions on customers' businesses, could adversely affect the Company.

In general, demand for our products and services is highly correlated with general economic conditions. Because a significant part of our business relies on our customers' advertising spending, which is driven in part by economic conditions and consumer spending, a prolonged downturn in the global economy and an uncertain economic outlook could further reduce the demand for printing and related services that we provide to these customers. Delays or reductions in customers' spending would have an adverse effect on demand for our products and services, which could be material, and consequently could negatively impact our results of operations, financial position and cash flow. Economic weakness and constrained advertising spending may result in decreased revenue, operating margin, earnings and growth rates and difficulty in managing inventory levels and collecting accounts receivable.

In addition, customer difficult ties could result in increases in bad debt write-offs and allowances for doubtful accounts receivable. We may experience operating margin declines as a result. Economic downturns may also result in restructuring actions and associated expenses and impairment of long-lived assets, including goodwill and other intangibles.

Uncertainty about future economic conditions makes it difficult for us to forecast operating results and to make decisions about future investments. Such declines in demand are difficult to predict and may result in the Company or the industry having increased excess capacity as a result. An increase in excess capacity may result in declines in prices for our products and services. The overall business climate may also be impacted by wars or acts of terrorism. Such acts may have sudden and unpredictable adverse impacts on demand for our products and services.

Our operations are subject to political and regulatory risks in the countries in which we operate.

Our operations could be substantially affected by both domestic and international economic, political or regulatory risk including: general economic and political conditions in the countries in which we operate; unexpected legal, regulatory or tax changes; governmental actions which have the effect of restriction on our business or opportunities or make it more expensive for us to operate in those jurisdictions; and changes in tax laws that could reduce net income due to withholding requirements or the imposition of tariffs or other restrictions.

In addition, potential political and economic uncertainty in our developed markets, including recent outcomes of the United Kingdom referendum to withdraw from the European Union and the U.S. presidential election, or the perception of such uncertainty, has had and may continue to have an adverse effect on global economic conditions and the stability of global financial markets. This may significantly reduce global market liquidity and restrict the ability of key market participants to operate in certain financial markets. Any of these factors could depress economic activity and restrict our access to capital, which could negatively impact our results of operations, financial position and cash flow. Our success will depend, in part, on our ability to effectively anticipate and manage these and other risks associated with our domestic and international operations.

Our business is dependent upon brand reputation and the quality of our customer support and services offerings. If we fail to offer effective customer support and services, our brand reputation would be harmed and customers may not use our solutions, resulting in a decline of our net sales.

A high level of customer support and service is critical for the successful marketing and sale of our solutions and the maintenance and enhancement of our brand reputation. If we are unable to provide a level of customer support and service to meet or exceed the expectations of our customers, we could experience a loss of customers and market share and a decline in our brand reputation which may result in reduced customer demand for our solutions. Furthermore, our brand reputation could be impacted by a wide range of factors, some of which are out of our control, including actions of our competitors and third party providers and positive or negative publicity.

During 2016, our five largest customers accounted for less than 10% of our net sales. In addition, we continue to provide products and services, including logistics, pre-media, production and sales services, to LSC and Donnelley Financial and their respective customers. There can be no assurance that our customers, including LSC and Donnelley Financial, will continue to purchase our products in the same mix or quantities or on the same terms as in the past. The loss of, or disruptions related to, significant customers could result in a material reduction in sales or change in the mix of products we sell to significant customers. This could materially and adversely affect our sales, financial condition and results of operations.

Additionally, disputes with significant suppliers, including those related to pricing or performance, could adversely affect our ability to supply products to our customers and could materially and adversely affect our product sales, financial condition and results of operations.

Changes in consumer preferences have reduced, and may continue to reduce, demand for our products in certain markets. In addition, failure to manage changes in our relationships with our significant customers will have an adverse effect on our results of operations.

Many of the end markets in which our customers compete are experiencing changes due to technological progress and changes in consumer preferences. In order to grow and remain competitive, we will need to continue to adapt to future changes in technology, enhance our existing offerings and introduce new offerings to address the changing demands of customers. If we are unable to continue to exploit new and existing technologies to distinguish our products and services from those of our competitors or adapt to new distribution methods, our business may be adversely affected.

Technological developments and changing demands of customers may require additional investment in new equipment and technologies. We must monitor changes in our customers' markets and develop new solutions to meet customers' needs. The development of such solutions may be costly and there is no assurance that these solutions will be accepted by customers. If we are unable to adapt to technological changes on a timely basis or at an acceptable cost, customers' demand for our products and services may be adversely affected.

In addition, electronic delivery of documents and data, including the online distribution and hosting of media content, offer alternatives to traditional delivery of printed documents. Consumers continue to accept electronic substitution in statement printing and forms while online and digital advertising is impacting customers' printed advertising spends. The extent to which consumers will continue to accept electronic delivery is uncertain and it is difficult to predict future rates of acceptance of these alternatives. Electronic delivery has negatively impacted our products, such as forms and statement printing. To the extent that consumers, customers and regulators continue to accept these alternatives, our products will be adversely affected.

Finally, there can be no assurance that our customers, including LSC and Donnelley Financial (both of which we spun off in October 2016 and who continue to be our customers), will continue to purchase our products in the same mix, quantities or on the same terms as in the past. The loss of or disruptions related to significant customers could result in a material reduction in sales or change in the mix of products we sell to our significant customers. This could materially and adversely affect our product sales, financial condition and results of operations.

Adverse credit market conditions, our operating performance and our creditworthiness may limit our ability to obtain future financing and the cost of any such capital may be higher than in past periods.

Uncertainty and volatility in global financial markets may cause financial institutions to fail, may cause lenders to reduce lending or may cause investors to reinvest in assets that are considered less risky. The failure of a financial institution that supports our existing credit agreement would reduce the size of its committed facility unless a replacement institution was added. Furthermore, we revised our existing financing structure to consummate the spinoff transactions, through refinancing and debt tender and exchange transactions. Any future capital markets transactions will be dependent on market conditions, which may result in receiving financing on terms less favorable to us than our existing financings.

In addition, our access to future financing will depend on a variety of factors such as the general availability of credit, our credit ratings and credit capacity at the time we pursue such financing. Our current corporate credit ratings are below investment grade and, as a result, our borrowing costs may further increase and our ability to borrow may be limited. Our obligations under our current \$800.0 million senior secured revolving credit facility (the "Credit Agreement") which expires September 30, 2021, are guaranteed by material and certain other domestic subsidiaries and are secured by a pledge of the equity interests of certain subsidiaries, including most of our domestic subsidiaries, and a security interest in substantially all of the domestic current assets and mortgages of certain domestic real property of the Company.

The Credit Agreement is subject to a number of covenants, including a maximum Leverage Ratio that, in part, restrict our ability to incur additional indebtedness, create liens, engage in mergers and consolidations, make restricted payments, dispose of certain assets and may also limit the use of proceeds. The Credit Agreement generally allows annual dividend payments of up to \$60.0 million in aggregate, though additional dividends may be allowed subject to certain conditions. If adequate capital is not available to us and our internal sources of liquidity prove to be insufficient, or if future financings require more restrictive covenants, such combination of events could adversely affect our ability to (i) acquire new businesses or enter new markets, (ii) service or refinance our existing debt, (iii) pay dividends on common stock, (iv) make necessary capital investments, and (v) make other expenditures necessary for the ongoing conduct of our business.

We may not be able to reduce or extinguish any of our material indebtedness, and as a result we would have increased financial leverage, which could adversely affect our business.

We may not be able to reduce or extinguish any of our material indebtedness. We have substantial indebtedness and if we are unable to reduce this indebtedness, we will continue to have increased financial leverage. Our interest and principal payments on our outstanding indebtedness have increased substantially in relation to our revenues and cash flows. In addition, our ability to make payments on, or repay or refinance, such debt, will depend largely upon our future operating performance.

The indentures governing the notes and debentures we issue do not contain restrictive covenants and we may incur substantially more debt or take other actions, including engaging in mergers and acquisitions, paying dividends and making other distributions to holders of equity securities, and disposing of certain assets, which may adversely affect our ability to satisfy our obligations under the notes and debentures issued under our indentures.

Although the Credit Agreement is subject to a number of negative and financial covenants, including a maximum leverage ratio, and covenants that restrict our ability to incur additional indebtedness, engage in mergers and acquisitions, pay dividends and make other distributions to the holders of our equity securities, and dispose of certain assets, the indentures governing our outstanding notes and debentures do not contain financial or operating covenants or restrictions on the incurrence of indebtedness, the payment of dividends or making other distributions, or the disposition of certain assets. In addition, the limited covenants applicable to the notes and debentures do not require us to achieve or maintain any minimum financial results relating to our financial position or results of operations.

In carrying out our strategy focused on maximizing long-term stockholder value, we may enter into transactions which may increase our financial leverage. Our ability to recapitalize, incur additional debt and take a number of other actions that are not limited by the terms of the indentures governing our notes and debentures could have the effect of diminishing our ability to make payments on those notes and debentures when due, and require us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, which would reduce the availability of cash flow to fund our operations, working capital and capital expenditures.

We may be adversely affected by a decline in the availability of raw materials or by fluctuations in the costs of paper, ink, energy and other raw materials.

We are dependent on the availability of paper, ink and other raw materials to support our operations. As such, purchases of paper, ink, energy and other raw materials represent a large portion of our costs. Increases in the costs of these inputs may increase our costs and we may not be able to pass these costs on to customers through higher prices. In addition, we may not be able to resell waste paper and other print-related by-products or may be adversely impacted by decreases in the prices for these by-products. Increases in the cost of materials may adversely impact customers' demand for our printing and related services. Unforeseen developments in these markets could result in a decrease in the supply of paper, ink or other raw materials and could cause a decline in our revenues.

We may be unable to improve our operating efficiency rapidly enough to meet market conditions.

Because the markets in which we compete are highly competitive, we must continue to improve our operating efficiency in order to maintain or improve our profitability. There is no assurance that we will be able to do so in the future. In addition, the need to reduce ongoing operating costs may result in significant up-front costs to reduce workforce, close or consolidate facilities, or upgrade equipment and technology.

We have in the past acquired, and intend in the future to acquire, other businesses, and we may be unable to successfully integrate the operations of these businesses and may not achieve the cost savings and increased net sales anticipated as a result of these acquisitions.

Achieving the anticipated benefits of acquisitions will depend in part upon our ability to integrate these businesses in an efficient and effective manner. The integration of companies that have previously operated independently may result in significant challenges, and we may be unable to accomplish the integration smoothly or successfully. In particular, the coordination of geographically dispersed organizations with differences in corporate cultures and management philosophies may increase the difficulties of integration. The integration of acquired businesses may also require the dedication of significant management resources, which may temporarily distract management's attention from our day-to-day operations. In addition, the process of integrating operations may cause an interruption of, or loss of momentum in, the activities of one or more of our businesses and the loss of our key personnel or the acquired businesses. Further, employee uncertainty and lack of focus during the integration process may disrupt our operations or the operations of the acquired businesses. Our strategy is, in part, predicated on our ability to realize cost savings and to increase net sales through the acquisition of businesses that add to the breadth and depth of our products and services. Achieving these cost savings and net sales increases is dependent upon a number of factors, many of which are beyond our control. In particular, we may not be able to realize the benefits of more comprehensive product and service offerings, anticipated integration of sales forces, asset rationalization and systems integration.

The highly competitive market for our products and industry consolidation may continue to create adverse price pressures.

The markets for the majority of our product categories are highly fragmented and we have a large number of competitors. Management believes that excess capacity in our markets has caused downward price pressure and that this trend is likely to continue. In addition, consolidation in the markets in which we compete may increase competitive price pressures due to competitors lowering prices.

We believe that selectively pursuing acquisitions is an important strategy for our business. If our competitors are able to successfully combine with one another or otherwise consolidate, the competitive landscape we face could be significantly altered. Such consolidation could create stronger competitors with greater financial resources and broader manufacturing and distribution capabilities than our own, and, if we are not successful with our own efforts to consolidate or adapt effectively to increased competition, the resulting increase in competitive pressures could negatively impact our results of operations, financial position and cash flow.

The trend of increasing costs to provide health care and other benefits to our employees and retirees may continue.

We provide health care and other benefits to both employees and retirees. For many years, costs for health care have increased more rapidly than general inflation in the U.S. economy. If this trend in health care costs continues, our cost to provide such benefits could increase, adversely impacting our profitability. Changes to health care regulations in the U.S. due to anticipated policy decisions of the new presidential administration may also increase our cost of providing such benefits.

Changes in market conditions or lower returns on assets may increase required pension and other postretirement benefits plan contributions in future periods.

The funded status of our pension and other postretirement benefits plans is dependent upon many factors, including returns on invested assets and the level of certain market interest rates. As experienced in prior years, declines in the market value of the securities held by the plans coupled with low interest rates have substantially reduced, and in the future could further reduce, the funded status of the plans. These reductions have increased the level of expected required pension and other postretirement benefits plan contributions in future years. Market conditions may lead to changes in the discount rates used to value the year-end benefit obligations of the plans, which could partially mitigate or worsen the effects of lower asset returns. If adverse market conditions were to continue for an extended period of time, our costs and required cash contributions associated with pension and other postretirement benefits plans may substantially increase in future periods.

Catastrophic events may damage or destroy our factories, distribution centers or other facilities, which may disrupt our business.

Natural disasters, conflicts, wars, terrorist attacks, fires or other catastrophic events could cause damage or disruption to our factories, distribution centers or other facilities, which may adversely affect our ability to manage logistics, cause delays in the delivery of products and services to our customers, and create inefficiencies in our supply chain. An event of this nature could also prevent us from maintaining ongoing operations and from performing critical business functions. While we maintain backup systems and operate out of multiple facilities to reduce the potentially adverse effect of these types of events, a catastrophic event that results in the destruction of any of our major factories, distribution centers or other facilities could affect our ability to conduct normal business operations, which could negatively impact our results of operations, financial position and cash flow.

We may be more vulnerable to adverse events and trends associated with operations outside the United States.

As a result of the spinoff transactions, our business is less diversified. In addition, we have significant operations outside the United States. Consequently, we may be more exposed to the risks inherent in conducting business outside the United States. Conducting business outside the United States subjects us to a number of additional risks and challenges, including:

- periodic changes in a specific country's or region's economic conditions, such as recession;
- compliance with a wide variety of domestic and foreign laws and regulations (including those of municipalities or provinces where we have operations) and unexpected changes in those laws and regulatory requirements, including uncertainties regarding taxes, social insurance contributions and other payroll taxes and fees to governmental entities, tariffs, quotas, export controls, export licenses and other trade barriers;
- unanticipated restrictions on our ability to sell to foreign customers where sales of products and the provision of services may require export licenses;
- certification requirements;
- fluctuations in foreign currency exchange rates, including those resulting from inflation, and currency devaluation activities;
- inadequate protection of intellectual property rights in some countries;
- potential political, legal and economic instability, foreign conflicts, and the impact of regional and global infectious illnesses in the countries in which we and our customers, suppliers and contract manufacturers are located;
- difficulties and costs of staffing and managing international operations across different geographic areas and cultures, including assuring compliance with the U.S. Foreign Corrupt Practices Act and other U. S. and foreign anticorruption laws; and;
- fluctuations in freight rates and transportation disruptions.

These factors, individually or in combination, could impair our ability to effectively deliver our products, result in unexpected and material expenses, or cause an unexpected decline in the demand for our products in certain countries or regions. Specifically with respect to our operations in China, our financial performance may be subject to the following risks, among others : regulation of foreign investment and business activities by the Chinese government, including recent scrutiny of foreign companies, may limit our ability to expand our business in China; uncertainties with respect to the legal system in China may limit the legal protections available to us in China; government restrictions on the remittance of currency out of China and the ability of any subsidiary we may establish in China to pay dividends and make other distributions to us; and potential unfavorable tax consequences as a result of our operations in China. Our failure to manage the risks and challenges associated with our international business and operations could have a material adverse effect on the Company's consolidated results of operations, financial position and cash flows.

We are exposed to significant risks related to potential adverse changes in currency exchange rates.

We are exposed to market risks resulting from changes in the currency exchange rates of the currencies in the countries in which we do business. Although operating in local currencies may limit the impact of currency rate fluctuations on the operating results of our non-U.S. subsidiaries, fluctuations in such rates may affect the translation of these results into our consolidated financial statements. To the extent borrowings, sales, purchases, revenues and expenses or other transactions are not in the applicable local currency, we may enter into foreign currency spot and forward contracts to hedge the currency risk. We cannot be sure, however, that our efforts at hedging will be successful, and such efforts could, in certain circumstances, lead to losses that are material to our consolidated results of operations, financial position and cash flows.

A decline in expected profitability of the Company or individual reporting units of the Company could result in the impairment of assets, including goodwill, other long-lived assets and deferred tax assets.

We hold material amounts of goodwill, other long-lived assets and deferred tax assets on our balance sheet. A decline in expected profitability, particularly if there is a decline in the global economy, could call into question the recoverability of our related goodwill, other long-lived tangible and intangible assets or deferred tax assets and require the write down or write off these assets or, in the case of deferred tax assets, recognition of a valuation allowance through a charge to income. Such an occurrence has had and could continue to have a material adverse effect on our consolidated results of operations, financial position and cash flows.

Changes in the rules and regulations to which we are subject may increase our costs.

We are subject to numerous rules and regulations, including, but not limited to, product safety, environmental and health and welfare benefit regulations. These rules and regulations may be changed by local, state or federal governments in countries in which we operate. Changes in these regulations may result in a significant increase in our costs to comply. Compliance with changes in rules and regulations could require increases to our workforce, increased cost for compensation and benefits, or investments in new or upgraded equipment. In addition, growing concerns about climate change, including the impact of global warming, may result in new regulations with respect to greenhouse gas emissions (including carbon dioxide) and/or “cap and trade” legislation. Compliance with new rules and regulations or changes in existing rules and regulations could result in additional costs.

Changes in the rules and regulations to which customers are subject may impact demand for our products and services.

Many of our customers are subject to rules and regulations requiring certain printed or electronic communications, governing the form of such communications and protecting the privacy of consumers. For instance, our healthcare and insurance printing businesses are subject to such regulations. Changes in these regulations may impact customers’ business practices and could reduce demand for our products and services. Changes in such regulations could eliminate the need for certain types of communications altogether or such changes may impact the quantity or format of such communications.

Changes in postal rates, regulations and delivery structure may adversely impact demand for our products and services.

Postal costs are a significant component of many of our customers’ cost structure and postal rate changes can influence the number of pieces and types of mailings that our customers mail. On December 24, 2013, the Postal Regulatory Commission (the “PRC”) approved the USPS Board of Governors’ request for an exigent price increase of 4.3%. This exigent rate increase was implemented in addition to a 1.7% rate increase, equal to the CPI, for total price increases of 6.0%, on average, across all mail categories, effective January 26, 2014. On January 15, 2015, the USPS filed for a CPI rate increase of approximately 2.0%, which was approved by the PRC on May 7, 2015, and became effective May 31, 2015. The USPS eliminated the 4.3% exigent rate increase in April 2016. The USPS implemented a CPI postage increase on January 22, 2017 of approximately 1.0%. In addition, the USPS has incurred significant financial losses in recent years and may, as a result, implement significant changes to the breadth or frequency of its mail delivery. The USPS has temporarily suspended its previously announced plans to restructure its mail delivery network, including the closure of many post office facilities. The impact of the USPS’s restructuring plans, many of which require legislative action, cannot currently be estimated. If implemented, such changes could impact our customers’ ability or willingness to communicate by mail. Declines in print volumes mailed would have an adverse effect on our business.

We rely on independent shipping companies to deliver the products we create for our customers, and as part of our logistics business for our customers, changes in our relationships with these companies or an increase in shipping costs could have an adverse impact on our business and results of operations.

We rely upon third party carriers, including FedEx and UPS, for timely delivery of our product shipments. As a result, we are subject to carrier disruptions and increased costs due to factors that are beyond our control, including employee strikes, inclement weather and increased fuel costs. Any failure to deliver products to our customers in a timely and accurate manner may damage our reputation and brand and could cause us to lose customers. If our relationship with any of these third party carriers is terminated or impaired, or if any of these third parties are unable to ship products for us, we would be required to use alternative, and possibly more expensive, carriers for the shipment of products to our customers. We may be unable to engage alternative carriers on a timely basis or

on terms favorable to us, if at all, which could have a material adverse effect on our business, financial condition and results of operations.

Furthermore, shipping costs represent a significant operational expense for us. Changes in shipping terms, or the inability of these third party shippers to perform effectively (whether as a result of mechanical failure, casualty loss, labor stoppage, or any other reason), could have an adverse effect on our business, financial condition and results of operations. Additionally, deterioration of the financial condition of our carriers could have an adverse impact on our shipping costs. Any future increases in shipping rates could have a material adverse effect on our business, financial condition and results of operations, particularly if we are unable to pass on these higher costs to our customers.

Undetected errors or failures found in our products and services may result in loss of or delay in market acceptance of our products and services that could seriously harm our business.

Our products and services may contain undetected errors or scalability limitations at any point, but particularly when first introduced or as new versions are released. We frequently release new versions of our products and different aspects of our platform are in various stages of development. Despite testing by us and by current and potential customers, errors may not be found in new products and services until after commencement of commercial availability or use, resulting in a loss of or a delay in market acceptance, damage to our reputation, customer dissatisfaction and reductions in net sales and margins, any of which could negatively impact our business.

Our services depend on the reliability of computer systems we and our vendors maintain and the ability to implement and maintain information technology and security measures to protect against security breaches and data leakage. Our failure to maintain the integrity of these systems could compromise the confidentiality of certain information provided to us by our customers and affect our ability to retain customers and attract new business.

We depend on our information technology and data processing systems to operate our business, and a significant malfunction or disruption in the operation of our systems, or a security breach or a data leak that compromises the confidential and sensitive information stored in those systems, could disrupt our business and adversely impact our ability to compete. These systems include systems that we own and operate, as well as those systems of our vendors. Such systems are susceptible to malfunctions and interruptions due to equipment damage and power outages and are also susceptible to cybercrime, or threats of intentional disruption, which are increasing in terms of sophistication and frequency.

Maintaining the confidentiality, integrity and availability of our systems, software and solutions is an issue of critical importance for us and for our customers and users who rely on us to protect the confidentiality of certain information they provide us. Many of our customers' industries are highly regulated and have established standards and requirements for safeguarding the confidentiality, integrity and availability of information relating to their businesses and customers. Disclosure of the information maintained on our systems due to human error, breach of our systems through hacking or cybercrime, a leak of confidential information due to employee misconduct or otherwise could materially damage our reputation, subject us to regulatory risks and cause significant reputational harm for our customers, all of which could have a material adverse effect on our business, financial condition and results of operations.

The spinoffs may not achieve the intended results.

Our operational and financial profile changed upon the separation of LSC and Donnelley Financial from the Company's other businesses. As a result, our diversification of revenue sources diminished, and our results of operations, cash flows, working capital and financing requirements may be subject to increased volatility and greater risk as a result of the concentration of our business in the multichannel communications management industry. Further, shares of our common stock represent an investment in a smaller company. These changes may not meet some stockholders' investment strategies, which could cause investors to sell their shares of our common stock. Excessive selling could cause the relative market price of our common stock to decrease.

Further, the anticipated benefits of the spinoff transactions were based on a number of assumptions, some of which may prove incorrect. Any such incorrect assumptions could adversely affect our business, results of operations or financial condition.

While we believe that the spinoff transactions will result in a number of benefits to us, including, among others, enabling management to better focus on our multichannel integrated communications business, if we fail to achieve some or all of the expected benefits of the transaction, or if those benefits are delayed, our business, results of operations and financial condition could be adversely affected and the value of our stock could be adversely impacted

The price of our common stock may fluctuate significantly with the completion of the spinoffs.

We cannot predict the prices at which our common stock may trade now that the spinoffs are complete or the effect of the spinoffs on the trading prices of our common stock. Similarly, certain stockholders may experience a decrease in the aggregate value of their stock based on share price volatility of all three resulting companies post spin.

We may not realize the benefits from our retained ownership interests in LSC and Donnelley Financial.

As part of the spinoff transactions, we distributed approximately 80.75% of the outstanding shares of common stock of each LSC and Donnelley Financial to our stockholders. After giving effect to these distributions, we retained approximately 19.25% of the outstanding shares of common stock of each of LSC and Donnelley Financial. In connection with the spinoff transactions, we entered into a stockholder and registration rights agreement with each of LSC and Donnelley Financial governing our ownership and potential disposition of the shares of common stock retained in each company. We expect to dispose of any shares of common stock of LSC and Donnelley Financial that we retained within the 12-month period following the initial distribution of shares of common stock of LSC and Donnelley Financial to our stockholders.

As with any investment in a publicly traded company, our retained ownership in each company is subject to risks and uncertainties relating to the businesses of LSC and Donnelley Financial and risks and uncertainties relating to fluctuations in public equity markets generally. In addition, under the stockholders' and registration rights agreement, we gave a proxy to each company to vote all of our retained shares of common stock in proportion to the votes cast by LSC's and Donnelley Financial's other stockholders. Consequently, we do not retain any influence over the management and affairs of each of LSC and Donnelley Financial.

Pursuant to the stockholders' and registration rights agreement with each company, we may, at our option, dispose of shares of common stock of either company to investment banks in exchange for our outstanding public debt. Any disposition of shares of common stock of LSC or Donnelley Financial held by the Company in the public market, or the perception that such dispositions could occur, could adversely affect prevailing market prices for LSC common stock and Donnelley Financial common stock and thereby adversely affect the value of our retained ownership interests or adversely affect the terms and conditions of such disposition.

Post-spin, we are a smaller company and may experience increased costs resulting from a decrease in purchasing power.

Prior to the completion of the spinoff transactions, we had been able to take advantage of our size and purchasing power in sourcing products and services from third-party vendors. Since the spinoff transactions are complete, we are a smaller company and may not have the same purchasing power that we had before the completion of the spinoff transactions. Although we are seeking to expand our direct purchasing relationships with many of our most important third-party vendors, we may be unable to obtain products and services at prices and on terms as favorable as those available to us prior to completion of the spinoff transactions, which could negatively impact our results of operations, financial positions and cash flow.

We may be unable to hire and retain talented employees, including management, which may be exacerbated by the spinoff transactions.

Our success depends, in part, on our general ability to attract, develop, motivate and retain highly skilled employees. The loss of a significant number of our employees or the inability to attract, hire, develop, train and retain skilled personnel could have a serious negative effect on the Company. Various locations may encounter competition with other manufacturers for skilled labor. Many of these competitors may be able to offer significantly greater compensation and benefits or more attractive lifestyle choices than we offer. In addition, many members of our management team have significant industry experience that is valuable to our competitors. We enter into non-solicitation and, as appropriate, non-competition agreements with certain of our executive officers, prohibiting them contractually from soliciting our customers and employees and from leaving and joining a competitor within a specified period.

Furthermore, as a result of the spinoff transactions, certain members of our senior management team prior to the spinoff, resigned from their roles with the Company to assume positions with either LSC or Donnelley Financial. The loss of members of our senior management team and other key employees due to the spinoff transactions may result in transitional challenges or temporary difficulty in managing our business properly, which could harm business prospects and our consolidated results of operations, financial position and cash flows.

The spinoff transactions could result in significant tax liability.

We obtained an opinion from our outside legal counsel substantially to the effect that, among other things, the distributions in connection with the spinoff transactions qualify as tax-free distributions under the U.S. Internal Revenue Code of 1986, as amended (the "Code"). The opinion will not be binding on the IRS or the courts. Additionally, we have received a private letter ruling from the IRS concluding that certain limited aspects of the distributions will not prevent the distributions from satisfying certain requirements for tax-free treatment under the Code. The opinion and the private letter ruling rely on customary factual representations and assumptions, which if incorrect or inaccurate may jeopardize the ability to rely on such opinion and letter ruling.

If either or both of the distributions do not qualify for tax-free treatment for U.S. federal income tax purposes, then, in general, we would be subject to tax as if we had sold the common stock of such spun-off entity in a taxable sale for its fair value. In that case, we expect that RR Donnelley stockholders would be subject to tax as if they had received a distribution equal to the fair value of the spun-off entity's common stock that was distributed to them, which generally would be treated first as a taxable dividend to the extent of our earnings and profits, then as a non-taxable return of capital to the extent of each holder's tax basis in its Company common stock, and thereafter as capital gain with respect to any remaining value. We expect that the amount of any such taxes to RR Donnelley stockholders and us would be substantial if this were to occur.

ITEM 1B. UNRESOLVED STAFF COMMENTS

We have no unresolved written comments from the SEC staff regarding our periodic or current reports under the Securities Exchange Act of 1934.

ITEM 2. PROPERTIES

The Company's corporate office is located in leased office space in Chicago, Illinois. As of December 31, 2016, the Company leased or owned 250 U.S. facilities, some of which had multiple buildings and warehouses, and these U.S. facilities encompassed approximately 18.2 million square feet. The Company leased or owned 96 international facilities, some of which had multiple buildings and warehouses, encompassing approximately 7.3 million square feet in Canada, Latin America, Europe and Asia. Of the Company's U.S. and international facilities, approximately 10.0 million square feet of space was owned, while the remaining 15.5 million square feet of space was leased.

ITEM 3. LEGAL PROCEEDINGS

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

For a discussion of certain litigation involving the Company, see Note 11, *Commitments and Contingencies*, to the Consolidated Financial Statements.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

EXECUTIVE OFFICERS OF R.R. DONNELLEY & SONS COMPANY (As of February 1, 2017)

Name and Positions with the Company	Age	Business Experience
Daniel L. Knotts President and Chief Executive Officer	52	Since October 2016, Mr. Knotts has served as the Chief Executive Officer of RR Donnelley Company and a member of our board of directors. Prior to that, Mr. Knotts was the Company's Chief Operating Officer since 2013. He served as Group President from 2008 until 2012 and, from 2007 until 2008, he served as Chief Operating Officer of the Global Print Solutions business. From 1986 until 2007, Mr. Knotts held positions of increasing responsibility within finance, operations, sales management and business unit leadership at various locations in the United States including serving as Senior Vice President of Operations for the Magazine Business, President of the Specialized Publishing Services business and President of the Magazine, Catalog and Retail businesses.
Thomas M. Carroll III Executive Vice President and Chief Administrative Officer	51	Since October 2016, Mr. Carroll has been the Executive Vice President and Chief Administrative Officer of RR Donnelley. Since 2007, Mr. Carroll has served as our Executive Vice President and Chief Human Resources Officer. In addition, he served as executive lead on the project management of the spinoff transactions. From 1995 until 2007, Mr. Carroll served in various capacities in management and human resources at the Company.
Jeffrey G. Gorski Senior Vice President, Controller and Chief Accounting Officer	42	Since October 2016, Mr. Gorski has served as RR Donnelley's Senior Vice President, Chief Accounting Officer, and Corporate Controller since January 2013. Prior to this, served as Vice President, Finance from 2011 to 2013. Prior to this, served as Vice President, Assistant Controller from 2007 to 2011. Prior to this, from 2005 until 2007, served in various capacities with RR Donnelley in accounting and operational finance.
John Pecaric Executive Vice President, Chief Commercial Officer and President of International	51	Since October 2016, Mr. Pecaric has been the Executive Vice President of Global Markets for RR Donnelley. Prior to this, Mr. Pecaric served as Group President – International where he led RR Donnelley's businesses outside the United States since 2014. From 2012 until 2014, Mr. Pecaric was Senior Vice President of Canada, Latin America, Book and Office Products. Prior to that, Mr. Pecaric held various sales, marketing, business development and operations positions dating back to 1985, other than between 2002 through 2004 when he briefly left RR Donnelley.
Terry D. Peterson Executive Vice President and Chief Financial Officer	52	Since October 2016, Mr. Peterson has served as RR Donnelley's Executive Vice President and Chief Financial Officer. Prior to joining RR Donnelley, Mr. Peterson served as Senior Vice President and Chief Financial Officer of Deluxe Corporation from 2009 to 2016. Prior to that, Mr. Peterson served in various capacities at Deluxe Corporation including Vice President, Investor Relations and Chief Accounting Officer from 2006 to 2009, the Controller and Chief Accounting Officer from 2005 to 2006 and the Director of Internal Audit from 2004 to 2005.
Deborah L. Steiner Executive Vice President, Secretary and Chief Compliance Officer	49	Since October 2016, Ms. Steiner has been the Executive Vice President and General Counsel of RR Donnelley. Prior to this, Ms. Steiner was the Company's Vice President, Associate General Counsel since April 2012. From 2005 until 2012 when she joined RR Donnelley, Ms. Steiner was Counsel at Latham & Watkins LLP. From 2003 to 2005, Ms. Steiner served as the First Deputy Inspector General and Chief Operating Officer in the Inspector General's Office for the Illinois Governor and, from 1999 to 2003, as an Assistant United States Attorney for the Northern District of Illinois.

PART II

ITEM 5. MARKET FOR R.R. DONNELLEY & SONS COMPANY'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Effective August 22, 2016, RR Donnelley's common stock is listed and traded on the New York Stock Exchange (NYSE). Prior to that date, the Company's stock was listed and traded on the NASDAQ Stock Market.

As of February 23, 2017, there were 3,982 stockholders of record of the Company's common stock. Quarterly closing prices of the Company's common stock, as reported on the NYSE and the NASDAQ, and dividends paid per share during the years ended December 31, 2016 and 2015, are contained in the chart below:

	Dividends Paid (1)(2)		Closing Common Stock Prices (3)			
			2016		2015	
	2016	2015	High	Low	High	Low
First Quarter	\$ 0.78	\$ 0.78	\$ 27.68	\$ 20.46	\$ 32.59	\$ 25.92
Second Quarter	0.78	0.78	29.47	25.44	33.32	28.85
Third Quarter	0.78	0.78	31.14	25.81	29.80	23.69
Fourth Quarter	0.14	0.78	23.81	15.70	28.51	23.84

- (1) Dividends paid per share amounts occurring prior to October 1, 2016 have been adjusted to reflect the Company's 1-for-3 reverse stock split. See Note 1, *Basis of Presentation and Summary of Significant Accounting Policies*, to the Consolidated Financial Statements.
- (2) Dividends paid does not reflect the value of dividends in-kind attributable to the distribution of shares of Donnelley Financial and LSC to the Company's stockholders in connection with the Separation.
- (3) All stock prices for periods preceding October 1, 2016 have been adjusted to reflect the spinoff transactions as well as the Company's 1-for-3 reverse stock split.

The Credit Agreement generally allows annual dividend payments of up to \$60.0 million in aggregate, though additional dividends may be allowed subject to certain conditions. For more detail refer to the Credit Agreement and its amendments filed as exhibits to this Annual Report on Form 10-K.

ISSUER PURCHASES OF EQUITY SECURITIES

There were no repurchases of equity securities during the three months ended December 31, 2016.

EQUITY COMPENSATION PLANS

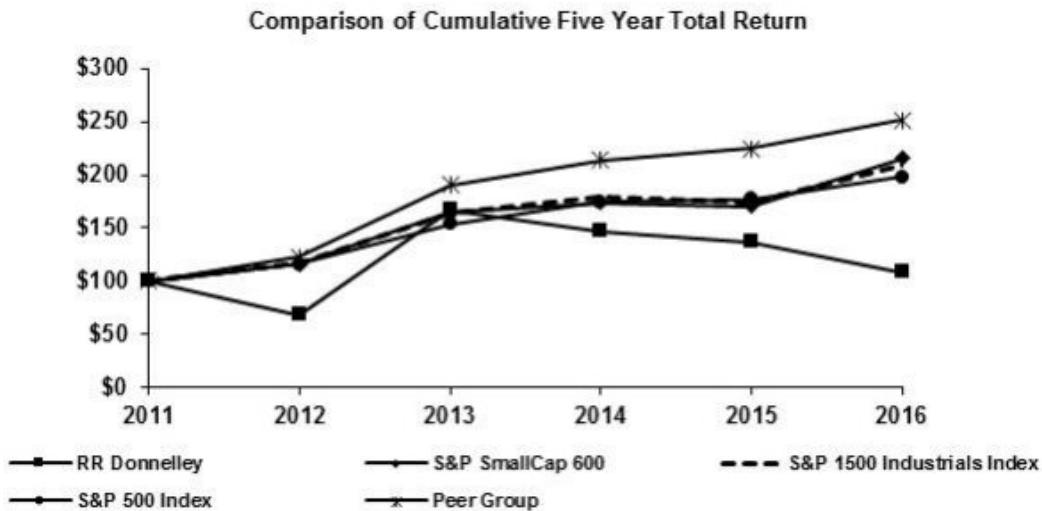
For information regarding equity compensation plans, see Item 12 of Part III of this Annual Report on Form 10-K.

PEER PERFORMANCE TABLE

The graph below compares five-year returns of the Company's common stock with those of the S&P SmallCap 600 and the S&P 1500 Industrials Index. The comparison assumes all dividends have been reinvested, and an initial investment of \$100 on December 31, 2011. The returns of each company in the peer group have been weighted to reflect their market capitalizations. The Company's performance through September 30, 2016 has been adjusted for the spinoffs of LSC and Donnelley Financial which occurred on October 1, 2016 and are reflected in the table below as a dividend. Additionally, the Company's performance has been adjusted for the 1-for-3 reverse stock split for the Company's stock which also occurred on October 1, 2016.

Following the spin-offs of LSC and Donnelley Financial, the Company is a member of the S&P SmallCap 600 which will replace the S&P 500 in this comparison going forward. Further, the Company, with its diverse set of services and customers, believes the S&P 1500 Industrials Index is a more appropriate comparison and will replace the peer group historically used. The peer group used in the performance graph combines two industry groups identified by Value Line Publishing, Inc., the publishing group (including printing companies) and the newspaper group. The Company itself has been excluded, and its contributions to the indices cited have been subtracted out. Changes in the peer group from year to year result from companies being added to or deleted from the Value Line publishing group or newspaper group.

Comparison of Five-Year Cumulative Total Return Among RR Donnelley, S&P 500 Index, S&P SmallCap 600, S&P 1500 Industrials Index and Peer Group*



Company Name/Index	Base Period	Fiscal Years Ended December 31,				
	2011	2012	2013	2014	2015	2016
RR Donnelley	100	68.43	166.93	146.91	136.56	108.42
S&P 500 Index	100	116.00	153.57	174.60	177.01	198.18
S&P SmallCap 600	100	116.33	164.38	173.84	170.41	215.67
S&P 1500 Industrials Index	100	116.46	164.43	178.37	173.53	208.94
Peer Group	100	122.83	190.25	213.82	224.78	251.37

The following are the specific companies included in the peer group:

A.H. Belo Corp.	S&P Global (b)
American Greetings (a)	Media General Inc.
Deluxe Corp.	Meredith Corp.
Scripps (E.W.) Co.	New York Times Co.
Gannett Co.	Scholastic Corp.
Graham Holdings Co.	John Wiley & Sons Co.
Journal Communications Inc. (c)	

- (a) American Greetings was included through August 9, 2013, when American Greetings went private.
- (b) Name change from the McGraw-Hill Companies.
- (c) Journal Communications Inc. was included through March 31, 2015 when it was acquired by E.W. Scripps

ITEM 6. SELECTED FINANCIAL DATA
SELECTED FINANCIAL DATA
(in millions, except per share data)

	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
Continuing Operations (1)					
Net sales	\$ 6,895.7	\$ 6,937.3	\$ 7,172.7	\$ 6,156.3	\$ 5,792.7
Net (loss) earnings from continuing operations	(484.9)	(31.7)	(40.3)	169.8	(115.5)
Net (loss) earnings attributable to RR Donnelley common stockholders per diluted share (2)	(6.95)	(0.28)	(0.66)	2.78	(1.92)
Financial Position and Other Data					
Total assets (3)	4,284.7	7,279.3	7,608.8	7,205.1	7,240.4
Long-term debt (3)	2,379.2	3,188.3	3,398.6	3,553.9	3,397.9
Cash dividends per common share (2)	2.48	3.12	3.12	3.12	3.12

(1) Includes the following significant items:

	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
Restructuring, impairment and other charges - net	\$ 584.3	\$ 62.7	\$ 72.3	\$ 46.3	\$ 162.4
Acquisition-related expenses	2.7	0.5	7.0	4.8	0.8
Spinoff-related transaction expenses	8.0	—	—	—	—
Gain from the sale of certain of the Company's affordable housing investments	(0.1)	(3.9)	—	—	—
Pension settlement charges	21.1	—	—	—	—
OPEB curtailment gain	(19.5)	—	—	—	—
Net (gain) loss on disposals of businesses	(11.9)	—	(10.4)	17.9	—
Loss on Venezuela currency remeasurement	—	30.3	18.4	3.2	—
Loss primarily related to the disposal of the Venezuelan operating entity	—	15.7	—	—	—
Loss from the impairment of the Company's investment in the Brazilian operations of Courier	—	2.8	—	—	—
Loss from the impairment of an equity investment	1.4	1.3	1.3	3.0	0.1
Loss on debt extinguishment	—	—	77.1	81.9	16.1
Loss on bankruptcy liquidation of RRDA	—	—	16.4	—	—
Purchase accounting inventory adjustments	—	—	12.1	—	—
Total charges before taxes	\$ 586.0	\$ 109.4	\$ 194.2	\$ 157.1	\$ 179.4
Total after-tax impact of the above charges, excluding the impact of noncontrolling interests	534.9	87.9	138.3	106.5	122.2
Tax benefit related to the decline in value of an entity within the Strategic Services segment	—	—	(15.2)	—	—
Tax benefit for previously unrecognized tax benefits related to the resolution of certain US federal uncertain tax positions	—	—	—	(7.2)	(26.1)
Valuation allowance provision on certain deferred tax assets in Latin America	—	—	—	—	32.7
Deferred income tax benefit related to investment in LSC	(0.4)	—	—	—	—
Tax benefit related to the decline in value and reorganization of certain entities within the International segment	—	—	—	—	(22.4)
Tax provision related to certain foreign earnings no longer considered to be permanently reinvested	—	—	—	—	11.0
Total charges, net of taxes	\$ 534.5	\$ 87.9	\$ 123.1	\$ 99.3	\$ 117.4

(2) Earnings per share amounts and dividends paid per share amounts occurring prior to October 1, 2016 have been adjusted to reflect the Company's 1-for-3 reverse stock split. See Note 1, *Basis of Presentation and Summary of Significant Accounting Policies*, to the Consolidated Financial Statements.

(3) Includes Donnelley Financial and LSC data for periods prior to the October 1, 2016 Distribution. Refer to Note 2, *Discontinued Operations*, to the Consolidated Financial Statements for information on the divested net assets and long-term debt.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of RR Donnelley's financial condition and results of operations should be read together with the consolidated financial statements and notes to those statements included in Item 15 of Part IV of this Annual Report on Form 10-K.

On October 1, 2016, the Company successfully completed the spinoff transactions of LSC and Donnelley Financial into two independent public companies as described in more detail in Item 1, *Business – Spinoff Transactions*, of Part I of this Annual Report on Form 10-K. The financial results of Donnelley Financial and LSC for periods prior to the Distribution have been reflected within the disclosures of this *Management's Discussion and Analysis of Financial Condition and Results of Operations* as discontinued operations. Additionally, sales from RR Donnelley to Donnelley Financial and LSC previously eliminated in consolidation have been recast and are now shown as external sales of RR Donnelley within the financial results of continuing operations. See Note 2, *Discontinued Operations*, to the Consolidated Financial Statements for additional information.

Business

For a description of the Company's business, segments and product and service offerings, see Item 1, *Business*, of Part I of this Annual Report on Form 10-K.

The Company separately reports its net sales, related costs of sales and gross profit for its product and service offerings. The Company's product offerings primarily consist of commercial and digital print, statement printing, direct mail, labels, packaging, forms, magazines, catalogs, retail inserts, books, manuals and other related products procured through the Company's print management offering. The Company's service offerings primarily consist of logistics, certain business outsourcing services and digital and creative solutions.

Executive Overview

2016 OVERVIEW

Net sales decreased by \$41.6 million, or 0.6%, in 2016 compared to 2015 including a \$71.3 million, or 1.0%, decrease due to changes in foreign exchange rates. After including the impact of changes in foreign exchange rates, the increases in net sales was driven by higher volume in the Strategic Services segment partially offset by volume declines and price pressures in the Variable Print and International segments.

The Company continues to take actions across all platforms to reduce its cost structure and enhance productivity. During the year ended December 31, 2016, the Company realized cost savings from restructuring activities, including the reorganization of administrative and support functions across all segments as well as continuing facility consolidations and reorganizations across platforms.

Net cash provided by operating activities for the year ended December 31, 2016 was \$125.2 million as compared to \$652.0 million for the year ended December 31, 2015. The decrease reflected the spinoff of LSC and Donnelley Financial, spinoff transaction costs and legal expenses, partially offset by lower incentive compensation and tax payments and lower pension and other postretirement benefit plan contributions.

Immediately following the Distribution on October 1, 2016, the Company effected a one-for-three reverse stock split for RR Donnelley common stock (the “Reverse Stock Split”). The Reverse Stock Split was approved by the Company’s Board of Directors on September 14, 2016 and previously approved by the Company’s stockholders at the annual meeting on May 19, 2016 . All references in these consolidated financial statements to the number of shares of common stock and per share amounts have been retroactively adjusted to give effect to the Reverse Stock Split.

2016 Financial Performance – Continuing Operations

The changes in the Company’s income (loss) from operations, operating margin, net loss attributable to RR Donnelley common stockholders and net loss attributable to RR Donnelley common stockholders per diluted share for the year ended December 31, 2016, from the year ended December 31, 2015, were due to the following:

	Income (loss) from Operations	Operating Margin	Net Loss From Continuing Operations Attributable to RR Donnelley Common Stockholders	Net Loss Attributable to RR Donnelley Stockholders Per Diluted Share
	(in millions, except margin and per share data)			
For the year ended December 31, 2015	\$ 237.3	3.4%	\$ (31.7)	\$ (0.28)
2016 restructuring, impairment and other charges - net	(584.3)	(8.5%)	(538.1)	(7.68)
2015 restructuring, impairment and other charges - net	62.7	0.9%	50.5	0.74
Spinoff-related transaction expenses	(8.0)	(0.1%)	(4.9)	(0.07)
Acquisition-related expenses	(2.2)	—%	(1.4)	(0.02)
Pension settlement charges	(21.1)	(0.3%)	(12.9)	(0.18)
OPEB curtailment gain	19.5	0.3%	12.0	0.17
Net gain/loss on disposals of businesses	11.9	0.2%	27.8	0.40
Venezuela currency remeasurement	—	—%	17.0	0.25
Net loss on investments	—	—%	0.4	0.01
Income tax adjustment	—	—%	0.4	0.01
Operations	(16.4)	(0.3%)	(4.0)	(0.30)
For the year ended December 31, 2016	<u>\$ (300.6)</u>	<u>(4.4%)</u>	<u>\$ (484.9)</u>	<u>\$ (6.95)</u>

2016 restructuring, impairment and other charges - net: included pre-tax charges of \$527.8 million for the impairment of goodwill in the commercial and digital print and statement printing reporting units within the Variable Print segment; \$29.7 million related to the impairment of intangible assets in the commercial and digital print reporting unit within the Variable Print segment; \$21.9 million for employee termination costs; \$2.3 million of other charges; \$3.5 million of lease termination and other restructuring costs; and \$0.9 million net gain on the disposal of previously impaired other long-lived assets. See Note 4, *Restructuring, Impairment and Other Charges*, to the Consolidated Financial Statements for further discussion.

2015 restructuring, impairment and other charges - net: included pre-tax charges of \$22.4 million for employee termination costs; \$18.0 million for the impairment of goodwill in the former Europe and Latin America reporting units, respectively, within the International segment; \$9.2 million of lease termination and other restructuring costs; \$11.9 million for the impairment of intangible assets, substantially all related to acquired customer relationship intangible assets; \$2.2 million of other charges related to multi-employer pension plan withdrawal obligations; and \$1.0 million net gain on disposal of previously impaired other long-lived assets, primarily for buildings and machinery and equipment associated with facility closures. See Note 4, *Restructuring, Impairment and Other Charges*, to the Consolidated Financial Statements for further discussion.

Spinoff-related transaction expenses: included pre-tax charges of \$8.0 million (\$4.9 million after-tax) related to consulting and other expenses for the year ended December 31, 2016 associated with the spinoff transactions.

Acquisition-related expenses: included pre-tax charges of \$2.7 million (\$1.8 million after-tax) related to legal, accounting and other expenses for the year ended December 31, 2016 associated with completed or contemplated acquisitions. For the year ended December 31, 2015, these pre-tax charges were \$0.5 million (\$0.4 million after-tax).

Pension settlement charges: included pre-tax charges of \$21.1 million (\$12.9 million after-tax) for the year ended December 31, 2016 related to lump-sum pension settlement payments.

Other postretirement benefit plan obligation (OPEB) curtailment gain: included a pre-tax gain of \$19.5 million (\$12.0 million after-tax) as a result of curtailments of the Company’s OPEB plans during the year ended December 31, 2016.

Net gain/loss on disposals of businesses: included a pre-tax net gain of \$11.9 million (\$12.1 million after-tax) for the year ended December 31, 2016, related to the disposals of certain immaterial businesses in the International segment. For the year ended December 31, 2015, these pre-tax charges included a loss of \$15.7 million (\$15.7 million after-tax) primarily related to the disposal of the Venezuelan operating entity in the International segment.

Venezuela currency remeasurement: currency remeasurement in Venezuela and the related impact of the devaluation resulted in a pre-tax loss of \$30.3 million (\$27.5 million after-tax) for the year ended December 31, 2015 of which \$10.5 million was included in loss attributable to noncontrolling interests.

Net loss on investments: included a pre-tax loss of \$1.4 million (\$1.4 million after-tax) resulting from the impairment of an equity investment and a pre-tax gain of \$0.1 million (\$0.1 million after-tax) resulting from the sale of one of the Company's affordable housing investments during the year ended December 31, 2016. The year ended December 31, 2015 included a pre-tax gain of \$3.9 million (\$2.4 million after-tax) resulting from the sale of one of the Company's affordable housing investments, a pre-tax loss of \$2.8 million (\$2.8 million after-tax) resulting from the impairment of the Company's investment in the Brazilian operations of Courier and a pre-tax loss of \$1.3 million (\$1.3 million after-tax) for the impairment of an equity investment.

Income tax adjustment: included the recognition of a \$0.4 million deferred income tax benefit related to the Company's investment in LSC.

Operations: reflected volume declines in the Variable Print segment, price pressures and wage and other inflation in the International segment, partially offset by lower incentive compensation expense, lower depreciation and amortization expense and cost savings associated with the reorganization of certain operations.

OUTLOOK

Vision and Strategy

RR Donnelley works with its customers to create, manage, deliver and optimize their multichannel communications strategies. The Company has and will continue to develop its creative and design, content management, digital and print production, supply chain management and distribution services to address its customers' evolving needs.

The Company's global platform provides differentiated solutions for its customers through its broad range of complementary communications services, strong logistics capabilities, and innovative leadership in both conventional print and digital technologies. This platform has enabled RR Donnelley to develop strong customer relationships, and the Company is focused on expanding these relationships to a broader range of its offerings. The flexibility of our platforms enhances the value the Company delivers to its customers and the Company intends to expand its capabilities in order to make it easier for customers to manage their full range of communication needs.

Management believes productivity improvement and cost reductions are critical to the Company's competitiveness. The Company continues to implement strategic initiatives across all platforms to reduce its overall cost structure and enhance productivity, including restructuring, consolidation, reorganization and integration of operations and streamlining of administrative and support activities.

The Company seeks to deploy its capital using a balanced approach in order to ensure financial flexibility and provide returns to stockholders. Priorities for capital deployment, over time, include principal and interest payments on debt obligations, distributions to stockholders, targeted acquisitions and capital expenditures. The Company believes that a strong financial condition is important to customers focused on establishing or growing long-term relationships. The Company also expects to make targeted acquisitions that extend its capabilities, drive cost savings and reduce future capital spending needs.

Management uses several key indicators to gauge progress toward achieving these objectives. These indicators include organic sales growth, operating margins, cash flow from operations and capital expenditures. The Company targets long-term net sales growth, while managing operating margins by achieving productivity improvements that offset the impact of price declines and cost inflation. Cash flows from operations are targeted to be stable over time, but in any given year can be significantly impacted by the timing of non-recurring or infrequent receipts and expenditures, the level of required pension and other postretirement benefits plan contributions and the impact of working capital management efforts.

The Company faces many challenges and risks as a result of competing in highly competitive global markets. Refer to Item 1A, *Risk Factors*, of Part I of this Annual Report on Form 10-K for further discussion.

2017 Outlook

In 2017 the Company expects net sales to range from a slight decrease to a slight increase as compared to 2016 driven by organic growth across certain product and service offerings primarily in the Strategic Services segment due to incremental revenues from the Commercial Agreements entered into in connection with the spinoff. Organic net sales growth is also expected in the International segment and from Precision Dialogue, which we acquired in 2016, that is reported within the Strategic Services and Variable Print segments. These increases are expected to partially offset by the anticipated continuing volume declines in the Variable Print segment and price pressures in most parts of the business. The highly competitive market conditions and unused industry capacity will continue to put price pressure on both transactional work and contract renewals across all segments. The Company's outlook assumes that the U.S. economy will grow modestly in 2017, with a decline in growth expected in developing countries. The Company will continue to leverage its customer relationships in order to provide a larger share of its customers' communications needs. In addition, the Company expects to continue cost control and productivity initiatives, including selected facility consolidations.

The Company initiated several restructuring actions in 2016 and 2015 to further reduce the Company's overall cost structure. These restructuring actions included the closures of two manufacturing facilities during 2016, as well as reorganization of certain operations. These and future cost reduction actions are expected to have a positive impact on operating earnings in 2017 and in future years. In addition, the Company expects to identify other cost reduction opportunities and possibly take further actions in 2017, which may result in significant additional restructuring charges. These restructuring actions will be funded by cash generated from operations and cash on hand or, if necessary, by utilizing the Company's credit facilities.

Cash flows from operations in 2017 are expected to increase significantly versus 2016 as lower operating income due to the spinoff of LSC and Donnelley will be more than offset by lower payments for taxes, interest and spinoff transaction costs as well as targeted working capital improvements. The Company expects capital expenditures to be in the range of \$100.0 million to \$115.0 million in 2017.

The Company's pension and OPEB plans were underfunded by \$99.3 million and \$134.7 million, respectively, as of December 31, 2016, as reported on the Company's Consolidated Balance Sheets and further described in Note 12, *Retirement Plans*, to the Consolidated Financial Statements. Governmental regulations for measuring pension plan funded status differ from those required under accounting principles generally accepted in the United States of America ("GAAP") for financial statement preparation. Based on the plans' regulatory funded status, required contributions in 2017 under all pension and other postretirement benefits plans is expected to be approximately \$17.0 million.

Significant Accounting Policies and Critical Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The Company's most critical accounting policies are those that are most important to the portrayal of its financial condition and results of operations, and which require the Company to make its most difficult and subjective judgments, often as a result of the need to make estimates of matters that are inherently uncertain. The Company has identified the following as its most critical accounting policies and judgments. Although management believes that its estimates and assumptions are reasonable, they are based upon information available when they are made, and therefore, actual results may differ from these estimates under different assumptions or conditions.

Revenue Recognition

The Company recognizes revenue for the majority of its products upon the transfer of title and risk of ownership, which is generally upon shipment to the customer. Because substantially all of the Company's products are customized, product returns are not significant; however, the Company accrues for the estimated amount of customer credits at the time of sale. Revenue from services is recognized as services are performed. Refer to Note 1, *Basis of Presentation and Summary of Significant Accounting Policies*, to the Consolidated Financial Statements for further discussion.

Certain revenues earned by the Company require significant judgment to determine if revenue should be recorded gross, as a principal, or net of related costs, as an agent. Billings for third-party shipping and handling costs as well as certain postage costs, primarily in the Company's logistics operations, and out-of-pocket expenses are recorded gross. In the Company's Global Turnkey Solutions and Sourcing operations, each contract is evaluated using various criteria to determine if revenue for components and other materials should be recognized on a gross or net basis. In general, these revenues are recognized on a gross basis if the Company has control over selecting vendors and pricing, is the primary obligor in the arrangement and bears credit risk and the risk of loss for inventory in its possession. Revenue from contracts that do not meet these criteria is recognized on a net basis. Many of the Company's operations process materials, primarily paper, that may be supplied directly by customers or may be purchased by the Company and sold to customers. No revenue is recognized for customer-supplied paper, but revenues for Company-supplied paper are recognized on a gross basis. As a result, the Company's reported sales and margins may be impacted by the mix of customer-supplied paper and Company-supplied paper.

Goodwill and Other Long-Lived Assets

The Company's methodology for allocating the purchase price of acquisitions is based on established valuation techniques that reflect the consideration of a number of factors, including valuations performed by third-party appraisers when appropriate. Goodwill is measured as the excess of the cost of an acquired entity over the fair value assigned to identifiable assets acquired and liabilities assumed. Based on its current organization structure, the Company has identified fourteen reporting units for which cash flows are determinable and to which goodwill may be allocated. Goodwill is either assigned to a specific reporting unit or allocated between reporting units based on the relative excess fair value of each reporting unit.

As a result of the Separation, goodwill of approximately \$657.9 million was distributed with LSC and Donnelley Financial. The goodwill distributed consisted of substantially all of the goodwill of the former Publishing and Retail segment and certain portions of the goodwill of the Strategic Services segment including the entire goodwill of the former financial reporting unit and a portion of each of the digital and creative solutions and logistics reporting units. The portion of the digital and creative solutions' and logistics' reporting units goodwill distributed was determined based upon the relative fair value as of October 1, 2016 of the businesses being disposed of in comparison to the overall fair value of the reporting unit as a whole. This resulted in the allocation of \$25.5 million, or all, of the goodwill of the digital and creative solutions reporting unit and \$104.2 million of the logistics reporting unit to the LSC disposal group.

The Company performs its goodwill impairment tests annually as of October 31, or more frequently if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value. The Company also performs an interim review for indicators of impairment each quarter to assess whether an interim impairment review is required for any reporting unit. As part of its interim reviews, management analyzes potential changes in the value of individual reporting units based on each reporting unit's operating results for the period compared to expected results as of the prior year's annual impairment test. In addition, management considers how other key assumptions, including discount rates and expected long-term growth rates, used in the last annual impairment test, could be impacted by changes in market conditions and economic events. Based on the interim assessments, management concluded that no events or changes in circumstances indicated that it was more likely than not that the fair value for any reporting unit had declined below its carrying value.

Due to the change in the Company's reporting structure, \$21.3 million of goodwill from the acquisition of Precision Dialogue was allocated to the digital and creative solutions group. As of October 31, 2016, eight reporting units had goodwill. The forms, sourcing, business process outsourcing, Latin America and Canada reporting units had no goodwill as of October 31, 2016. The reporting units with goodwill were reviewed for impairment using either a qualitative or quantitative assessment.

Qualitative Assessment for Impairment

The Company performed a qualitative assessment for the Labels reporting unit to determine whether it was more likely than not that the fair value of the reporting unit was less than its carrying value. In performing this analysis, the Company considered various factors, including the effect of market or industry changes and the reporting unit's actual results compared to projected results. In addition, management considered how other key assumptions used in the October 31, 2015 annual goodwill impairment test could be impacted by changes in market conditions and economic events.

As part of the qualitative review of impairment, management analyzed the potential changes in fair value of the Labels reporting unit based on its operating results for the ten months ended October 31, 2016 compared to expected results. As of October 31, 2015, the estimated fair value of the Labels reporting unit exceeded its carrying value by approximately 296.6%, according to a valuation performed by a third-party appraisal firm.

Based on its qualitative assessment, management concluded that as of October 31, 2016, it was more likely than not that the fair values of the Labels reporting unit was greater than its carrying values. The goodwill balance of the Labels reporting unit was \$7.0 million as of October 31, 2016.

Quantitative Assessment for Impairment

For the remaining seven reporting units with goodwill, a two-step method was used for determining goodwill impairment. In the first step (“Step One”), the Company compared the estimated fair value of each reporting unit to its carrying value, including goodwill. If the carrying value of a reporting unit exceeded the estimated fair value, the second step (“Step Two”) is completed to determine the amount of the impairment charge. Step Two requires the allocation of the estimated fair value of the reporting unit to the assets, including any unrecognized intangible assets, and liabilities in a hypothetical purchase price allocation. Any remaining unallocated fair value represents the implied fair value of goodwill, which is compared to the corresponding carrying value of goodwill to compute the goodwill impairment charge. The results of Step One of the goodwill impairment test as of October 31, 2016, indicated that the estimated fair values for five of the seven reporting units exceeded their respective carrying values. Therefore, the Company did not perform Step Two for these five reporting units. The Company did perform Step Two for the commercial and digital print and statement printing reporting units.

As part of its impairment test for these reporting units, the Company engaged a third-party appraisal firm to assist in the Company’s determination of the estimated fair values. This determination included estimating the fair value of each reporting unit using both the income and market approaches. The income approach requires management to estimate a number of factors for each reporting unit, including projected future operating results, economic projections, anticipated future cash flows, discount rates and the allocation of shared or corporate items. The market approach estimates fair value using comparable marketplace fair value data from within a comparable industry grouping. The Company weighted both the income and market approach equally to estimate the concluded fair value of each reporting unit.

The determination of fair value in Step One and the allocation of that value to individual assets and liabilities in Step Two, if necessary, requires the Company to make significant estimates and assumptions. These estimates and assumptions primarily include, but are not limited to: the selection of appropriate peer group companies; control premiums appropriate for acquisitions in the industries in which the Company competes; the discount rate; terminal growth rates; and forecasts of revenue, operating income, depreciation and amortization, restructuring charges and capital expenditures. The allocation of fair value under Step Two requires several analyses to determine the fair value of assets and liabilities including, among others, trade names, customer relationships, and property, plant and equipment.

As a result of the 2016 annual goodwill impairment test, the Company recognized non-cash charges of \$416.2 million and \$111.6 million during the period ended December 31, 2016 for the impairment of goodwill in the commercial and digital print and statement printing reporting units, respectively, which are included within the Variable Print segment. The goodwill impairment charges in the commercial and digital print and statement printing reporting units resulted from reductions in the estimated fair value of these reporting unit based on lower expectations for future revenue, profitability and cash flows as compared to the expectations of the October 31, 2015 annual goodwill impairment test. The lower expectations for commercial and digital print were driven by reduced demand for commercial print along with price pressures driven by excess capacity in the industry. The lower expectations for statement printing were due to lower demand for printed statements largely due to the impact of electronic substitution and price pressures driven by excess capacity in the industry. As of December 31, 2016, the commercial and digital print reporting unit had no remaining goodwill and the statement printing reporting unit had \$15.2 million of goodwill remaining. There were no other goodwill impairment charges as the estimated fair values of remaining reporting units exceeded their respective carrying values.

Goodwill Impairment Assumptions

Although the Company believes its estimates of fair value are reasonable, actual financial results could differ from those estimates due to the inherent uncertainty involved in making such estimates. Changes in assumptions concerning future financial results or other underlying assumptions could have a significant impact on either the fair value of the reporting units, the amount of the goodwill impairment charge, or both. Future declines in the overall market value of the Company’s equity and debt securities may also result in a conclusion that the fair value of one or more reporting units has declined below its carrying value.

One measure of the sensitivity of the amount of goodwill impairment charges to key assumptions is the amount by which each reporting unit “passed” (fair value exceeds the carrying value) or “failed” (the carrying value exceeds fair value) Step One of the goodwill impairment test. Five reporting units passed Step One, with fair values that exceeded the carrying values by between 30% and 87% of their respective estimated fair values. Relatively small changes in the Company’s key assumptions would not have resulted in any reporting units failing Step One.

Generally, changes in estimates of expected future cash flows would have a similar effect on the estimated fair value of the reporting unit. That is, a 1.0% decrease in estimated annual future cash flows would decrease the estimated fair value of the reporting unit by approximately 1.0%. The estimated long-term net sales growth rate can have a significant impact on the estimated future cash flows, and therefore, the fair value of each reporting unit. A 1.0% decrease in the long-term net sales growth rate would have resulted in no reporting units failing Step One of the goodwill impairment test. Of the other key assumptions that impact the estimated fair values, most reporting units have the greatest sensitivity to changes in the estimated discount rate. The estimated discount rates for the reporting units with operations primarily located in the U.S. were 9.0% and 9.5% as of October 31, 2016. The estimated discount rate for the reporting unit with operations primarily in foreign locations was 11.5%. A 1.0% increase in estimated discount rates would have resulted in no reporting units failing Step One. The Company believes that its estimates of future cash flows and discount rates are reasonable, but future changes in the underlying assumptions could differ due to the inherent uncertainty in making such estimates. Additionally, further price deterioration or lower volume could have a significant impact on the fair values of the reporting units.

Other Long-Lived Assets

The Company evaluates the recoverability of other long-lived assets, including property, plant and equipment and certain identifiable intangible assets, whenever events or changes in circumstances indicate that the carrying value of an asset or asset group may not be recoverable. Factors which could trigger an impairment review include significant underperformance relative to historical or projected future operating results, significant changes in the manner of use of the assets or the strategy for the overall business, a significant decrease in the market value of the assets or significant negative industry or economic trends. When the Company determines that the carrying value of long-lived assets may not be recoverable based upon the existence of one or more of the indicators, the assets are assessed for impairment based on the estimated future undiscounted cash flows expected to result from the use of the asset and its eventual disposition. If the carrying value of an asset exceeds its estimated future undiscounted cash flows, an impairment loss is recorded for the excess of the asset's carrying value over its fair value. During the year ended December 31, 2016, the Company recognized non-cash impairment charges of \$29.7 million related to the impairment of certain acquired customer relationship intangible assets in the commercial and digital print reporting unit within the Variable Print segment. The impairment of the customer relationship intangible assets resulted from lower expectations of future revenue to be derived from those relationships. In addition, the Company recognized a net gain of \$0.6 million during the year ended December 31, 2016 primarily related to gains on the sale of previously impaired assets, partially offset by impairments of machinery and equipment associated with facility closures.

Pension and Other Postretirement Benefits Plans

The Company records annual income and expense amounts relating to its pension and other postretirement benefits plans based on calculations which include various actuarial assumptions including discount rates, expected long-term rates of return, turnover rates, health care cost trend rates and compensation increases. The Company reviews its actuarial assumptions on an annual basis as of December 31 (or more frequently if a significant event requiring remeasurement occurs) and modifies the assumptions based on current rates and trends when it is appropriate to do so. The effects of modifications are recognized immediately on the Consolidated Balance Sheet, but are generally amortized into operating earnings over future periods, with the deferred amount recorded in accumulated other comprehensive income (loss). The Company believes that the assumptions utilized in recording its obligations under its plans are reasonable based on its experience, market conditions and input from its actuaries and investment advisors. The discount rates for pension benefits at December 31, 2016 and 2015 were 3.8% and 4.3%, respectively. The discount rates for other postretirement benefits plans at December 31, 2016 and 2015 were 4.0% and 4.2%, respectively.

As of December 31, 2015, the Company changed the method used to estimate the interest cost components of net pension and other postretirement benefits plan expense for its defined benefit pension and other postretirement benefit plans. Historically, the interest cost components were estimated using a single weighted-average discount rate derived from the yield curve used to measure the projected benefit obligation at the beginning of the period. The Company has elected to use a full yield curve approach in the estimation of these interest components of net pension and other postretirement benefits plan expense by applying the specific spot rates along the yield curve used in the determination of the projected benefit obligation to the relevant projected cash flows. The Company made this change to improve the correlation between projected benefit cash flows and the corresponding yield curve spot rates and to provide a more precise measurement of interest costs. This change does not affect the measurement and calculation of the Company's total benefit obligations. The Company has accounted for this change as a change in estimate and accordingly has accounted for it prospectively starting in the first quarter of 2016.

A one-percentage point change in the discount rates at December 31, 2016 would have the following effects on the accumulated benefit obligation and projected benefit obligation:

Pension Plans

	<u>1.0% Increase</u>	<u>1.0% Decrease</u>
	(in millions)	
Accumulated benefit obligation	\$ (123.0)	\$ 150.7
Projected benefit obligation	(124.5)	152.5

Other Postretirement Benefits Plans

	<u>1.0% Increase</u>	<u>1.0% Decrease</u>
	(in millions)	
Accumulated benefit obligation	\$ (32.4)	\$ 38.6

The Company's U.S. pension plans are frozen and the Company has transitioned to a risk management approach for its U.S. pension plan assets. The overall investment objective of this approach is to further reduce the risk of significant decreases in the plan's funded status by allocating a larger portion of the plan's assets to investments expected to hedge the impact of interest rate risks on the plan's obligation. Over time, the target asset allocation percentage for the pension plan is expected to decrease for equity and other "return seeking" investments and increase for fixed income and other "hedging" investments. The assumed long-term rate of return for plan assets, which is determined annually, is likely to decrease as the asset allocation shifts over time.

The expected long-term rate of return for plan assets is based upon many factors including expected asset allocations, historical asset returns, current and expected future market conditions and risk. In addition, the Company considered the impact of the current interest rate environment on the expected long-term rate of return for certain asset classes, particularly fixed income. The target asset allocation percentage for the primary U.S. pension plan was approximately 55.0% for return seeking investments and approximately 45.0% for hedging investments. The expected long-term rate of return on plan assets assumption used to calculate net pension and other postretirement benefits plan expense in 2016 was 7.25% for both of the Company's major U.S. pension and other postretirement benefits plans. The expected long-term rate of return on plan assets assumption that will be used to calculate net pension and other postretirement benefits plan expense in 2017 is 6.75% for both of the Company's major U.S. pension and other postretirement benefits plans.

A 0.25% change in the expected long-term rate of return on plan assets at December 31, 2016 would have the following effects on 2017 pension and other postretirement benefit plan (income)/expense:

	<u>0.25% Increase</u>	<u>0.25% Decrease</u>
	(in millions)	
2017		
U.S. pension plans	\$ (1.2)	\$ 1.2
Other postretirement benefit plans	(0.5)	0.5

The Company also maintains several pension plans in international locations. The expected returns on plan assets and discount rates for those plans are determined based on each plan's investment approach, local interest rates and plan participant profiles.

Accounting for Income Taxes

Significant judgment is required in determining the provision for income taxes and related accruals, deferred tax assets and liabilities and any valuation allowance recorded against deferred tax assets. In the ordinary course of business, there are transactions and calculations where the ultimate tax outcome is uncertain. Additionally, the Company's tax returns are subject to audit by various U.S. and foreign tax authorities. The Company recognizes a tax position in its financial statements when it is more likely than not (*i.e.*, a likelihood of more than fifty percent) that the position would be sustained upon examination by tax authorities. This recognized tax position is then measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement. Although management believes that its estimates are reasonable, the final outcome of uncertain tax positions may be materially different from that which is reflected in the Company's historical financial statements.

The Company has recorded deferred tax assets related to future deductible items, including domestic and foreign tax loss and credit carryforwards. The Company evaluates these deferred tax assets by tax jurisdiction. The utilization of these tax assets is limited by the amount of taxable income expected to be generated within the allowable carryforward period and other factors. Accordingly, management has provided a valuation allowance to reduce certain of these deferred tax assets when management has concluded that, based on the weight of available evidence, it is more likely than not that the deferred tax assets will not be fully realized. If actual results differ from these estimates, or the estimates are adjusted in future periods, adjustments to the valuation allowance might need to be recorded. As of December 31, 2016 and 2015, valuation allowances of \$154.1 million and \$130.8 million, respectively, were recorded in the Company's Consolidated Balance Sheets.

Deferred U.S. income taxes and foreign taxes are not provided on the excess of the investment value for financial reporting over the tax basis of investments in those foreign subsidiaries for which such excess is considered to be permanently reinvested in those operations. The Company has recognized deferred tax liabilities of \$6.7 million as of December 31, 2016 related to local taxes on certain foreign earnings that are not considered to be permanently reinvested. Management regularly evaluates whether foreign earnings are expected to be permanently reinvested. This evaluation requires judgment about the future operating and liquidity needs of the Company's foreign subsidiaries. Changes in economic and business conditions, foreign or U.S. tax laws, or the Company's financial situation could result in changes to these judgments and the need to record additional tax liabilities.

Commitments and Contingencies

The Company is subject to lawsuits, investigations and other claims related to environmental, employment, commercial and other matters, as well as preference claims related to amounts received from customers and others prior to their seeking bankruptcy protection. Periodically, the Company reviews the status of each significant matter and assesses potential financial exposure. If the potential loss from any claim or legal proceeding is considered probable and the related liability is estimable, the Company accrues a liability for the estimated loss. Because of uncertainties related to these matters, accruals are based on the best information available at the time. As additional information becomes available, the Company reassesses the related potential liability and may revise its estimates.

With respect to claims made under the Company's third-party insurance for workers' compensation, automobile and general liability, the Company is responsible for the payment of claims below and above insured limits, and consulting actuaries are utilized to assist the Company in estimating the obligation associated with any such incurred losses, which are recorded in accrued and other non-current liabilities. Historical loss development factors for both the Company and the industry are utilized to project the future development of such incurred losses, and these amounts are adjusted based upon actual claims experience and settlements. If actual experience of claims development is significantly different from these estimates, an adjustment in future periods may be required. Expected recoveries of such losses are recorded in other current and other non-current assets.

Restructuring

The Company records restructuring charges when liabilities are incurred as part of a plan approved by management with the appropriate level of authority for the elimination of duplicative functions, the closure of facilities, or the exit of a line of business, generally in order to reduce the Company's overall cost structure. Total restructuring charges were \$25.4 million for the year ended December 31, 2016. The restructuring liabilities might change in future periods based on several factors that could differ from original estimates and assumptions. These include, but are not limited to, contract settlements on terms different than originally expected, ability to sublease properties based on market conditions at rates or on timelines different than originally estimated or changes to original plans as a result of acquisitions. Such changes might result in reversals of or additions to restructuring charges that could affect amounts reported in the Consolidated Statements of Operations of future periods.

Accounts Receivable

The Company maintains an allowance for doubtful accounts receivable, which is reviewed for estimated losses resulting from the inability of its customers to make required payments for products and services. Specific customer provisions are made when a review of significant outstanding amounts, utilizing information about customer creditworthiness and current economic trends, indicates that collection is doubtful. In addition, provisions are made at differing rates, based upon the age of the receivable and the Company's past collection experience. The allowance for doubtful accounts receivable was \$35.9 million and \$26.0 million at December 31, 2016 and 2015, respectively. The Company's estimates of the recoverability of accounts receivable could change, and additional changes to the allowance could be necessary in the future, if any major customer's creditworthiness deteriorates or actual defaults are higher than the Company's historical experience.

Share-Based Compensation

The amount of expense recognized for share-based awards is determined by the Company's estimates of several factors, including expected performance compared to target for performance share units, future forfeitures of awards, expected volatility of the Company's stock and the average life of options prior to expiration. The total compensation expense within the results of continuing operations related to all share-based compensation plans was \$7.4 million for the year ended December 31, 2016. See Note 18, *Stock and Incentive Programs for Employees*, to the Consolidated Financial Statements for further discussion.

Off-Balance Sheet Arrangements

Other than non-cancelable operating lease commitments, the Company does not have off-balance sheet arrangements, financings or special purpose entities.

Financial Review

In the financial review that follows, the Company discusses its consolidated results of operations, financial position, cash flows and certain other information. This discussion should be read in conjunction with the Company's Consolidated Financial Statements and related notes that begin on page F-1.

RESULTS OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2016 AS COMPARED TO THE YEAR ENDED DECEMBER 31, 2015

The following table shows the results of operations for continuing operations for the years ended December 31, 2016 and 2015, which reflects the results of acquired businesses from the relevant acquisition dates:

	2016	2015	\$ Change	% Change
	(in millions, except percentages)			
Products net sales	\$ 5,288.1	\$ 5,312.1	\$ (24.0)	(0.5%)
Services net sales	1,607.6	1,625.2	(17.6)	(1.1%)
Total net sales	6,895.7	6,937.3	(41.6)	(0.6%)
Products cost of sales (exclusive of depreciation and amortization)	4,164.4	4,178.9	(14.5)	(0.3%)
Services cost of sales (exclusive of depreciation and amortization)	1,354.5	1,353.3	1.2	0.1%
Total cost of sales	5,518.9	5,532.2	(13.3)	(0.2%)
Products gross profit	1,123.7	1,133.2	(9.5)	(0.8%)
Services gross profit	253.1	271.9	(18.8)	(6.9%)
Total gross profit	1,376.8	1,405.1	(28.3)	(2.0%)
Selling, general and administrative expenses (exclusive of depreciation and amortization)	900.8	872.6	28.2	3.2%
Restructuring, impairment and other charges-net	584.3	62.7	521.6	831.9%
Depreciation and amortization	204.2	232.5	(28.3)	(12.2%)
Other operating income	(11.9)	—	(11.9)	100.0%
Income (loss) from operations	\$ (300.6)	\$ 237.3	\$ (537.9)	(226.7%)

Consolidated

Net sales of products for the year ended December 31, 2016 decreased \$24.0 million, or 0.5%, to \$5,288.1 million compared to the same period in 2015, including a \$53.6 million, or 1.0% decrease due to changes in foreign exchange rates. After including the impact of changes in foreign exchange rates, net sales of products increased slightly due to higher volume in the Strategic Services segment, mostly offset by price pressures and lower volume in the Variable Print segment.

Net sales from services for the year ended December 31, 2016 decreased \$17.6 million, or 1.1%, to \$1,607.6 million versus the same period in 2015, including a \$17.7 million, or 1.1%, decrease due to changes in foreign exchange rates. After including the impact from foreign exchange rates, net sales from services was essentially unchanged as higher volume in the Strategic Services segment was mostly offset by lower volume in the International segment.

Products cost of sales decreased \$14.5 million, or 0.3%, for the year ended December 31, 2016 versus the same period in the prior year. Products cost of sales decreased primarily due to lower volume in the Variable Print segment and cost controls, partially offset by higher volume in the Strategic Services segment and wage and other inflation in the International segment. As a percent of sales, products cost of sales increased 0.1% to 78.8% due to higher volume in the Strategic Services segment and wage and other inflation in the International segment.

Services cost of sales increased \$1.2 million, or 1.0% as a percentage of net sales from services for the year ended December 31, 2016 versus the same period in the prior year. Services cost of sales increased primarily due to higher volume in the Strategic Services segment driven by unfavorable mix in the logistics reporting unit, partially offset by lower volume in the International segment and cost control initiatives.

Products gross profit decreased \$9.5 million to \$1,123.7 million for the year ended December 31, 2016 compared to the same period in 2015 primarily due to volume declines in the Variable Print segment, price pressures and wage and other inflation in the International segment, partially offset by cost control initiatives. Products gross margin decreased slightly from 21.3% in 2015 to 21.2% in 2016.

Services gross profit decreased \$18.8 million to \$253.1 million for the year ended December 31, 2016 versus the same period in 2015 due to lower volume in the International segment and unfavorable mix in the Strategic Services segment. Services gross margin decreased from 16.7% to 15.7%, reflecting an unfavorable mix in the Strategic Services segment.

Selling, general and administrative expenses increased \$28.2 million to \$900.8 million, or 0.5% as a percentage of net sales, for the year ended December 31, 2016 versus the same period in 2015 due to pension settlement charges of \$21.1 million, spinoff-related transaction expenses, an increase in legal expenses and higher acquisition-related expenses, partially offset by OPEB curtailment gain of \$19.5 million and cost control initiatives.

For the year ended December 31, 2016, the Company recorded net restructuring, impairment and other charges of \$584.3 million compared to \$62.7 million in the same period in 2015. In 2016, these charges included charges of \$21.9 million for employee termination costs, \$2.3 million of other charges, \$527.8 million for the impairment of goodwill in the commercial and digital print and statement printing reporting units within the Variable Print segment, \$29.7 million for the impairment of customer relationships within the Commercial and Digital Print reporting unit within the Variable Print segment, \$3.5 million of lease termination and other restructuring costs and gains of \$0.9 million related to the sale of previously impaired other long-lived assets. In 2015, these charges included charges of \$22.4 million for employee termination costs, \$18.0 million for the impairment of goodwill in the Latin America and former Europe reporting units, respectively, within the International segment, \$9.2 million of lease termination and other restructuring costs, \$11.9 million for the impairment of intangible assets, \$2.2 million of other charges related to multi-employer pension plan withdrawal obligations and \$1.0 million net gain on disposal of previously impaired other long-lived assets. See Note 4, *Restructuring, Impairment and Other Charges*, to the Consolidated Financial Statements for further discussion.

Depreciation and amortization decreased \$28.3 million to \$204.2 million for the year ended December 31, 2016 compared to the same period in 2015 due to lower capital spending in recent years compared to historical levels. Depreciation and amortization included \$33.7 million and \$46.2 million of amortization of other intangible assets related to customer relationships, trade names, trademarks, licenses and agreements for the years ended December 31, 2016 and 2015, respectively.

For the year ended December 31, 2016, other operating income was \$11.9 million, which related to the net gain on the sales of entities in the International segment.

A loss from operations of \$300.6 million for the year ended December 31, 2016 represented a decline of \$537.9 million, or 226.7%, compared to the year ended December 31, 2015. The decrease was due to the higher restructuring, impairment and other charges, increased selling, general and administrative expenses and a decline in products and services gross margin, partially offset by lower depreciation and amortization expense.

	2016	2015	\$ Change	% Change
	(in millions, except percentages)			
Interest expense-net	\$ 198.7	\$ 204.1	\$ (5.4)	(2.6%)
Investment and other (income) expense-net	(2.1)	43.9	(46.0)	(104.8%)

Net interest expense decreased by \$5.4 million for the year ended December 31, 2016 versus the same period in 2015, primarily due to a decrease in average outstanding debt.

Net investment and other (income) expense for the year ended December 31, 2016 was income of \$2.1 million as compared to expense of \$43.9 million for the year ended December 31, 2015. For the year ended December 31, 2016, the Company had income from investments and dividends partially offset by an impairment charge of \$1.4 million related to an equity investment. For the year ended December 31, 2015, the Company recorded a loss of \$30.3 million related to the currency remeasurement in Venezuela and the related impact of the devaluation and a \$15.7 million net loss on the sale of its Venezuelan operating entity.

	2016	2015	\$ Change	% Change
	(in millions, except percentages)			
Loss before income taxes	\$ (497.2)	\$ (10.7)	\$ (486.5)	4,546.7%
Income tax (benefit) expense	(12.3)	21.0	(33.3)	(158.6%)
Effective income tax rate	2.5%	(196.3%)		

The effective income tax rate for the year ended December 31, 2016 was 2.5% compared to (196.3%) in the same period in 2015. The income tax benefit for the period ended December 31, 2016 reflects the impact of the non-deductible goodwill impairment charges. The tax rate in 2015 reflects a lower tax benefit than the statutory rate on the Venezuelan currency devaluation, the impact of the non-deductible goodwill impairment charges and the loss on the sale of the Company's Venezuelan operating entity.

The income (loss) attributable to noncontrolling interests was income of \$1.3 million for the year ended December 31, 2016 versus a loss of \$12.7 million for the year ended December 31, 2015. For the year ended December 31, 2015, the Venezuelan currency remeasurement, net of foreign exchange gains, resulted in losses attributable to noncontrolling interests of \$10.5 million.

Net loss from continuing operations, excluding the impact from non-controlling interests, attributable to RR Donnelley common stockholders for the year ended December 31, 2016 was \$486.2 million, or \$6.95 per diluted share, compared to \$19.0 million, or \$0.28 per diluted share, for the year ended December 31, 2015.

Net (loss) earnings from discontinued operations was a loss of \$9.7 million and earnings of \$170.1 million for the years ended December 31, 2016 and 2015, respectively.

Information by Segment

The following tables summarize net sales, income (loss) from operations and certain items impacting comparability within each of the operating segments and Corporate. The descriptions of the reporting units generally reflect the primary products or services provided by each reporting unit. Included in these net sales amounts are sales of other products or services that may be produced within a reporting unit to meet customer needs and improve operating efficiency.

Variable Print

	Year Ended December 31,	
	2016	2015
Net sales	\$ 3,145.4	\$ 3,214.9
Income (loss) from operations	(349.5)	208.2
Operating margin	(11.1%)	6.5%
Restructuring and impairment and other charges-net	562.9	9.1

Reporting unit	Net Sales for the Year Ended 2016			
	2016	2015	\$ Change	% Change
	(in millions, except percentages)			
Commercial and digital print	\$ 1,654.9	\$ 1,682.2	\$ (27.3)	(1.6%)
Direct mail	527.8	522.2	5.6	1.1%
Labels	399.6	417.0	(17.4)	(4.2%)
Statement printing	381.1	394.1	(13.0)	(3.3%)
Forms	182.0	199.4	(17.4)	(8.7%)
Total Variable Print	\$ 3,145.4	\$ 3,214.9	\$ (69.5)	(2.2%)

Net sales for the Variable Print segment for the year ended December 31, 2016 were \$3,145.4 million, a decrease of \$69.5 million, or 2.2%, compared to 2015, including a \$1.3 million decrease due to changes in foreign exchange rates. Net sales decreased due to lower volume primarily in the commercial and digital print, forms, labels and statement printing reporting units, price pressures and lower pass-through postage sales, partially offset by increased volume in direct mail. An analysis of net sales by reporting unit follows:

- Commercial and digital print: Sales decreased as a result of lower volume, primarily in transactional activity and price pressures, partially offset by higher in-store marketing materials volume.
- Direct mail: Sales increased as a result of higher volume, driven primarily by the acquisition of Precision Dialogue in the third quarter of 2016 which added \$12.8 million of sales in 2016, partially offset by price pressures.
- Labels: Sales decreased primarily as a result of lower volume and price pressures.
- Statement printing: Sales decreased primarily as a result of lower volume, lower pass-through postage sales and price pressures.
- Forms: Sales decreased due to lower volume, primarily as a result of electronic substitution.

Variable Print segment had a loss from operations of \$349.5 million for the year ended December 31, 2016 as compared to income from operations of \$208.2 million for the year ended December 31, 2015. The loss was driven by higher restructuring, impairment and other charges, price pressures and lower volume in commercial and digital print which was partially offset by lower depreciation and amortization expense, favorable mix within forms and labels and higher volume resulting from the acquisition of Precision Dialogue. Operating margins decreased from 6.5% for the year ended December 31, 2015 to (11.1%) for the year ended December 31, 2016, of which 17.6 percentage points were due to higher restructuring, impairment and other charges. Additionally, operating margins were impacted by price pressures, partially offset by cost and productivity initiatives.

Strategic Services

	Year Ended December 31,	
	2016	2015
Net sales	\$ 1,726.9	\$ 1,604.6
Income from operations	26.8	39.5
Operating margin	1.6%	2.5%
Restructuring and impairment and other charges-net	2.1	5.8

Reporting unit	Net Sales for the Year Ended Year Ended			
	2016	2015	\$ Change	% Change
	(in millions, except percentages)			
Logistics	\$ 1,229.1	\$ 1,214.4	\$ 14.7	1.2%
Sourcing	347.2	234.8	112.4	47.9%
Digital and creative solutions	150.6	155.4	(4.8)	(3.1%)
Total Strategic Services	\$ 1,726.9	\$ 1,604.6	\$ 122.3	7.6%

Net sales for the Strategic Services segment for the year ended December 31, 2016 were \$1,726.9 million, an increase of \$122.3 million, or 7.6%, compared to the year ended December 31, 2015. Net sales increased primarily due to increased sourcing volume from the commercial agreements entered into as part of the spinoff and higher volume in freight brokerage services in logistics, partially offset by decreased fuel surcharges and pass-through postage sales in logistics. An analysis of net sales by reporting unit follows:

- Logistics: Sales increased primarily due to higher volume in freight brokerage services and last-mile delivery, partially offset by a decrease in fuel surcharges, pass-through postage, international mail services and lower volume in print logistics.
- Sourcing: Sales increased primarily due to higher volume resulting from the commercial agreements entered into as part of the spinoff and higher volume in forms and commercial print volume, partially offset by lower volume in labels.
- Digital and creative solutions: Sales decreased primarily due to lower volume in prepress and photo services, partially offset by \$9.6 million of incremental revenue from the acquisition of Precision Dialogue.

Strategic Services segment income from operations decreased \$12.7 million for the year ended December 31, 2016 mainly due to an unfavorable revenue mix in sourcing and logistics and price pressures, partially offset by cost control initiatives. Operating margins decreased from 2.5% to 1.6% due to an unfavorable revenue mix in logistics, partially offset by lower restructuring, impairment and other charges which favorably impacted operating margin by 0.2 percentage points.

International

	Year Ended December 31,	
	2016	2015
Net sales	\$ 2,023.4	\$ 2,117.8
Income from operations	150.7	86.7
Operating margin	7.4%	4.1%
Restructuring and impairment and other charges-net	8.9	43.6
Gain on sales of businesses	(12.5)	—
Spinoff-related transaction expenses	0.1	—

Reporting unit	Net Sales for the Year Ended December 31,			
	2016	2015	\$ Change	% Change
	(in millions, except percentages)			
Asia	\$ 737.2	\$ 739.2	\$ (2.0)	(0.3%)
Global Turnkey Solutions	497.9	518.2	(20.3)	(3.9%)
Business process outsourcing	418.0	483.5	(65.5)	(13.5%)
Canada	206.6	197.1	9.5	4.8%
Latin America	163.7	179.8	(16.1)	(9.0%)
Total International	\$ 2,023.4	\$ 2,117.8	\$ (94.4)	(4.5%)

Net sales in the International segment for the year ended December 31, 2016 were \$2,023.4 million, a decrease of \$94.4 million, or 4.5%, compared to the same period in 2015, including a \$70.0 million, or 3.3%, decrease due to changes in foreign exchange rates. The net sales decrease was also due to lower volume in business process outsourcing, Global Turnkey Solutions and Latin America as well as price pressures in Asia and business process outsourcing, partially offset by increased volume in Asia. An analysis of net sales by reporting unit follows:

- Asia: Sales decreased slightly due to price pressures, lower volume in catalogs and labels and changes in foreign exchange rates, partially offset by increased volume in packaging and book exports.
- Global Turnkey Solutions: Sales decreased primarily due to lower volume.
- Business process outsourcing: Sales decreased due to changes in foreign exchange rates and \$18.9 million due to the disposition of two entities in the first quarter of 2016 as well as price pressures, partially offset by higher volume.
- Canada: Sales increased due to higher volume in forms, labels and statement printing, partially offset by changes in foreign exchange rates.
- Latin America: Sales decreased primarily due to lower forms volume of which \$16.3 million resulted from the sale of the Venezuelan operating entity in the second quarter of 2015 and unfavorable changes in foreign exchange rates across the region, partially offset by higher testing book volume.

International segment income from operations increased \$64.0 million primarily due to lower restructuring, impairment and other charges, a net gain on the sale of entities in business process outsourcing, higher volume and favorable revenue mix in Asia and Canada, partially offset by price pressures and wage and other inflation in Asia and business process outsourcing. Operating margins increased from 4.1% to 7.4%, of which 1.6 percentage points was due to lower restructuring, impairment and other charges and 0.6 percentage points due to the net gain on the sale of entities in the business process outsourcing. The remaining increase in operating margin reflected favorable revenue mix in Asia, Latin America and Canada, partially offset by price pressures and wage and other inflation in Asia and business process outsourcing.

Corporate

The following table summarizes unallocated operating expenses and certain items impacting comparability within the activities presented as Corporate:

	Year Ended	
	December 31,	
	2016	2015
	(in millions)	
Operating expenses	\$ 128.6	\$ 97.1
Spinoff-related transaction expenses	7.9	—
Restructuring and impairment charges	10.4	4.2
Acquisition-related expenses	2.7	0.5
Loss on disposition of business	0.6	—
OPEB curtailment gain	(19.5)	—
Pension settlement charges	21.1	—

Corporate operating expenses in the year ended December 31, 2016 were \$128.6 million, an increase of \$31.5 million compared to the same period in 2015. The increase was primarily driven by the non-cash pension settlement charge, higher restructuring, impairment and other charges, spinoff-related expenses and an increase in legal expenses, partially offset by the OPEB curtailment gain and lower variable compensation expense.

RESULTS OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2015 AS COMPARED TO THE YEAR ENDED DECEMBER 31, 2014

	Income from Operations	Operating Margin	Net Loss From	Net Loss
			Continuing Operations Attributable to RR Donnelley Common Stockholders	Attributable to RR Donnelley Stockholders Per Diluted Share
	(in millions, except margin and per share data)			
For the year ended December 31, 2014	\$ 213.9	3.0%	\$ (43.7)	\$ (0.66)
2015 restructuring, impairment and other charges - net	(62.7)	(0.9%)	(50.5)	(0.74)
2014 restructuring, impairment and other charges - net	72.3	1.0%	58.2	0.88
Acquisition-related expenses	6.5	0.1%	5.4	0.08
Purchase accounting inventory adjustments	12.1	0.2%	7.6	0.12
Loss on debt extinguishment	—	—%	49.8	0.75
Net (gain)/loss on disposals of businesses	—	—%	(22.1)	(0.33)
Venezuela currency remeasurement	—	—%	(8.8)	(0.13)
Net loss on investments	—	—%	(0.9)	(0.01)
Loss on bankruptcy of subsidiary	—	—%	14.2	0.21
Income tax adjustments	—	—%	(15.2)	(0.23)
Operations	(4.8)	—%	(13.0)	(0.22)
For the year ended December 31, 2015	\$ 237.3	3.4%	\$ (19.0)	\$ (0.28)

2015 restructuring, impairment and other charges—net: included pre-tax charges of \$22.4 million for employee termination costs; \$18.0 million for the impairment of goodwill in the Latin America and former Europe reporting units within the International segment; \$9.2 million of lease termination and other restructuring costs; \$11.9 million for the impairment of intangible assets, substantially all related to acquired customer relationship intangible assets; \$2.2 million of other charges related to multi-employer pension plan withdrawal obligations; and \$1.0 million net gain on disposal of previously impaired other long-lived assets, primarily for buildings and machinery and equipment associated with facility closures. See Note 4, *Restructuring, Impairment and Other Charges* to the Consolidated Financial Statements for further discussion.

2014 restructuring, impairment and other charges—net: included pre-tax charges of \$24.5 million for employee termination costs primarily to the integration of Consolidated Graphics, including the closure of seven Consolidated Graphics facilities as well as one additional facility closure within the Variable Print segment and the reorganization of certain operations; \$22.7 million of lease termination and other restructuring costs, of which \$11.6 million related to multi-employer pension plan withdrawal charges, \$25.1 million for impairment charges of which \$13.3 million for the impairment of acquired customer relationship intangible assets and acquired tradenames and \$11.8 million related to impairments of other long-lived assets, primarily for buildings and machinery and equipment associated with facility closures. See Note 4, *Restructuring, Impairment and Other Charges*, to the Consolidated Financial Statements for further discussion.

Acquisition-related expenses: included pre-tax charges of \$0.5 million (\$0.4 million after-tax) related to legal, accounting and other expenses for the year ended December 31, 2015 associated with completed or contemplated acquisitions. For the year ended December 31, 2014, these pre-tax charges were \$7.0 million (\$5.9 million after-tax).

Purchase accounting inventory adjustments: included pre-tax charges of \$12.1 million (\$7.6 million after-tax) for the year ended December 31, 2014 as a result of inventory purchase accounting adjustments for Consolidated Graphics.

Net gain on disposal of businesses: included a pre-tax gain on the sale of Journalism Online of \$11.2 million (\$6.9 million after-tax) offset by a pre-tax loss on the sale of Office Tiger Global Real Estate Services Inc. (“GRES”) of \$0.8 million (\$0.5 million after-tax) for the year ended December 31, 2014.

Loss on bankruptcy of subsidiary: included a pre-tax loss of \$16.4 million (\$14.2 million after-tax) for the year ended December 31, 2014 as a result of the bankruptcy liquidation of RR Donnelley Argentina (“RRDA”), a subsidiary of RR Donnelley.

Venezuela currency remeasurement: currency remeasurement in Venezuela resulted in a pre-tax loss, net of foreign exchange gains, of \$30.3 million (\$27.5 million after-tax), of which \$10.5 million was included in loss attributable to noncontrolling interests for the year ended December 31, 2015. For the year ended December 31, 2014, the currency devaluation in Venezuela resulted in a pre-tax loss of \$18.4 million (\$13.8 million after-tax), of which \$5.6 million was included in income attributable to noncontrolling interests.

Net loss on investments: included a pre-tax gain of \$3.9 million (\$2.4 million after-tax) resulting from the sale of one of the Company’s affordable housing investments, a pre-tax loss of \$2.8 million (\$2.8 million after-tax) resulting from the impairment of the Company’s investment in the Brazilian operations of Courier and a pre-tax loss of \$1.3 million (\$1.3 million after-tax) for the impairment of an equity investment for the year ended December 31, 2015. The year ended December 31, 2014 included a loss of \$1.3 million (\$0.8 million after-tax) from the impairment of an equity investment.

Loss on debt extinguishment: included a pre-tax loss of \$77.1 million (\$49.8 million after-tax) for the year ended December 31, 2014, related to the premiums paid, unamortized debt issuance costs and other expenses due to the repurchase of senior notes. See Note 14, *Debt*, to the Consolidated Financial Statements for further discussion.

Income tax adjustments: for the year ended December 31, 2014, income tax adjustments included the recognition of a \$15.2 million benefit related to the decline in value and reorganization of an entity within the Strategic Services segment.

Operations: reflected volume declines in the Variable Print segment, price pressures and wage and other inflation in the International segment, partially offset by lower incentive compensation expense, lower depreciation and amortization expense, cost control initiatives resulting from the integration of Consolidated Graphics and the reorganization of certain operations, and an increase in volume due to the acquisition of Consolidated Graphics. See further details in the review of operating results by segment that follows below.

Consolidated

The following table shows the results of operations for continuing operations for the years ended December 31, 2015 and 2014, which reflects the results of acquired businesses from the relevant acquisition dates:

	2015	2014	\$ Change	% Change
	(in millions, except percentages)			
Products net sales	\$ 5,312.1	\$ 5,566.2	\$ (254.1)	(4.6%)
Services net sales	1,625.2	1,606.5	18.7	1.2%
Total net sales	6,937.3	7,172.7	(235.4)	(3.3%)
Products cost of sales (exclusive of depreciation and amortization)	4,178.9	4,362.3	(183.4)	(4.2%)
Services cost of sales (exclusive of depreciation and amortization)	1,353.3	1,336.5	16.8	1.3%
Total cost of sales	5,532.2	5,698.8	(166.6)	(2.9%)
Products gross profit	1,133.2	1,203.9	(70.7)	(5.9%)
Services gross profit	271.9	270.0	1.9	0.7%
Total gross profit	1,405.1	1,473.9	(68.8)	(4.7%)
Selling, general and administrative expenses (exclusive of depreciation and amortization)	872.6	933.1	(60.5)	(6.5%)
Restructuring, impairment and other charges-net	62.7	72.3	(9.6)	(13.3%)
Depreciation and amortization	232.5	254.6	(22.1)	(8.7%)
Income from operations	\$ 237.3	\$ 213.9	\$ 23.4	10.9%

Net sales of products for the year ended December 31, 2015 decreased \$254.1 million, or 4.6%, to \$5,312.1 million versus the same period in the prior year, including a \$141.9 million, or 2.7%, decrease due to changes in foreign exchange rates. Net sales of products decreased due to lower volume in the Variable Print segment, an \$85.2 million, or 1.5% decrease due to the impact of the Venezuelan currency devaluation and sale of the Company's Venezuelan operating entity and price pressures, partially offset by the acquisition of Consolidated Graphics.

Net sales from services for the year ended December 31, 2015 increased \$18.7 million, or 1.2%, to \$1,625.2 million versus the same period in the prior year, including a \$19.7 million, or 1.2%, decrease due to changes in foreign exchange rates. The increase in net sales from services was primarily due to higher volume in the Strategic Services segment, primarily driven by the logistics reporting unit.

Products cost of sales decreased \$183.4 million, or 4.2%, for the year ended December 31, 2015 versus the same period in the prior year. Products cost of sales decreased primarily due to lower volume in the Variable Print segments, the impact of the Venezuelan currency devaluation and sale of the Company's Venezuelan operating entity, lower variable compensation expense and cost control initiatives, partially offset by the acquisition of Consolidated Graphics and wage and other inflation in the International segment. As a percent of net sales, cost of sales increased from 78.4% to 78.7% for the year ended December 31, 2015 versus the same period in the prior year due to price pressures and wage inflation.

Services cost of sales increased \$16.8 million, or 1.3%, for the year ended December 31, 2015 versus the same period in the prior year. Services cost of sales increased primarily due to higher volume in the Strategic Services segment driven by the logistics reporting unit and increased transportation costs, partially offset by cost control initiatives. Services cost of sales increased 0.1% as a percentage of net sales from services for the year ended December 31, 2015 due to a favorable revenue mix primarily driven by the logistics reporting unit.

Products gross profit decreased \$70.7 million to \$1,133.2 million for the year ended December 31, 2015 versus the same period in the prior year due to volume declines in the Variable Print segment, the impact of the Venezuelan currency devaluation and sale of the Company's Venezuelan operating entity, price pressures and wage and other inflation in the International segment, partially offset by the acquisition of Consolidated Graphics and cost control initiatives. Products gross margin decreased slightly from 21.6% to 21.3% reflecting price pressures and wage and other inflation in the International segment.

Services gross profit increased \$1.9 million to \$271.9 million for the year ended December 31, 2015 versus the same period in the prior year due to higher volume in the Strategic Services segment driven by the logistics reporting unit, partially offset by increased transportation costs. Services gross margin decreased from 16.8% to 16.7%, reflecting an unfavorable mix in the logistics reporting unit.

Selling, general and administrative expenses decreased \$60.5 million to \$872.6 million, and from 13.0% to 12.6% as a percentage of net sales, for the year ended December 31, 2015 versus the same period in the prior year reflecting lower variable compensation, lower acquisition costs, reduced bad debt expense and costs control initiatives, partially offset by the acquisition of Consolidated Graphics.

For the year ended December 31, 2015, the Company recorded net restructuring, impairment and other charges of \$62.7 million compared to \$72.3 million in the same period in 2014. In 2015, these charges included charges of \$22.4 million for employee termination costs, \$18.0 million for the impairment of goodwill in the Latin America and former Europe reporting units, respectively, within the International segment, \$9.2 million of lease termination and other restructuring costs, \$11.9 million for the impairment of intangible assets, \$2.2 million of other charges related to multi-employer pension plan withdrawal obligations and \$1.0 million net gain on disposal of previously impaired other long-lived assets. Restructuring, impairment and other charges in the year ended December 31, 2014 included pre-tax charges of \$24.5 million for employee termination costs primarily to the integration of Consolidated Graphics, including the closure of seven Consolidated Graphics facilities as well as one additional facility closure within the Variable Print segment and the reorganization of certain operations, \$22.7 million of lease termination and other restructuring costs, of which \$11.6 million related to multi-employer pension plan withdrawal charges primarily attributable to facility closures, \$25.1 million impairment of other long lived assets, of which \$13.3 million related to the impairment of acquired customer relationship intangible assets and acquired trade names and \$11.8 million related to the impairment of other long lived assets, primarily for buildings and machinery and equipment associated with facility closures and charges. See Note 4, *Restructuring, Impairment and Other Charges*, to the Consolidated Financial Statements for further discussion.

Depreciation and amortization decreased \$22.1 million to \$232.5 million for the year ended December 31, 2015 compared to the same period in 2014, primarily due to the impact of changes in foreign exchange rates and lower capital spending in recent years compared to historical levels, partially offset by increases due to the acquisition of Consolidated Graphics. Depreciation and amortization included \$46.2 million and \$50.2 million of amortization of other intangible assets related to customer relationships, trade names, trademarks, licenses and agreements for the year ended December 31, 2015 and 2014, respectively.

The income from operations for the year ended December 31, 2015 was \$237.3 million, an increase of \$23.4 million, compared to the year ended December 31, 2014. The increase was due to lower variable compensation expense, depreciation and amortization expense, cost control initiatives resulting from the integration of Consolidated Graphics and the reorganization of certain operations, and an increase in volume due to the acquisition of Consolidated Graphics, partially offset by volume declines in the Variable Print segment, price pressures and wage and other inflation in the International segment.

	2015	2014	\$ Change	% Change
(in millions, except percentages)				
Interest expense-net	\$ 204.1	\$ 211.2	\$ (7.1)	(3.4%)
Investment and other expense-net	43.9	22.1	21.8	98.6%
Loss on debt extinguishment	—	77.1	(77.1)	(100.0%)

Net interest expense decreased by \$7.1 million for the year ended December 31, 2015 versus the same period in 2014, primarily due to a decrease in average outstanding debt.

Net investment and other expense for the year ended December 31, 2015 and 2014 was \$43.9 million and \$22.1 million, respectively. For the year ended December 31, 2015, the Company recorded a loss of \$30.3 million related to the currency remeasurement in Venezuela and the related impact of the devaluation and a \$15.7 million net loss on the sale of its Venezuelan operating entity. For the year ended December 31, 2014, the Company recorded a loss of \$18.4 million, net of foreign exchange gains, related to the Venezuelan currency remeasurement, and the loss on the bankruptcy liquidation of RRDA of \$16.4 million. This was partially offset by a gain on the sale of Journalism Online of \$11.2 million.

Loss on debt extinguishment for the year ended December 31, 2014 was \$77.1 million related to the premiums paid, unamortized debt issuance costs and other expenses due to the repurchase of senior notes.

	2015	2014	\$ Change	% Change
(in millions, except percentages)				
Loss before income taxes	\$ (10.7)	\$ (96.5)	\$ 85.8	(88.9%)
Income tax expense (benefit)	21.0	(56.2)	77.2	(137.4%)
Effective income tax rate	(196.3%)	58.2%		

The effective income tax rate for the year ended December 31, 2015 was (196.3%) compared to 58.2% in the same period in 2014. The tax rate in 2015 reflects a lower tax benefit than the statutory rate on the Venezuelan currency devaluation, the impact of the non-deductible goodwill impairment charges and the loss on the sale of the Company's Venezuelan operating entity. The tax rate in 2014 was impacted by a \$15.2 million tax benefit related to the decline in value of an entity within the Strategic Services segment.

The loss attributable to noncontrolling interests was \$12.7 million for the year ended December 31, 2015 compared to income of \$3.4 million for the year ended December 31, 2014. For the year ended December 31, 2015 and 2014, the Venezuelan currency remeasurement, net of foreign exchange gains, resulted in losses attributable to noncontrolling interests of \$10.5 million and \$5.6 million, respectively. The impact of the remeasurements was more than offset for the year ended December 31, 2014 by the Company's operating earnings in Venezuela.

The net loss from continuing operations, excluding the impact from non-controlling interests, attributable to RR Donnelley common stockholders from continuing operations for the year ended December 31, 2015 was \$19.0 million, or \$0.28 per diluted share, compared to \$43.7 million, or \$0.66 per diluted share, for the year ended December 31, 2014.

Net income from discontinued operations was \$170.1 million and \$161.1 million for the years ended December 31, 2015 and 2014, respectively.

Information by Segment

The following tables summarize net sales, income (loss) from operations and certain items impacting comparability within each of the operating segments and Corporate. The descriptions of the reporting units generally reflect the primary products or services provided by each reporting unit. Included in these net sales amounts are sales of other products or services that may be produced within a reporting unit to meet customer needs and improve operating efficiency.

Variable Print

	Year Ended December 31,	
	2015	2014
Net sales	\$ 3,214.9	\$ 3,268.5
Income from operations	208.2	184.8
Operating margin	6.5%	5.7%
Restructuring and impairment and other charges-net	9.1	40.1
Purchase accounting inventory adjustment	—	12.1
Acquisition-related expenses	—	0.1

Reporting unit	Net Sales for the Year Ended December 31,			
	2015	2014	\$ Change	% Change
	(in millions, except percentages)			
Commercial and digital print	\$ 1,682.2	\$ 1,714.1	\$ (31.9)	(1.9%)
Direct mail	522.2	512.0	10.2	2.0%
Labels	417.0	422.4	(5.4)	(1.3%)
Statement printing	394.1	390.9	3.2	0.8%
Forms	199.4	229.1	(29.7)	(13.0%)
Total Variable Print	<u>\$ 3,214.9</u>	<u>\$ 3,268.5</u>	<u>\$ (53.6)</u>	<u>(1.6%)</u>

Net sales for the Variable Print segment for the year ended December 31, 2015 were \$3,214.9 million, a decrease of \$53.6 million, or 1.6%, compared to 2014, including a \$5.2 million, or 0.2% decrease due to changes in foreign exchange rates. In addition, net sales decreased due to lower transactional commercial print and forms volume, partially offset by the acquisitions of Consolidated Graphics. An analysis of net sales by reporting unit follows:

- Commercial and digital print: Sales decreased primarily as a result of lower transactional commercial print and print and fulfillment volume and the unfavorable impact of U.S election cycles on current year spending, partially offset by the acquisition of Consolidated Graphics and higher volume in in-store marketing materials.
- Direct mail: Sales increased as a result of higher volume and an increase in pass-through paper sales, partially offset by lower pass-through postage sales.
- Labels: Sales decreased due to lower volume and price pressures.
- Statement printing: Sales increased slightly primarily as a result of higher pass-through postage sales and an increase in volume, partially offset by price pressures.
- Forms: Sales decreased due to lower volume due to electronic substitution.

Variable Print segment income from operations increased \$23.4 million for the year ended December 31, 2015 mainly due to lower restructuring, impairment and other charges, the impact of the prior year purchase accounting inventory adjustment, cost control initiatives resulting from the integration of Consolidated Graphics, favorable mix within labels and direct mail, lower incentive compensation expense and higher volume resulting from the acquisition of Consolidated Graphics, partially offset by lower volume in transactional commercial print and price pressures. Operating margins increased from 5.7% for the year ended December 31, 2014 to 6.5% for the year ended December 31, 2015, of which 0.9 percentage points were due to lower restructuring, impairment and other charges and 0.4 percentage points were due to the favorable impact of the prior year purchase accounting inventory adjustment. Additionally, operating margins reflected price pressures, partially offset by cost control initiatives resulting from the integration of Consolidated Graphics.

Strategic Services

	Year Ended December 31,	
	2015	2014
Net sales	\$ 1,604.6	\$ 1,563.0
Income from operations	39.5	50.9
Operating margin	2.5%	3.3%
Restructuring and impairment and other charges-net	5.8	6.6

Reporting unit

Reporting unit	Net Sales for the Year Ended December 31,			
	2015	2014	\$ Change	% Change
	(in millions, except percentages)			
Logistics	\$ 1,214.4	\$ 1,154.8	\$ 59.6	5.2%
Sourcing	234.8	216.8	18.0	8.3%
Digital and creative solutions	155.4	191.4	(36.0)	(18.8%)
Total Strategic Services	\$ 1,604.6	\$ 1,563.0	\$ 41.6	2.7%

Net sales for the Strategic Services segment for the year ended December 31, 2015 were \$1,604.6 million, an increase of \$41.6 million, or 2.7%, compared to the year ended December 31, 2014, including a \$0.1 million decrease due to changes in foreign exchange rates. Net sales increased primarily due to higher volume in logistics and sourcing, partially offset by a decrease in fuel surcharges and lower volume in digital and creative solutions. An analysis of net sales by reporting unit follows:

- Logistics: Sales increased primarily due to higher volume in freight brokerage services, pass-through postage sales and international mail services, partially offset by a decrease in fuel surcharges and lower volume in print logistics.
- Sourcing: Sales increased primarily due to higher volume in variable print, forms and commercial print-management for healthcare customers.
- Digital and creative solutions: Sales decreased primarily due to the bankruptcy of two customers and lower volume in prepress and photo services.

Strategic Services segment income from operations decreased \$11.4 million for the year ended December 31, 2015 mainly due to increased costs of transportation and unfavorable revenue mix within logistics, partially offset by higher volume in logistics and cost control initiatives. Operating margins decreased from 3.3% to 2.5% driven by increased costs of transportation and unfavorable revenue mix.

International

	Year Ended December 31,	
	2015	2014
Net sales	\$ 2,117.8	\$ 2,341.2
Income from operations	86.7	113.8
Operating margin	4.1%	4.9%
Restructuring and impairment and other charges-net	43.6	21.1
Acquisition related expenses	—	0.4

Reporting unit	Net Sales for the Year Ended			
	December 31,			
	2015	2014	\$ Change	% Change
	(in millions, except percentages)			
Asia	\$ 739.2	\$ 745.7	\$ (6.5)	(0.9%)
Global Turnkey Solutions	518.2	524.0	(5.8)	(1.1%)
Business process outsourcing	483.5	513.1	(29.6)	(5.8%)
Canada	197.1	218.8	(21.7)	(9.9%)
Latin America	179.8	339.6	(159.8)	(47.1%)
Total International	\$ 2,117.8	\$ 2,341.2	\$ (223.4)	(9.5%)

Net sales in the International segment for the year ended December 31, 2015 were \$2,117.8 million, a decrease of \$223.4 million, or 9.5%, compared to the same period in 2014, including a \$156.3 million, or 6.7%, decrease due to changes in foreign exchange rates. The net sales decrease was also due to an \$85.2 million, or 3.6%, decrease as a result of the impact of the Venezuelan currency devaluation and sale of the Company's Venezuelan operating entity during the second quarter of 2015, the bankruptcy liquidation of RRDA in the third quarter of 2014, which had net sales of \$22.1 million for the year ended December 31, 2014, partially offset by higher volume in Global Turnkey Solutions, Canada and business process outsourcing. An analysis of net sales by reporting unit follows:

- Asia: Sales decreased due to price pressures and lower volume in labels and book exports, partially offset by higher volume in packaging products.
- Global Turnkey Solutions: Sales decreased due to changes in foreign exchange rates and a decline in packaging volume, partially offset by higher volume primarily related to a new customer.
- Business process outsourcing: Sales decreased due to changes in foreign exchange rates, lower pass-through print management volume and the sale of GRES in the first quarter of 2014, partially offset by an increase in volume due to new customers and higher outsourcing volume.
- Canada: Sales decreased due to changes in foreign exchange rates, partially offset by higher labels and statement printing volume.
- Latin America: Sales decreased due to the impact of the Venezuelan currency devaluation and sale of the Company's Venezuelan operating entity, changes in foreign exchange rates across the region and the 2014 bankruptcy liquidation of RRDA.

International segment income from operations decreased \$27.1 million primarily due to higher restructuring, impairment and other charges. Wage inflation in Latin America, Asia and business process outsourcing, price pressures in Asia and changes in foreign exchange rates were partially offset by lower depreciation and amortization expense, cost control initiatives and lower incentive compensation expense. Operating margins decreased from 4.9% to 4.1% of which 1.2 percentage points was due to higher restructuring, impairment and other charges, which was partially offset by cost control initiatives.

Corporate

The following table summarizes unallocated operating expenses and certain items impacting comparability within the activities presented as Corporate:

	Year Ended	
	December 31,	
	2015	2014
	(in millions)	
Operating expenses	\$ 97.1	\$ 135.6
Restructuring and impairment charges	4.2	4.5
Acquisition-related expenses	0.5	6.5

Corporate operating expenses in the year ended December 31, 2015 decreased \$38.5 million compared to the same period in 2014. The decrease was driven by lower incentive compensation expense, lower acquisition-related expenses and lower bad debt and workers' compensation expense, partially offset by an increase in healthcare costs.

LIQUIDITY AND CAPITAL RESOURCES

The Company believes it has sufficient liquidity to support its ongoing operations and to invest in future growth to create value for its stockholders. Operating cash flows and the Company's \$800.0 million senior secured revolving credit facility (the "Credit Agreement") are the Company's primary sources of liquidity and are expected to be used for, among other things, payment of interest and principal on the Company's long-term debt obligations, distributions to stockholders that may be approved by the Board of Directors, acquisitions, capital expenditures necessary to support productivity improvement and growth and completion of restructuring programs.

The following describes the Company's cash flows for the years ended December 31, 2016, 2015 and 2014 which includes LSC and Donnelley Financial for all periods prior to the October 1, 2016 Distribution. Refer to Note 2, *Discontinued Operations*, to the Consolidated Financial Statements for information on the significant non-cash items, capital expenditures and depreciation and amortization related to LSC and Donnelley Financial.

Cash Flows From Operating Activities

Operating cash inflows are largely attributable to sales of the Company's products and services and all periods include cash flows from discontinued operations. Operating cash outflows are largely attributable to recurring expenditures for raw materials, labor, rent, interest, taxes and other operating activities.

2016 compared to 2015

Net cash provided by operating activities was \$125.2 million for the year ended December 31, 2016, compared to \$652.0 million for the year ended December 31, 2015. The decrease reflected the spinoff of LSC and Donnelley Financial on October 1, 2016, as well as higher spinoff transaction costs and legal expenses, partially offset by lower payments for incentive compensation and taxes as well as lower pension and other postretirement benefit plan contributions.

2015 compared to 2014

Net cash provided by operating activities was \$652.0 million for the year ended December 31, 2015, compared to \$722.7 million for the year ended December 31, 2014. The decrease in net cash provided by operating activities reflected the timing of payments for employee-related liabilities and higher payments for incentive compensation costs and taxes, partially offset by lower pension and other postretirement benefit plan contributions.

Cash Flows From Investing Activities

2016 compared to 2015

Net cash used in investing activities for the year ended December 31, 2016 was \$210.5 million compared to \$317.1 million for the year ended December 31, 2015. Capital expenditures were \$172.1 million during the year ended December 31, 2016, a decrease of \$35.5 million as compared to the same period of 2015. During the year ended December 31, 2016, net cash used for the acquisition of Precision Dialogue was \$48.1 million. Net cash used in investing activities for the year ended December 31, 2015 included \$118.2 million primarily related to an acquisition within the Company's then wholly owned-sub subsidiary LSC.

2015 compared to 2014

Net cash used in investing activities for the year ended December 31, 2015 was \$317.1 million compared to \$577.2 million for the year ended December 31, 2014. Net cash used for acquisitions was \$118.2 million primarily related to an acquisition within the Company's wholly owned-sub subsidiary LSC compared to \$380.8 million for the year ended December 31, 2014 related to the acquisitions of Consolidated Graphics, Esselte (now part of LSC) and MultiCorpora (now part of DFS). Capital expenditures were \$207.6 million during the year ended December 31, 2015, a decrease of \$16.0 million as compared to the same period of 2014. Net cash used for dispositions of businesses was \$1.6 million for the year ended December 31, 2014, which included cash incentive payments made in connection with the disposal of MRM France offset by net cash proceeds from the dispositions of GRES, Journalism Online and RRDA. Cash provided by investing activities for the year ended December 31, 2014 included proceeds from the sale of investments and other assets of \$42.7 million, primarily related to facility closures and related property.

Cash Flows From Financing Activities

2016 compared to 2015

Net cash provided by financing activities for the year ended December 31, 2016 was \$ 29.0 million compared to net cash used in financing activities of \$436.5 million for the year ended December 31, 2015. Cash on hand and borrowings under the Company's credit facility were used to pay \$219.8 million and \$200.0 million of senior notes that matured on August 15, 2016 and May 15, 2015, respectively. The Company also repaid \$70.0 million of debt assumed from the Courier acquisition (now part of LSC) during the year ended December 31, 2015. Additionally, the Company repurchased \$725.9 million of aggregate principal of senior notes during the year ended December 31, 2016 using the proceeds from the issuance of senior notes and senior secured term loan B facilities of \$450.0 million and \$725.0 million, respectively, issued by its formerly wholly-owned subsidiaries LSC and Donnelley Financial, which proceeds were received as distributions by the Company immediately prior to the Separation. Additionally, Donnelley Financial issued a senior note with aggregate principal of \$300.0 million which was exchanged by the Company for \$274.4 million in aggregate principal of certain senior notes. See Note 14, *Debt*, for further detail of the various debt transactions.

2015 compared to 2014

Net cash used in financing activities for the year ended December 31, 2015 was \$436.5 million compared to \$605.1 million provided in financing activities in the same period in 2014. Cash on hand and borrowings under the Company's credit facility were used to pay \$200.0 million and \$258.2 million of senior notes that matured in the second quarters of 2015 and 2014, respectively. Additionally, during the year ended December 31, 2014, the Company received proceeds of \$400.0 million from the issuance of senior notes, which were used, along with borrowings under the credit facility, to repurchase \$361.1 million of senior notes. The Company also repaid \$118.4 million of debt and interest assumed from the Consolidated Graphics acquisition during the year ended December 31, 2014.

Dividends

Cash dividends paid to stockholders totaled \$173.0 million, \$212.6 million and \$203.1 million in 2016, 2015 and 2014, respectively. On January 18, 2017, the Board of Directors of the Company declared a quarterly cash dividend of \$0.14 per common share, payable on March 1, 2017 to stockholders of record on February 15, 2017.

The Credit Agreement generally allows annual dividend payments of up to \$60.0 million in aggregate, though additional dividends may be allowed subject to certain conditions. The Company's Board of Directors must review and approve future dividend payments and will determine whether to declare additional dividends based on the Company's operating performance, expected future cash flows, debt levels, liquidity needs and investment opportunities.

Contractual Cash Obligations and Other Commitments and Contingencies

The following table quantifies the Company's future contractual obligations as of December 31, 2016:

	Payments Due In						
	Total	2017	2018	2019	2020	2021	Thereafter
	(in millions)						
Debt (a)	\$ 2,405.6	\$ 8.2	\$ 0.2	\$ 172.2	\$ 350.0	\$ 716.0	\$ 1,159.0
Interest due on debt (b)	989.3	168.0	168.0	156.6	131.9	97.2	267.6
Operating leases (c)	346.8	101.2	77.9	57.5	40.6	26.5	43.1
Multi-employer pension plan withdrawal obligations	81.6	6.6	6.6	6.6	6.6	6.6	48.6
Deferred compensation	80.1	23.9	12.2	8.9	3.8	4.7	26.6
Outsourced services	59.8	32.8	15.3	10.0	1.2	0.3	0.2
Pension and other postretirement benefits plan contributions (d)	33.0	16.5	16.5	—	—	—	—
Incentive compensation	22.8	22.8	—	—	—	—	—
Separation and Distribution Agreement final settlement (e)	78.0	78.0	—	—	—	—	—
Other (f)	44.4	40.4	1.0	1.3	1.2	0.4	0.1
Total as of December 31, 2016	<u>\$ 4,141.4</u>	<u>\$ 498.4</u>	<u>\$ 297.7</u>	<u>\$ 413.1</u>	<u>\$ 535.3</u>	<u>\$ 851.7</u>	<u>\$ 1,545.2</u>

- (a) Excludes unamortized debt issuance costs of \$16.5 million and a discount of \$1.7 million which do not represent contractual commitments with a fixed amount or maturity date.
- (b) Includes scheduled interest payments.
- (c) Includes obligations to landlords.
- (d) Includes the low-end of the estimated range for 2017 and 2018 pension and other postretirement benefits plan contributions and does not include the obligations for subsequent periods, as the Company is unable to reasonably estimate the ultimate amounts.

- (e) Reflects cash payments of \$68.0 million and \$10.0 million to Donnelley Financial and LSC, respectively, as required by a provision in the Separation and Distribution Agreement.
- (f) Represents contractual obligations for purchases of property, plant and equipment of \$30.2 million and employee restructuring-related severance payments of \$7.6 million. Excluded from the table are \$41.8 million of uncertain tax liabilities, as the Company is unable to reasonably estimate the ultimate amount or timing of settlement or other resolution.

Liquidity

The Company maintains cash pooling structures that enable participating international locations to draw on the pools' cash resources to meet local liquidity needs. Foreign cash balances may be loaned from certain cash pools to U.S. operating entities on a temporary basis in order to reduce the Company's short-term borrowing costs or for other purposes.

Cash and cash equivalents were \$317.5 million as of December 31, 2016, an increase of \$28.8 million as compared to December 31, 2015.

The Company's cash balances are held in numerous locations throughout the world, including substantial amounts held outside of the United States. Cash and cash equivalents as of December 31, 2016 included \$49.2 million in the U.S. and \$268.3 million at international locations. The Company's foreign subsidiaries are expected to make a total of approximately \$100.0 million in payments in 2017 and future years in satisfaction of intercompany obligations. The Company has recognized deferred tax liabilities of \$6.7 million as of December 31, 2016 related to local taxes on certain foreign earnings that are not considered to be permanently reinvested. Certain other cash balances of foreign subsidiaries may be subject to U.S. or local country taxes if repatriated to the U.S. In addition, repatriation of some foreign cash balances is further restricted by local laws. Management regularly evaluates whether foreign earnings are expected to be permanently reinvested. This evaluation requires judgment about the future operating and liquidity needs of the Company and its foreign subsidiaries. Changes in economic and business conditions, foreign or U.S. tax laws, or the Company's financial situation could result in changes to these judgments and the need to record additional tax liabilities.

Included in cash and cash equivalents of \$317.5 million at December 31, 2016 were short-term investments in the amount of \$59.2 million, which primarily consist of short-term deposits and money market funds. These investments are with institutions with sound credit ratings and are expected to be highly liquid.

The Company currently holds investments in each LSC and Donnelley Financial common stock with a fair value of approximately \$328.7 million as of December 31, 2016. The Company currently intends to use its retained interest in LSC's and Donnelley Financial's shares, or proceeds therefrom, to reduce debt. The Company expects to dispose of all of the shares of common stock retained in LSC and Donnelley Financial within a year of the Distribution.

The Company has a senior secured revolving Credit Agreement which was amended and restated effective September 30, 2016 to decrease the aggregate revolving commitments of the lenders from \$1.5 billion to \$800.0 million and to extend the expiration date from September 9, 2019 to September 30, 2021. The Credit Agreement also includes an option for the Company to increase commitments under the Revolving Facility or add term loans in an aggregate amount of up to \$100.0 million, at any time prior to the maturity date, subject to the satisfaction of certain conditions set forth in the Credit Agreement.

Cash on hand and borrowings under the then-existing credit agreement were used to pay the \$219.8 million and \$200.0 million of senior notes that matured on August 15, 2016 and May 15, 2015, respectively.

Borrowings under the Credit Agreement bear interest at a base or LIBOR plus an applicable margin determined at the time of the borrowing. In addition, the Company pays facility commitment fees which fluctuate dependent on the Credit Agreement's Leverage Ratio. The Credit Agreement is used for general corporate purposes, including acquisitions and letters of credit. The Company's obligations under the Credit Agreement are guaranteed by its material and certain other domestic subsidiaries and are secured by a pledge of the equity interests of certain subsidiaries, including most of its domestic subsidiaries, and a security interest in substantially all of the domestic current assets and mortgages of certain domestic real property of the Company.

The Credit Agreement is subject to a number of covenants, including a maximum Leverage Ratio, as defined and calculated pursuant to the Credit Agreement, that, in part, restrict the Company's ability to incur additional indebtedness, create liens, engage in mergers and consolidations, make restricted payments and dispose of certain assets.

There were \$185.0 million of borrowings under the Credit Agreement as of December 31, 2016. Based on the Company's results of operations for the year ended December 31, 2016 and existing debt, the Company would have had the ability to utilize \$402.6 million of the \$800.0 million Credit Agreement and not have been in violation of the terms of the agreement. The current availability under the Credit Agreement and net available liquidity as of December 31, 2016 is shown in the table below:

	December 31, 2016
	(in millions)
Availability	
Committed Credit Agreement	\$ 800.0
Availability reduction from covenants	212.4
	<u>\$ 587.6</u>
Usage	
Borrowings under the Credit Agreement	185.0
Impact on availability related to outstanding letters of credit	—
	<u>\$ 185.0</u>
Current availability at December 31, 2016	\$ 402.6
Cash	317.5
Net Available Liquidity (a)	<u>\$ 720.1</u>

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

The Company was in compliance with its debt covenants as of December 31, 2016, and expects to remain in compliance based on management's estimates of operating and financial results for 2017 and the foreseeable future. However, declines in market and economic conditions or demand for certain of the Company's products and services could impact the Company's ability to remain in compliance with its debt covenants in future periods. As of December 31, 2016, the Company met all the conditions required to borrow under the Credit Agreement and management expects the Company to continue to meet the applicable borrowing conditions.

The failure of a financial institution supporting the Credit Agreement would reduce the size of the Company's committed facility unless a replacement institution was added. Currently, the Credit Agreement is supported by sixteen U.S. and international financial institutions.

As of December 31, 2016, the Company had \$77.8 million in outstanding letters of credit and bank guarantees, of which \$57.7 million were issued under the Credit Agreement. The letters of credit issued under the Credit Agreement did not reduce availability under the Credit Agreement as of December 31, 2016, as the amounts issued were less than the reduction in availability from the Leverage Ratio covenant. As of December 31, 2016, the Company also had \$140.4 million in other uncommitted credit facilities, primarily outside the U.S. (the "Other Facilities"). As of December 31, 2016, bank acceptance drafts, letters of credit and guarantees of \$67.8 million were issued, and reduced availability, under the Company's Other Facilities. Total borrowings under the Credit Agreement and the Other Facilities (the "Combined Facilities") were \$192.5 million as of December 31, 2016.

On September 14, 2016, Moody's Investor Services ("Moody's") downgraded the Company's long-term corporate credit rating from Ba3 to B1 and changed the credit ratings outlook from developing to stable. Moody's also downgraded its rating on the Company's senior unsecured debt and Credit Agreement from B1 to B2 and Baa3 to Ba1, respectively. On October 6, 2016, S&P downgraded the Company's corporate credit rating from BB- to B+ and changed the credit ratings outlook from Credit Watch negative to Stable. S&P also downgraded its ratings on the Company's senior unsecured debt and Credit Agreement from BB- to B+ and BB+ to BB, respectively. The Company's current S&P and Moody's credit ratings are shown in the table below:

	S&P	Moody's
Long-term corporate credit rating	B+, Stable	B1, Stable
Senior unsecured debt	B+	B2
Credit Agreement	BB	Ba1

As a result of previous downgrades by Moody's and S&P, the interest rate on the Company's 11.25% senior notes due February 1, 2019 was 13.25% and 12.75% as of December 31, 2016 and 2015, respectively. As a result of the Moody's downgrade on February 2, 2016, the interest rate increased from 12.75% to 13.0% in February 2016. As a result of the S&P downgrade on October 6, 2016, the interest rate increased from 13.0% to 13.25% in October 2016. The maximum interest rate on these notes is 13.25%. The applicable margin used in the calculation of interest on borrowings under the Credit Agreement and rate for the related facility commitment fees fluctuate dependent on the Credit Agreement's Leverage Ratio. The terms and conditions of future borrowings may also be impacted as a result of ratings downgrades.

Acquisitions and Dispositions

During the year ended December 31, 2016, the Company paid \$48.1 million, net of cash acquired, for the acquisition of Precision Dialogue. The Company financed the cash portion of the acquisition with a combination of cash on hand and borrowings under the credit facility.

During the year ended December 31, 2015, the Company paid \$118.2 million, net of cash acquired, substantially all for the acquisition of Courier. The Company financed the cash portion of the Courier acquisition with a combination of cash on hand and borrowings under the credit facility.

During the year ended December 31, 2014, the Company paid \$380.8 million of total cash purchase prices, net of cash acquired, substantially all for the acquisitions of Consolidated Graphics, Esselte and MultiCorpora. The Company financed the cash portion of these acquisitions with a combination of cash on hand, including net proceeds from the \$350.0 million 6.50% senior note issuance on November 12, 2013, and borrowings under the credit facility.

During the year ended December 31, 2014, the Company sold the assets and liabilities of Journalism Online, a provider of online subscription management services, for net proceeds of \$10.5 million, of which \$9.5 million was received as of December 31, 2014. The Company also sold the assets and liabilities of GRES, its commercial and residential real estate advisory services, for net proceeds of \$1.8 million.

Debt Issuances

On September 30, 2016, the Company's then wholly-owned subsidiary Donnelley Financial issued senior notes and incurred a senior secured term loan B facility with total aggregate principals of \$300.0 million and \$350.0 million, respectively. Additionally on September 30, 2016, the Company's then wholly-owned subsidiary LSC issued senior notes and incurred a senior secured term loan B facility with total aggregate principal of \$450.0 million and \$375.0 million, respectively. All of the related net proceeds were distributed to the Company in connection with the Separation. After the Separation, RR Donnelley has no obligations as it relates to these senior notes, senior secured term loan B facilities or any other LSC or Donnelley Financial indebtedness.

On March 20, 2014, the Company issued \$400.0 million of 6.00% senior notes due April 1, 2024. Interest on the notes is payable semi-annually on April 1 and October 1, and commenced on October 1, 2014. The net proceeds from the offering along with borrowings under the credit facility were used to repurchase \$211.1 million of the 8.25% senior notes due March 15, 2019, \$100.0 million of the 7.25% senior notes due May 15, 2018 and \$50.0 million of the 7.625% senior notes due June 15, 2020.

Risk Management

The Company is exposed to interest rate risk on its variable debt and price risk on its fixed-rate debt. At December 31, 2016, the Company's exposure to rate fluctuations on variable-interest borrowings was \$192.1 million. Approximately 92% of the Company's outstanding term debt was comprised of fixed-rate debt as of December 31, 2016.

The Company assesses 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 December 31, 2016 and 2015 by approximately \$69.6 million and \$99.4 million, respectively.

The Company is exposed to the impact of foreign currency fluctuations in certain countries in which it operates. The exposure to foreign currency movements is limited in many countries because the operating revenues and expenses of its various subsidiaries and business units are substantially in the local currency of the country in which they operate. To the extent that borrowings, sales, purchases, revenues, expenses or other transactions are not in the local currency of the subsidiary, the Company is exposed to currency risk and may enter into foreign exchange spot and forward contracts to hedge the currency risk. As of December 31, 2016 and 2015, the aggregate notional amount of outstanding foreign exchange forward contracts was approximately \$172.2 million and \$268.4 million, respectively (see Note 15, *Derivatives*, to the Consolidated Financial Statements). Net unrealized gains from these foreign exchange forward contracts were \$0.2 million and \$0.3 million at December 31, 2016 and 2015, respectively. The Company does not use derivative financial instruments for trading or speculative purposes.

OTHER INFORMATION

Environmental, Health and Safety

For a discussion of certain environmental, health and safety issues involving the Company, see Note 11, *Commitments and Contingencies*, to the Consolidated Financial Statements.

Litigation and Contingent Liabilities

For a discussion of certain litigation involving the Company, see Note 11, *Commitments and Contingencies*, to the Consolidated Financial Statements.

New Accounting Pronouncements

Recently issued accounting standards and their estimated effect on the Company's consolidated financial statements are also described in Note 23, *New Accounting Pronouncements*, to the Consolidated Financial Statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market Risk

The Company is exposed to interest rate risk on its variable-rate debt, price risk on its fixed-rate debt and the impact of foreign currency fluctuations in certain countries in which it operates. The Company discusses risk management in various places throughout this document, including discussions in Item 7 of Part II of this Annual Report on Form 10-K concerning Liquidity and Capital Resources and in Note 15, *Derivatives*, to Consolidated Financial Statements.

Credit Risk

The Company is exposed to credit risk on accounts receivable balances. This risk is mitigated due to the Company's large, diverse customer base, dispersed over various geographic regions and industrial sectors. No single customer comprised more than 10% of the Company's consolidated net sales in 2016, 2015 or 2014. The Company maintains provisions for potential credit losses and such losses to date have normally been within the Company's expectations. The Company evaluates the solvency of its customers on an ongoing basis to determine if additional allowances for doubtful accounts receivable need to be recorded. Significant economic disruptions or a slowdown in the economy could result in significant additional charges.

Commodities

The primary raw materials used by the Company are paper and ink. To reduce price risk caused by market fluctuations, the Company has incorporated price adjustment clauses in certain sales contracts. Management believes a hypothetical 10% change in the price of paper and other raw materials would not have a significant effect on the Company's consolidated annual results of operations or cash flows because these costs are generally passed through to its customers.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial information required by Item 8 is contained in Item 15 of Part IV of this Annual Report on Form 10-K.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

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 December 31, 2016, 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 December 31, 2016 were effective in ensuring information required to be disclosed in the Company's 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 management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting

There were no changes in the Company's 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 December 31, 2016 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Report of Management on Internal Control Over Financial Reporting

The management of the Company, including the Company's Chief Executive Officer and Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934).

Management of the Company, including the Company's Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2016. Management based this assessment on criteria for effective internal control over financial reporting described in the "Internal Control—Integrated Framework (2013)" issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on this assessment, management determined that, as of December 31, 2016, the Company maintained effective internal control over financial reporting.

Deloitte & Touche LLP, an independent registered public accounting firm, who audited the consolidated financial statements of the Company included in this Annual Report on Form 10-K, has also audited the effectiveness of the Company's internal control over financial reporting as stated in its report appearing below.

February 28, 2017

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
R.R. Donnelley & Sons Company
Chicago, Illinois

We have audited the internal control over financial reporting of R.R. Donnelley & Sons Company and subsidiaries (the "Company") as of December 31, 2016, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2016 of the Company and our report dated February 28, 2017 expressed an unqualified opinion on those financial statements.

/s/ DELOITTE & TOUCHE LLP
Chicago, Illinois
February 28, 2017

ITEM 9B. OTHER INFORMATION

None.

PART III**ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF R.R. DONNELLEY & SONS COMPANY AND CORPORATE GOVERNANCE**

Information regarding directors and executive officers of the Company is incorporated herein by reference to the descriptions under “Proposal 1: Election of Directors,” “The Board’s Committees and their Functions” and “Section 16(a) Beneficial Ownership Reporting Compliance” of the Company’s Proxy Statement for the Annual Meeting of Stockholders scheduled to be held May 19, 2017 (the “2017 Proxy Statement”). See also the information with respect to the Company’s executive officers at the end of Part I of this Annual Report on Form 10-K under the caption “*Executive Officers of R.R. Donnelley & Sons Company*.”

The Company has adopted a policy statement entitled *Code of Ethics* that applies to its chief executive officer and senior financial officers. In the event that an amendment to, or a waiver from, a provision of the *Code of Ethics* is made or granted, the Company intends to post such information on its web site, www.rdonnelley.com. A copy of the Company’s *Code of Ethics* has been filed as Exhibit 14 to the Company’s Annual Report on Form 10-K for the fiscal year ended December 31, 2013.

ITEM 11. EXECUTIVE COMPENSATION

Information regarding executive and director compensation is incorporated by reference to the material under the captions “Compensation Discussion and Analysis,” “Human Resources Committee Report,” “Executive Compensation,” “Potential Payments Upon Termination or Change in Control,” and “Director Compensation” of the 2017 Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information regarding security ownership of certain beneficial owners and management is incorporated herein by reference to the material under the heading “Stock Ownership” of the 2017 Proxy Statement.

Equity Compensation Plan Information

Information as of December 31, 2016 concerning compensation plans under which RR Donnelley’s equity securities are authorized for issuance was as follows:

Equity Compensation Plan Information

Plan Category	Number of Securities to Be Issued upon Exercise of Outstanding Options, Warrants and Rights (in thousands) (1)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b) (2)	Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column (1)) (in thousands) (3)
Equity compensation plans approved by security holders (a)	2,541.0	\$ 38.10	1,119.8 (c)

(a) Includes 989,542 shares issuable upon the vesting of restricted stock units.

(b) Restricted stock units were excluded when determining the weighted-average exercise price of outstanding options, warrants and rights.

(c) All of these shares are available for issuance under the 2012 Performance Incentive Plan. The 2012 Performance Incentive Plan allows grants in the form of cash or bonus awards, stock options, stock appreciation rights, restricted stock, stock units or combinations thereof. The maximum number of shares of common stock that may be granted with respect to bonus awards, including performance awards or fixed awards in the form of restricted stock or other form, is 10,000,000 in the aggregate, or 3,333,333 adjusted for stock split, of which 1,119,847 remain available for issuance.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Information regarding certain relationships and related transactions and director independence is incorporated herein by reference to the material under the heading “Certain Transactions,” “The Board’s Committees and Their Functions” and “Corporate Governance—Independence of Directors” of the 2017 Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information regarding principal accounting fees and services is incorporated herein by reference to the material under the heading “The Company’s Independent Registered Public Accounting Firm” of the 2017 Proxy Statement.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) 1. Financial Statements

The financial statements listed in the accompanying index (page F-1) to the financial statements are filed as part of this Annual Report on Form 10-K.

(b) Exhibits

The exhibits listed on the accompanying index (pages E-1 through E-3) are filed as part of this Annual Report on Form 10-K.

(c) Financial Statement Schedules omitted

Certain schedules have been omitted because the required information is included in the consolidated financial statements and notes thereto or because they are not applicable or not required.

ITEM 15(a). INDEX TO FINANCIAL STATEMENTS

	<u>Page</u>
<u>Consolidated Statements of Operations for each of the three years in the period ended December 31, 2016</u>	F -2
<u>Consolidated Statements of Comprehensive Income for each of the three years in the period ended December 31, 2016</u>	F -3
<u>Consolidated Balance Sheets as of December 31, 2016 and 2015</u>	F -4
<u>Consolidated Statements of Cash Flows for each of the three years in the period ended December 31, 2016</u>	F -5
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R.R. DONNELLEY & SONS COMPANY AND SUBSIDIARIES (“RR DONNELLEY”)

CONSOLIDATED STATEMENTS OF OPERATIONS

(in millions, except per share data)

	Year Ended December 31,		
	2016	2015	2014
Products net sales	\$ 5,288.1	\$ 5,312.1	\$ 5,566.2
Services net sales	1,607.6	1,625.2	1,606.5
Total net sales	6,895.7	6,937.3	7,172.7
Products cost of sales (exclusive of depreciation and amortization)	4,164.4	4,178.9	4,362.3
Services cost of sales (exclusive of depreciation and amortization)	1,354.5	1,353.3	1,336.5
Total cost of sales	5,518.9	5,532.2	5,698.8
Products gross profit	1,123.7	1,133.2	1,203.9
Services gross profit	253.1	271.9	270.0
Total gross profit	1,376.8	1,405.1	1,473.9
Selling, general and administrative expenses (exclusive of depreciation and amortization)	900.8	872.6	933.1
Restructuring, impairment and other charges-net (Note 4)	584.3	62.7	72.3
Depreciation and amortization	204.2	232.5	254.6
Other operating income	(11.9)	—	—
Income (loss) from operations	(300.6)	237.3	213.9
Interest expense-net (Note 14)	198.7	204.1	211.2
Investment and other (income) expense-net	(2.1)	43.9	22.1
Loss on debt extinguishment	—	—	77.1
Loss before income taxes	(497.2)	(10.7)	(96.5)
Income tax (benefit) expense (Note 13)	(12.3)	21.0	(56.2)
Net loss from continuing operations	(484.9)	(31.7)	(40.3)
Net (loss) earnings from discontinued operations, net of income taxes	(9.7)	170.1	161.1
Net (loss) earnings	(494.6)	138.4	120.8
Less: Income (loss) attributable to noncontrolling interests	1.3	(12.7)	3.4
Net (loss) earnings attributable to RR Donnelley common stockholders	\$ (495.9)	\$ 151.1	\$ 117.4
Basic net (loss) earnings per share attributable to RR Donnelley common stockholders			
(Note 16) (1):			
Continuing operations	\$ (6.95)	\$ (0.28)	\$ (0.66)
Discontinued operations	\$ (0.14)	\$ 2.48	\$ 2.43
Net (loss) earnings attributable to RR Donnelley stockholders	\$ (7.09)	\$ 2.20	\$ 1.77
Diluted net (loss) earnings per share attributable to RR Donnelley common stockholders			
(Note 16) (1):			
Continuing operations	\$ (6.95)	\$ (0.28)	\$ (0.66)
Discontinued operations	\$ (0.14)	\$ 2.48	\$ 2.43
Net (loss) earnings attributable to RR Donnelley stockholders	\$ (7.09)	\$ 2.20	\$ 1.77
Weighted average number of common shares outstanding (1)			
Basic	70.0	68.5	66.2
Diluted	70.0	68.5	66.2

(1) All earnings per share amounts and adjusted weighted average common shares outstanding for all periods reflect RR Donnelley’s 1-for-3 reverse stock split, which was effective October 1, 2016.

See accompanying Notes to Consolidated Financial Statements.

R.R. DONNELLEY & SONS COMPANY AND SUBSIDIARIES (“RR DONNELLEY”)

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(in millions)

	Year Ended December 31,		
	2016	2015	2014
Net (loss) earnings	\$ (494.6)	\$ 138.4	\$ 120.8
Other comprehensive (loss) income, net of tax (Note 17):			
Translation adjustments	(38.3)	(55.7)	(45.2)
Adjustment for net periodic pension and other postretirement benefits plan cost	11.2	34.8	(240.9)
Change in fair value of available-for-sale securities	119.3	—	—
Change in fair value of derivatives	—	0.1	0.1
Other comprehensive (loss) income	92.2	(20.8)	(286.0)
Comprehensive (loss) income	(402.4)	117.6	(165.2)
Less: comprehensive (loss) income attributable to noncontrolling interests	0.8	(13.9)	2.9
Comprehensive (loss) income attributable to RR Donnelley common stockholders	\$ (403.2)	\$ 131.5	\$ (168.1)

See accompanying Notes to Consolidated Financial Statements.

R.R. DONNELLEY & SONS COMPANY AND SUBSIDIARIES (“RR DONNELLEY”)

CONSOLIDATED BALANCE SHEETS

(in millions, except per share data)

	December 31,	
	2016	2015
ASSETS		
Cash and cash equivalents	\$ 317.5	\$ 288.7
Receivables, less allowances for doubtful accounts of \$35.9 in 2016 (2015 - \$26.0) (Note 6)	1,354.4	1,237.2
Inventories (Note 7)	379.6	352.8
Prepaid expenses and other current assets	136.7	86.8
Investment in LSC and Donnelley Financial (Note 2)	328.7	—
Current assets held for disposition (Note 2)	—	1,136.2
Total current assets	2,516.9	3,101.7
Property, plant and equipment-net (Note 8)	650.3	696.6
Goodwill (Note 5)	602.0	1,085.7
Other intangible assets-net (Note 5)	171.9	221.0
Deferred income taxes (Note 13)	108.9	93.1
Other noncurrent assets	234.7	229.1
Noncurrent assets held for disposition (Note 2)	—	1,852.1
Total assets	\$ 4,284.7	\$ 7,279.3
LIABILITIES		
Accounts payable	\$ 1,001.2	\$ 993.9
Accrued liabilities (Note 10)	541.7	462.1
Short-term and current portion of long-term debt (Note 14)	8.2	231.9
Current liabilities held for disposition (Note 2)	—	649.4
Total current liabilities	1,551.1	2,337.3
Long-term debt (Note 14)	2,379.2	2,186.8
Pension liabilities (Note 12)	119.4	130.2
Other postretirement benefits plan liabilities (Note 12)	134.1	167.6
Other noncurrent liabilities	193.1	217.9
Noncurrent liabilities held for disposition (Note 2)	—	1,542.9
Total liabilities	4,376.9	6,582.7
Commitments and Contingencies (Note 11)		
EQUITY		
RR Donnelley stockholders' equity		
Preferred stock, \$1.00 par value		
Authorized: 2.0 shares; Issued: None	—	—
Common stock, \$0.01 par value in 2016 (2015 - \$1.25)		
Authorized: 165.0 shares;		
Issued: 89.0 shares in 2016 and 2015	0.9	111.2
Additional paid-in-capital	3,468.5	3,386.8
Accumulated deficit	(2,155.4)	(620.6)
Accumulated other comprehensive loss	(55.7)	(793.2)
Treasury stock, at cost, 19.1 shares in 2016 (2015 - 19.4 shares)	(1,364.0)	(1,401.5)
Total RR Donnelley stockholders' equity	\$ (105.7)	\$ 682.7
Noncontrolling interests	13.5	13.9
Total equity	(92.2)	696.6
Total liabilities and equity	\$ 4,284.7	\$ 7,279.3

See accompanying Notes to Consolidated Financial Statements.

R.R. DONNELLEY & SONS COMPANY AND SUBSIDIARIES (“RR DONNELLEY”)

CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)

	Year Ended December 31,		
	2016	2015	2014
OPERATING ACTIVITIES			
Net (loss) earnings	\$ (494.6)	\$ 138.4	\$ 120.8
Adjustments to reconcile net earnings (loss) to net cash provided by operating activities:			
Impairment charges	558.3	36.5	47.3
Depreciation and amortization	363.2	454.0	474.0
Provision for doubtful accounts receivable	22.7	15.4	16.9
Share-based compensation	12.9	17.3	17.7
Deferred income taxes	(57.6)	(36.1)	(87.0)
Changes in uncertain tax positions	(3.6)	1.3	(3.0)
Loss (gain) on investments and other assets - net	(11.4)	14.3	(3.9)
Loss related to Venezuela currency remeasurement - net	—	30.3	18.4
Loss on debt extinguishment	96.1	—	77.1
Net pension and other postretirement benefits plan income	(59.8)	(44.5)	(48.7)
Net loss on pension and other postretirement benefits plan settlements and curtailments	79.3	—	95.7
Gain on bargain purchase	—	—	(9.5)
Other	19.0	22.1	44.0
Changes in operating assets and liabilities - net of acquisitions:			
Accounts receivable - net	(226.6)	(17.6)	(49.6)
Inventories	(37.9)	16.0	(14.1)
Prepaid expenses and other current assets	2.7	26.3	(10.8)
Accounts payable	(19.4)	61.0	81.4
Income taxes payable and receivable	(53.7)	46.9	(3.0)
Accrued liabilities and other	(41.9)	(104.0)	0.9
Pension and other postretirement benefits plan contributions	(22.5)	(25.6)	(41.9)
Net cash provided by operating activities	<u>125.2</u>	<u>652.0</u>	<u>722.7</u>
INVESTING ACTIVITIES			
Capital expenditures	(172.1)	(207.6)	(223.6)
Acquisitions of businesses, net of cash acquired	(48.1)	(118.2)	(380.8)
Disposition of businesses	13.7	0.6	(1.6)
Proceeds from sales of investments and other assets	3.8	27.1	42.7
Transfers (to)/from restricted cash	(4.3)	(0.5)	(12.3)
Other investing activities	(3.5)	(18.5)	(1.6)
Net cash used in investing activities	<u>(210.5)</u>	<u>(317.1)</u>	<u>(577.2)</u>
FINANCING ACTIVITIES			
Proceeds from issuance of long-term debt	1,164.0	—	400.0
Net change in short-term debt	(17.5)	11.9	(0.4)
Payments of current maturities and long-term debt	(1,013.2)	(272.7)	(811.5)
Payments on credit facility borrowings	(665.0)	—	—
Proceeds from credit facility borrowings	850.0	—	—
Debt issuance costs	(37.5)	—	(13.7)
Dividends paid	(173.0)	(212.6)	(203.1)
Proceeds (payments) to settle forward contracts	—	33.3	24.0
Net transfer of cash and cash equivalents to LSC and Donnelley Financial	(84.4)	—	—
Other financing activities	5.6	3.6	(0.4)
Net cash (used in) provided by financing activities	<u>29.0</u>	<u>(436.5)</u>	<u>(605.1)</u>
Effect of exchange rate on cash and cash equivalents	(15.8)	(36.7)	(40.9)
Net (decrease) increase in cash and cash equivalents	(72.1)	(138.3)	(500.5)
Cash and cash equivalents at beginning of year	389.6	527.9	1,028.4
Cash and cash equivalents at end of period	<u>\$ 317.5</u>	<u>\$ 389.6</u>	<u>\$ 527.9</u>
Supplemental non-cash disclosure:			
Assumption of warehousing equipment related to customer contract	\$ 8.8	\$ —	\$ —
Debt-for-debt exchange, including debt issuance costs of \$5.5 million	300.0	—	—
Issuance of 2.7 million shares of RR Donnelley stock for acquisitions of businesses	—	155.2	—
Settlement of accounts receivable for acquisition of a business	—	8.6	—
Issuances of 5.7 million shares of RR Donnelley stock for acquisitions of businesses	—	—	319.0

See accompanying Notes to Consolidated Financial Statements.

R.R. DONNELLEY & SONS COMPANY AND SUBSIDIARIES (“RR DONNELLEY”)

CONSOLIDATED STATEMENTS OF STOCKHOLDERS’ EQUITY
(in millions)

	Common Stock		Additional Paid-in-Capital	Treasury Stock		Retained Earnings (Accumulated Deficit)	Accumulated Other Comprehensive Loss	Total RR Donnelley's Stockholders' Equity	Noncontrolling Interests	Total Equity
	Shares	Amount		Shares	Amount					
Balance at January 1, 2014	<u>81.0</u>	<u>\$ 101.2</u>	<u>\$ 3,004.9</u>	<u>(20.4)</u>	<u>\$ (1,512.8)</u>	<u>\$ (473.4)</u>	<u>\$ (488.1)</u>	<u>\$ 631.8</u>	<u>\$ 21.9</u>	<u>\$ 653.7</u>
Net earnings						117.4		117.4	3.4	120.8
Other comprehensive income							(285.5)	(285.5)	(0.5)	(286.0)
Share-based compensation			17.7					17.7		17.7
Issuances of common stock	5.3	6.7	294.0					300.7		300.7
Issuances of treasury stock			(14.3)	0.3	32.6			18.3		18.3
Issuance of share-based awards, net of withholdings and other			(45.0)	0.3	41.5			(3.5)		(3.5)
Cash dividends paid						(203.1)		(203.1)		(203.1)
Noncontrolling interests in acquired business								—	2.7	2.7
Distributions to noncontrolling interests								—	(0.9)	(0.9)
Balance at December 31, 2014	<u>86.3</u>	<u>\$ 107.9</u>	<u>\$ 3,257.3</u>	<u>(19.7)</u>	<u>\$ (1,438.7)</u>	<u>\$ (559.1)</u>	<u>\$ (773.6)</u>	<u>\$ 593.8</u>	<u>\$ 26.6</u>	<u>\$ 620.4</u>
Net earnings (loss)						151.1		151.1	(12.7)	138.4
Other comprehensive loss							(19.6)	(19.6)	(1.2)	(20.8)
Share-based compensation			17.3					17.3		17.3
Issuances of common stock	2.7	3.3	150.9					154.2		154.2
Issuances of treasury stock			(1.2)	—	2.2			1.0		1.0
Issuance of share-based awards, net of withholdings and other			(37.5)	0.3	35.0			(2.5)		(2.5)
Cash dividends paid						(212.6)		(212.6)		(212.6)
Noncontrolling interests in acquired business								—	4.6	4.6
Noncontrolling interests in disposed business								—	(2.4)	(2.4)
Distributions to noncontrolling interests								—	(1.0)	(1.0)
Balance at December 31, 2015	<u>89.0</u>	<u>\$ 111.2</u>	<u>\$ 3,386.8</u>	<u>(19.4)</u>	<u>\$ (1,401.5)</u>	<u>\$ (620.6)</u>	<u>\$ (793.2)</u>	<u>\$ 682.7</u>	<u>\$ 13.9</u>	<u>\$ 696.6</u>
Net (loss) earnings						(495.9)		(495.9)	1.3	(494.6)
Other comprehensive loss							92.7	92.7	(0.5)	92.2
Share-based compensation			12.9					12.9		12.9
Par value amendment		(110.3)	110.3							-
Issuance of share-based awards, net of withholdings and other			(41.5)	0.3	37.5			(4.0)		(4.0)
Cash dividends paid						(173.0)		(173.0)		(173.0)
Distribution of LSC and Donnelley Financial						(865.9)	644.8	(221.1)		(221.1)
Distributions to noncontrolling interests								—	(1.2)	(1.2)
Balance at December 31, 2016	<u>89.0</u>	<u>\$ 0.9</u>	<u>\$ 3,468.5</u>	<u>(19.1)</u>	<u>\$ (1,364.0)</u>	<u>\$ (2,155.4)</u>	<u>\$ (55.7)</u>	<u>\$ (105.7)</u>	<u>\$ 13.5</u>	<u>\$ (92.2)</u>

See accompanying Notes to Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)

Note 1. Basis of Presentation and Summary of Significant Accounting Policies

Basis of Presentation —The accompanying consolidated financial statements include the accounts of R.R. Donnelley & Sons Company and its subsidiaries (the “Company” or “RR Donnelley”) and have been prepared in accordance with accounting principles generally accepted in the United States of America (“GAAP”). All intercompany transactions have been eliminated in consolidation. The accounts of businesses acquired during 2016, 2015, and 2014 are included in the consolidated financial statements from the dates of acquisition. During the fourth quarter of 2016, management realigned the Company’s reportable segments to reflect the impact of the Spinoff Transactions described below and to reflect the management reporting structure of the remaining business and the manner in which the chief operating decision maker regularly assesses information for decision-making purposes. All prior year amounts have been reclassified to conform to the Company’s current reporting structure. See Note 20, *Segment Information*, for additional details regarding the Company’s current reportable segments.

Spinoff Transactions

On October 1, 2016, the Company completed the separation of its financial communications and data services business (“Donnelley Financial Solutions, Inc.” or “Donnelley Financial”) and the publishing and retail-centric print services and office products business (“LSC Communications, Inc.” or “LSC”) into two separate publicly-traded companies (the “Separation”). The Company completed the tax free distribution of approximately 26.2 million shares, or 80.75%, of the outstanding common stock of Donnelley Financial and 26.2 million shares, or 80.75%, of the outstanding common stock of LSC, to the Company’s stockholders (the “Distribution”). The Distribution was made to the Company’s stockholders of record as of the close of business on September 23, 2016, who received one share of Donnelley Financial common stock and one share of LSC common stock for every eight shares of RR Donnelley common stock held as of the record date. As a result of the Distribution, Donnelley Financial and LSC are now independent public companies trading under the symbols “DFIN” and “LKSD”, respectively, on the New York Stock Exchange. Immediately following the Distribution, the Company held 6.2 million shares of Donnelley Financial Solutions common stock and 6.2 million shares of LSC common stock. The Company accounts for these investments as available-for-sale equity securities.

Beginning in the fourth quarter of 2016, the financial results of Donnelley Financial and LSC for periods prior to the Distribution have been reflected in the Company’s consolidated financial statements as discontinued operations. Sales from RR Donnelley to Donnelley Financial and LSC previously eliminated in consolidation have been recast and are now shown as external sales of RR Donnelley within the financial results of continuing operations. See Note 2, *Discontinued Operations*, for additional information.

Reverse Stock Split

Immediately following the Distribution on October 1, 2016, the Company effected a one for three reverse stock split for RR Donnelley common stock (the “Reverse Stock Split”). The Reverse Stock Split was approved by the Company’s Board of Directors on September 14, 2016 and previously approved by the Company’s stockholders at the annual meeting on May 19, 2016.

As a result of the Reverse Stock Split, the number of issued and outstanding and treasury shares of the Company’s common stock were reduced proportionally based on the Reverse Stock Split ratio of one share for every three shares of common stock held before the Reverse Stock Split. No fractional shares of RR Donnelley common stock were distributed to stockholders in connection with the Reverse Stock Split, but instead, all fractional shares were aggregated by the Company’s transfer agent and sold at the prevailing price in the open-market on October 6, 2016. The total number of aggregated shares of the Company’s common stock of 3,088 shares was sold for total net cash proceeds of less than \$0.1 million which was then paid to stockholders in an amount equal to their respective pro rata share of the total net cash proceeds. All references in these consolidated financial statements to the number of shares of common stock and per share amounts have been retroactively adjusted to give effect to the Reverse Stock Split.

Nature of Operations —RR Donnelley is a global, integrated communications provider enabling organizations to create, manage, deliver and optimize their multichannel marketing and business communications. The Company has a flexible and comprehensive portfolio of integrated communications solutions that allows its customers to engage audiences, reduce costs and drive revenues. RR Donnelley’s innovative content management offering, production platform, logistics services, supply chain management, outsourcing capabilities and customized consultative expertise assist its customers in the delivery of integrated messages across multiple media to highly targeted audiences at optimal times for customers in virtually every private and public sector.

Use of Estimates —The preparation of consolidated financial statements, in conformity with GAAP, requires the extensive use of management’s estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from these estimates. Estimates are used when accounting for items and matters including, but not limited to, allowance for uncollectible accounts receivable, inventory obsolescence, asset valuations and useful lives, employee benefits, self-insurance reserves, taxes, restructuring and other provisions and contingencies.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Foreign Operations—Assets and liabilities denominated in foreign currencies are translated into U.S. dollars at the exchange rates existing at the respective balance sheet dates. Income and expense items are translated at the average rates during the respective periods. Translation adjustments resulting from fluctuations in exchange rates are recorded as a separate component of other comprehensive income (loss) while transaction gains and losses are recorded in net earnings. Deferred taxes are not provided on cumulative foreign currency translation adjustments when the Company expects foreign earnings to be permanently reinvested.

Fair Value Measurements—Certain assets and liabilities are required to be recorded at fair value on a recurring basis. Fair value is determined based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. The Company records the fair value of its foreign exchange forward contracts, available-for-sale securities, interest rate swaps, pension plan assets and other postretirement plan assets on a recurring basis. Assets measured at fair value on a nonrecurring basis include long-lived assets held and used, long-lived assets held for sale, goodwill and other intangible assets. The fair value of cash and cash equivalents, accounts receivable, short-term debt and accounts payable approximate their carrying values. The three-tier value hierarchy, which prioritizes valuation methodologies based on the reliability of the inputs, is:

Level 1 — Valuations based on quoted prices for identical assets and liabilities in active markets.

Level 2 — Valuations based on observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.

Level 3 — Valuations based on unobservable inputs reflecting the Company's own assumptions, consistent with reasonably available assumptions made by other market participants.

Revenue Recognition—The Company recognizes revenue for the majority of its products upon transfer of title and the passage of the risk of ownership, which is generally upon shipment to the customer. Contracts generally specify F.O.B. shipping point terms. Under agreements with certain customers, custom products may be stored by the Company for future delivery. In these situations, the Company may also receive a logistics or warehouse management fee for the services it provides. In certain of these cases, delivery and billing schedules are outlined in the customer agreement and product revenue is recognized when manufacturing is complete, title and risk of ownership transfer to the customer, and there is a reasonable assurance as to collectability. Because the majority of products are customized, product returns are not significant; however, the Company accrues for the estimated amount of customer credits at the time of sale.

Revenue from services is recognized as services are performed. For the Company's logistics operations, whose operations include the delivery of printed material and other products, the Company recognizes revenue upon completion of the delivery of services. Within the Company's business process outsourcing operations, the Company provides various outsourcing services. Depending on the nature of the service performed, revenue is recognized for outsourcing services either as services are rendered or upon completion of the service. Revenues related to the Company's digital and creative solutions operations, which include digital content management, photography, color services and page production, are recognized in accordance with the terms of the contract, typically upon completion of the performed service and acceptance by the customer.

The Company records deferred revenue in situations where amounts are invoiced but the revenue recognition criteria outlined above are not met. Such revenue is recognized when all criteria are subsequently met.

Certain revenues earned by the Company require judgment to determine if revenue should be recorded gross, as a principal, or net of related costs, as an agent. Billings for third-party shipping and handling costs as well as certain postage costs, primarily in the Company's logistics operations, and out-of-pocket expenses are recorded gross. In the Company's Global Turnkey Solutions and Sourcing operations, contracts are evaluated using various criteria to determine if revenue for components and other materials should be recognized on a gross or net basis. In general, these revenues are recognized on a gross basis if the Company has control over selecting vendors and pricing, is the primary obligor in the arrangement, bears all credit risk and bears the risk of loss for inventory in its possession. Revenue from contracts that do not meet these criteria is recognized on a net basis. Many of the Company's operations process materials, primarily paper, that may be supplied directly by customers or may be purchased by the Company and sold to customers. No revenue is recognized for customer-supplied paper, but revenues for Company-supplied paper are recognized on a gross basis.

The Company records taxes collected from customers and remitted to governmental authorities on a net basis.

By-product recoveries—The Company records the sale of by-products as a reduction of cost of sales.

Cash and cash equivalents—The Company considers all highly liquid investments with original maturities of three months or less to be cash equivalents. Short-term securities consist of investment grade instruments of governments, financial institutions and corporations.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Receivables—Receivables are stated net of allowances for doubtful accounts and primarily include trade receivables, notes receivable and miscellaneous receivables from suppliers. No single customer comprised more than 10% of the Company's consolidated net sales in 2016, 2015 or 2014. Specific customer provisions are made when a review of significant outstanding amounts, utilizing information about customer creditworthiness and current economic trends, indicates that collection is doubtful. In addition, provisions are made at differing rates, based upon the age of the receivable and the Company's historical collection experience. See Note 6, *Accounts Receivable*, for details of activity affecting the allowance for doubtful accounts receivable.

Inventories—Inventories include material, labor and factory overhead and are stated at the lower of cost or market and net of excess and obsolescence reserves for raw materials and finished goods. Provisions for excess and obsolete inventories are made at differing rates, utilizing historical data and current economic trends, based upon the age and type of the inventory. Specific excess and obsolescence provisions are also made when a review of specific balances indicates that the inventories will not be utilized in production or sold. The cost of 44.6% and 45.9% of the inventories at December 31, 2016 and 2015, respectively, has been determined using the Last-In, First-Out (LIFO) method. This method is intended to reflect the effect of inventory replacement costs within results of operations; accordingly, charges to cost of sales generally reflect recent costs of material, labor and factory overhead. The Company uses an external-index method of valuing LIFO inventories. The remaining inventories, primarily related to certain acquired and international operations, are valued using the First-In, First-Out or specific identification methods.

Long-Lived Assets—The Company assesses potential impairments to its long-lived assets if events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. An impaired asset is written down to its estimated fair value based upon the most recent information available. Estimated fair market value is generally measured by discounting estimated future cash flows. Long-lived assets, other than goodwill and other intangible assets, that are held for sale are recorded at the lower of the carrying value or the fair market value less the estimated cost to sell.

Property, plant and equipment—Property, plant and equipment are recorded at cost and depreciated on a straight-line basis over their estimated useful lives. Useful lives range from 15 to 40 years for buildings, the lesser of 7 years or the lease term for leasehold improvements and from 3 to 15 years for machinery and equipment. Maintenance and repair costs are charged to expense as incurred. Major overhauls that extend the useful lives of existing assets are capitalized. When properties are retired or disposed, the costs and accumulated depreciation are eliminated and the resulting profit or loss is recognized in the results of operations.

Goodwill—Goodwill is reviewed for impairment annually as of October 31 or more frequently if events or changes in circumstances indicate that it is more likely than not that the fair value of a reporting unit is below its carrying value.

For certain reporting units, the Company may perform a qualitative, rather than quantitative, assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. In performing this qualitative analysis, the Company considers various factors, including the excess of prior year estimates of fair value compared to carrying value, the effect of market or industry changes and the reporting units' actual results compared to projected results. Based on this qualitative analysis, if management determines that it is more likely than not that the fair value of the reporting unit is greater than its carrying value, no further impairment testing is performed.

For the remaining reporting units, the Company compares each reporting unit's fair value, estimated based on comparable company market valuations and expected future discounted cash flows to be generated by the reporting unit, to its carrying value. If the carrying value exceeds the reporting unit's fair value, the Company performs an additional fair value measurement calculation to determine the impairment loss, which is charged to operations in the period identified. See Note 4, *Restructuring, Impairment and Other Charges*, for additional information.

The Company also performs an interim review for indicators of impairment at each quarter-end to assess whether an interim impairment review is required for any reporting unit. In the Company's interim review for indicators of impairment as of December 31, 2016, management concluded that there were no indicators that the fair value of any of the reporting units with goodwill was more likely than not below its carrying value.

Amortization—Certain costs to acquire and develop internal-use computer software are capitalized and amortized over their estimated useful life using the straight-line method, up to a maximum of five years. Amortization expense, primarily related to internally-developed software and excluding amortization expense related to other intangible assets, was \$17.6 million, \$14.9 million and \$16.5 million for the years ended December 31, 2016, 2015 and 2014, respectively. Deferred debt issuance costs are amortized over the term of the related debt. Other intangible assets are recognized separately from goodwill and are amortized over their estimated useful lives. Other intangible assets with indefinite lives are not amortized. See Note 5, *Goodwill and Other Intangible Assets*, for further discussion of other intangible assets and the related amortization expense.

Financial Instruments—The Company uses derivative financial instruments to hedge exposures to interest rate and foreign exchange fluctuations in the ordinary course of business.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

All derivatives are recorded as other current or noncurrent assets or other current or noncurrent liabilities on the balance sheet at their respective fair values with unrealized gains and losses recorded in other comprehensive income (loss), net of applicable income taxes, or in the results of operations, depending on the purpose for which the derivative is held. For derivatives designated and that qualify as fair value hedges, the gain or loss on the derivative, as well as the offsetting gain or loss on the hedged item attributable to the hedged risk, are recognized in the results of operations. Changes in the fair value of derivatives that do not meet the criteria for designation as a hedge at inception, or fail to meet the criteria thereafter, are recognized currently in the results of operations. At inception of a hedge transaction, the Company formally documents the hedge relationship and the risk management objective for undertaking the hedge. In addition, the Company assesses, 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 of the hedged item and whether the derivative is expected to continue to be highly effective. The impact of any ineffectiveness is recognized currently in the results of operations.

The Company's foreign exchange forward contracts and interest rate swaps are subject to enforceable master netting agreements that allow the Company to settle positive and negative positions with the respective counterparties. The Company settles foreign exchange forward contracts on a net basis when possible. Foreign exchange forward contracts that can be settled on a net basis are presented net in the Consolidated Balance Sheets. Interest rate swaps are settled on a gross basis and presented gross in the Consolidated Balance Sheets. See Note 15, *Derivatives*, for additional information.

Share-Based Compensation —The Company recognizes share-based compensation expense based on estimated fair values for all share-based awards made to employees and directors, including stock options, restricted stock units and performance share units. The Company recognizes compensation expense for share-based awards expected to vest on a straight-line basis over the requisite service period of the award based on their grant date fair value. See Note 18, *Stock and Incentive Programs for Employees and Directors*, for further discussion.

Pension and Other Postretirement Benefits Plans —The Company records annual income and expense amounts relating to its pension and other postretirement benefit plans based on calculations which include various actuarial assumptions, including discount rates, mortality, assumed rates of return, compensation increases, turnover rates and healthcare cost trend rates. The Company reviews its actuarial assumptions on an annual basis and makes modifications to the assumptions based on current rates and trends when it is deemed appropriate to do so. The effect of modifications on the value of plan obligations and assets is recognized immediately within other comprehensive income (loss) and amortized into operating earnings over future periods. The Company believes that the assumptions utilized in recording its obligations under its plans are reasonable based on its experience, market conditions and input from its actuaries and investment advisors. See Note 12, *Retirement Plans*, for additional information.

Taxes on Income —Deferred taxes are provided using an asset and liability method whereby deferred tax assets are recognized for deductible temporary differences and operating loss carryforwards and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax basis. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment.

The Company recognizes deferred tax liabilities related to taxes on certain foreign earnings that are not considered to be permanently reinvested. No deferred tax liabilities are recognized for foreign earnings that are considered to be permanently reinvested. Management regularly evaluates whether foreign earnings are expected to be permanently reinvested. This evaluation requires judgment about the future operating and liquidity needs of the Company and its foreign subsidiaries. Changes in economic and business conditions, foreign or U.S. tax laws, or the Company's financial situation could result in changes to these judgments and the need to record additional tax liabilities.

The Company is regularly audited by foreign and domestic tax authorities. These audits occasionally result in proposed assessments where the ultimate resolution might result in the Company owing additional taxes, including in some cases, penalties and interest. The Company recognizes a tax position in its financial statements when it is more likely than not (*i.e.*, a likelihood of more than fifty percent) that the position would be sustained upon examination by tax authorities. This recognized tax position is then measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement. Although management believes that its estimates are reasonable, the final outcome of uncertain tax positions may be materially different from that which is reflected in the Company's financial statements. The Company adjusts such reserves upon changes in circumstances that would cause a change to the estimate of the ultimate liability, upon effective settlement or upon the expiration of the statute of limitations, in the period in which such event occurs. See Note 13, *Income Taxes*, for further discussion.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Note 2. Discontinued Operations

On October 1, 2016, RR Donnelley completed the Separation and Distribution. Immediately following the Distribution, the Company held approximately 6.2 million shares of Donnelley Financial Solutions common stock and approximately 6.2 million shares of LSC common stock. The Company accounts for these investments as available-for-sale equity securities. The value of the Company's investment in Donnelley Financial and LSC was approximately \$328.7 million as of December 31, 2016.

In conjunction with the Separation, the Company entered into certain agreements with Donnelley Financial and LSC, to implement the legal and structural separation from Donnelley Financial and LSC, govern the relationship between the Company, Donnelley Financial and LSC up to and after the completion of the Separation, and allocate between the Company, Donnelley Financial and LSC various assets, liabilities and obligations, including, among other things, employee benefits, intellectual property and tax-related assets and liabilities. These agreements included the Separation and Distribution Agreement, Transition Services Agreement, Tax Disaffiliation Agreement, Patent Assignment and License Agreement, Trademark Assignment and License Agreement, Data Assignment and License Agreement, Software, Copyright and Trade Secret Assignment and License Agreement, Stockholder and Registration Rights Agreement and commercial and other arrangements and agreements.

After the Separation, RR Donnelley no longer consolidates the financial results of Donnelley Financial or LSC within its financial results of continuing operations. The financial results of Donnelley Financial were previously included in the financial reporting unit within the Strategic Services segment. The financial results of LSC were previously included in Publishing and Retail Services segment as well as the office products reporting unit within the Company's Variable Print segment, substantially all of the operations previously reported as the Europe reporting unit within the Company's International segment, all Mexican operations within the Latin America reporting unit of the Company's International segment and the co-mail and related list services operations within the logistics reporting unit within the Company's Strategic Services segment.

Sales from RR Donnelley to Donnelley Financial and LSC previously eliminated in consolidation have been recast and are now shown as external sales within the financial results of continuing operations. The net sales were \$150.4 million, \$153.4 million and \$152.5 million for the years ended December 31, 2016, 2015 and 2014. For all the periods prior to the Separation, the financial results of Donnelley Financial and LSC are presented as net earnings from discontinued operations in the Consolidated Statements of Operations and assets and liabilities held for disposition in the Consolidated Balance Sheets. For all the periods after the Separation, discontinued operations includes spinoff transaction costs primarily related to losses on debt extinguishments related to debt repaid in conjunction with the spinoff transactions, the interest expense related to said debt and other spinoff related expenses. Interest expense was allocated to discontinued operations for interest expense directly attributable to the operations of the discontinued operations and interest expense related to corporate level debt that was repurchased in conjunction with the spinoff transactions.

The following table presents the financial results of discontinued operations :

	Year ended December 31,		
	2016	2015	2014
Net sales	\$ 3,303.4	\$ 4,472.9	\$ 4,583.3
Cost of sales	2,534.7	3,414.2	3,506.5
Operating expenses (a)	615.9	708.7	774.8
Interest and other (income) expense, net (b)	151.4	71.6	58.4
Earnings before income taxes	1.4	278.4	243.6
Income tax expense	11.1	108.3	82.5
Net loss from discontinued operations	<u>\$ (9.7)</u>	<u>\$ 170.1</u>	<u>\$ 161.1</u>

(a) Includes spinoff transaction costs incurred of \$81.2 million and \$13.6 million, respectively, during the years ended December 31, 2016 and 2015.

(b) Includes the related interest expense of the corporate level debt which was purchased in connection with the Separation totaling \$55.9 million, \$73.3 million and \$73.3 million for the years ended December 31, 2016, 2015 and 2014. Also includes the losses on the extinguishment of corporate level debt executed in conjunction with the spinoff transactions totaling \$96.1 million for the year ended December 31, 2016.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

The following table presents the aggregate carrying amount of the major classes of assets and liabilities of discontinued operations:

	<u>December 31, 2015</u>
Carrying amounts of assets included as part of discontinued operations:	
Cash and cash equivalents	\$ 100.9
Receivables, less allowances for doubtful accounts	763.2
Inventories	239.2
Prepaid expenses and other current assets	32.9
Current assets held for disposition	1,136.2
Property, plant and equipment-net	751.5
Goodwill	657.9
Other intangible assets-net	217.0
Deferred income taxes	85.1
Other noncurrent assets	140.6
Noncurrent assets held for disposition	1,852.1
Total assets held for disposition in the consolidated balance sheets	\$ 2,988.3
Carrying amounts of liabilities included as part of discontinued operations:	
Accounts payable	\$ 328.4
Accrued liabilities	318.3
Short-term and current portion of long-term debt	2.7
Current liabilities held for disposition	649.4
Long-term debt	1,001.5
Pension liabilities	384.2
Other noncurrent liabilities	157.2
Noncurrent liabilities held for disposition	1,542.9
Total liabilities held for disposition in the consolidated balance sheets	\$ 2,192.3

The following table presents the significant non-cash items and capital expenditures of discontinued operations:

	<u>Year ended</u> <u>December 31,</u>		
	<u>2016</u>	<u>2015</u>	<u>2014</u>
Depreciation and amortization	\$ 159.0	\$ 221.5	\$ 219.4
Pension settlement charges	77.7	—	95.7
Impairment charges	1.5	7.1	22.0
Loss on debt extinguishments	96.1	—	—
Gain on bargain purchase	—	—	(9.5)
Assumption of warehousing equipment related to customer contract	8.8	—	—
Purchase of property, plant and equipment	(49.0)	(74.0)	(89.6)

In connection with the Separation, the Company entered into transition services agreements with Donnelley Financial and LSC, under which the companies will provide one another with certain services to help ensure an orderly transition following the Separation (the "Transition Services Agreement"). The charges for these services are intended to allow the companies, as applicable, to recover the direct and indirect costs incurred in providing such services. The Transition Services Agreement generally provides for a term of services starting at the Separation date and continuing for a period of up to twenty-four months following the Separation. During the three-month period ending December 31, 2016, the Company recognized \$3.3 million as a reduction of costs within selling, general and administrative expenses within the consolidated statements of operations from the Transition Services Agreement.

The Company also entered into various commercial agreements which govern sales transactions between the companies. Under these commercial agreements, the Company recognized \$98.0 million of net sales to Donnelley Financial and LSC during the three-month period ending December 31, 2016. Additionally, the Company purchased \$79.0 million of products and services from Donnelley Financial and LSC during the three-month period ending December 31, 2016. The Company also recognized \$17.8 million of net cash inflow from Donnelley Financial and LSC within the Company's operating cash provided by operating activities. The Company had accounts receivable of approximately \$78.1 million recorded within Receivables and accounts payable of approximately \$62.6 million within Accounts Payable in the Consolidated Balance Sheets at December 31, 2016 associated with Donnelley Financial and LSC. Additionally, included within Accrued Liabilities in the Consolidated Balance Sheets as of December 31, 2016 was \$78.0 million of cash due to Donnelley Financial and LSC, to be paid in the second quarter of 2017, as required by a provision in the Separation and Distribution Agreement.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Note 3. Acquisitions and Dispositions

2016 Acquisition

On August 4, 2016, the Company acquired Precision Dialogue Holdings, LLC (“Precision Dialogue”), a provider of email marketing, direct mail marketing and other services with operations in the United States for a purchase price, net of cash acquired, of approximately \$59.2 million. The acquisition expanded the Company’s ability to help its customers measure communications effectiveness and audience engagement. Precision Dialogue contributed \$22.4 million in sales and a loss before income taxes of \$2.8 million during the period ended December 31, 2016 and is included within the operating results of the Variable Print and Strategic Services segments.

The Precision Dialogue acquisition was recorded by allocating the cost of the acquisition to the assets acquired, including other intangible assets, based on their estimated fair values at the acquisition date. The excess of the cost over the net amounts assigned to the fair value of the assets acquired was recorded as goodwill. The goodwill associated with this acquisition is primarily attributable to the synergies expected to arise as a result of the acquisition. The total tax deductible goodwill related to the Precision Dialogue acquisition was \$8.8 million.

Based on the valuation, the final purchase price allocation for the Precision Dialogue acquisition was as follows:

Accounts receivable	\$ 11.5
Inventories	0.4
Prepaid expenses and other current assets	0.8
Property, plant and equipment	6.9
Other intangible assets	14.1
Other noncurrent assets	1.2
Goodwill	42.5
Accounts payable and accrued liabilities	(11.4)
Deferred taxes-net	(6.8)
Total purchase price-net of cash acquired	<u>59.2</u>
Less: debt assumed	11.1
Net cash paid	<u>\$ 48.1</u>

The fair values of other intangible assets, technology and goodwill associated with the Precision Dialogue acquisition were determined to be Level 3 under the fair value hierarchy. The following table presents the fair value, valuation techniques and related unobservable inputs for these Level 3 measurements:

	Fair Value	Valuation Technique	Unobservable Input	Range
Customer relationships	\$ 11.0	Excess earnings	Discount rate	16.0%
			Attrition rate	7.0% - 8.0%
Trade names	1.4	Relief-from-royalty method	Discount rate	16.0%
			Royalty rate (pre-tax)	0.75% - 1.25%
Technology	0.6	Relief-from-royalty method	Discount rate	16.0%
			Royalty rate (pre-tax)	15.0%
Non-compete agreements	1.7	With or without method	Obsolence factor	0.0% - 40.0%
			Discount rate	16.0%

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

The fair values of property, plant and equipment associated with the acquisition of Precision Dialogue were determined to be Level 3 under the fair value hierarchy and were estimated using either the market approach, if a secondhand market existed, or the cost approach.

For the year ended December 31, 2016, the Company recorded \$2.7 million of acquisition-related expenses, respectively, associated with completed or contemplated acquisitions within selling, general and administrative expenses in the Consolidated Statements of Operations.

2016 Dispositions

On January 11, 2016, the Company sold two entities within the business process outsourcing reporting unit for net proceeds of \$13.4 million, all of which was received in 2016. Additionally, during 2016 the Company sold three immaterial entities for proceeds of \$0.3 million. The dispositions of these entities resulted in a net gain of \$11.9 million during the period ended December 31, 2016, which was recorded in other operating income in the Consolidated Statements of Operations. The operations of these entities were included within the International segment.

2015 Acquisitions

The Company completed four insignificant acquisitions in 2015, one of which included the settlement of accounts receivable in exchange for the acquisition of the business. These acquisitions were recorded by allocating the cost of the acquisition to the assets acquired, including other intangible assets, based on their estimated fair values at the acquisition date. The excess of the cost over the net amounts assigned to the fair value of the assets acquired was recorded as goodwill. The goodwill associated with these acquisitions is primarily attributable to the synergies expected to arise as a result of the acquisitions.

The tax deductible goodwill related to these acquisitions was \$9.8 million.

Based on the valuations, the final purchase price allocations for the 2015 acquisitions were as follows:

Accounts receivable	\$	3.4
Inventories		0.2
Prepaid expenses and other current assets		0.6
Property, plant and equipment		5.7
Other intangible assets		5.2
Other noncurrent assets		0.2
Goodwill		15.2
Accounts payable and accrued liabilities		(5.6)
Other noncurrent liabilities		(4.7)
Total purchase price-net of cash acquired		20.2
Less: debt assumed		3.7
Less: settlement of accounts receivable for acquisition of a business		8.6
Less: value of common stock issued		1.0
Net cash paid	\$	<u>6.9</u>

The fair values of other intangible assets and goodwill associated with these acquisitions were determined to be Level 3 under the fair value hierarchy. The following table presents the fair value, valuation techniques and related unobservable inputs for these Level 3 measurements:

	Fair Value	Valuation Technique	Unobservable Input	Range
Customer relationships	\$ 4.9	Excess earnings	Discount rate Attrition rate	15.0% - 17.0% 5.0% - 10.0%
Non-compete agreements	0.3	Excess earnings	Discount rate	17.0%

The fair values of property, plant and equipment associated with these acquisitions were determined to be Level 3 under the fair value hierarchy and were estimated using either the market approach, if a secondhand market existed, or cost approach.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

For the year ended December 31, 2015, the Company recorded \$0.5 million of acquisition-related expenses associated with acquisitions completed or contemplated, within selling, general and administrative expenses in the Consolidated Statements of Operations.

2015 Disposition

On April 29, 2015, the Company sold its 50.1% interest in its Venezuelan operating entity. The proceeds were de minimis, and the sale resulted in a net loss of \$14.7 million, which was recognized in net investment and other expense in the Consolidated Statement of Operations for the year ended December 31, 2015. The Company's Venezuelan operations had net sales of \$16.3 million and a loss before income taxes of \$38.4 million, including the net loss as a result of the sale, for the year ended December 31, 2015. For the year ended December 31, 2014, the Company's Venezuelan operations had net sales of \$101.5 million and earnings before income taxes of \$4.3 million. The operations of the Venezuela business were included in the International segment.

2014 Acquisitions

On January 31, 2014, the Company acquired Consolidated Graphics, Inc. ("Consolidated Graphics"), a provider of digital and commercial printing, fulfillment services, print management and proprietary Internet-based technology solutions, with operations in North America, Europe and Asia. The acquisition enhanced the Company's ability to provide integrated communications solutions for its customers. The purchase price for Consolidated Graphics was \$359.9 million in cash and 5.3 million shares of RR Donnelley common stock, or a total transaction value of \$660.6 million based on the Company's closing share price on January 30, 2014, plus the assumption of Consolidated Graphics' debt of \$118.4 million. Immediately following the acquisition, the Company repaid substantially all of the debt assumed. Consolidated Graphics' operations are included in the Variable Print segment, with the exception of operations in the Czech Republic and Japan which are included in the International segment.

For the year ended December 31, 2014, the Company recorded \$7.0 million of acquisition-related expenses associated with acquisitions completed or contemplated, within selling, general and administrative expenses in the Consolidated Statements of Operations.

The Consolidated Graphics acquisition was recorded by allocating the cost of the acquisition to the assets acquired, including other intangible assets, based on its estimated fair value at the applicable acquisition date. The excess of the cost of the Consolidated Graphics acquisition over the amounts assigned to the fair value of the assets acquired was recorded as goodwill. The goodwill associated with this acquisition was primarily attributable to the synergies expected to arise as a result of the acquisition.

The tax deductible goodwill related to the Consolidated Graphics acquisition was \$63.4 million.

Based on the valuations, the final purchase price allocation for this acquisition as well as the purchase price allocation for an insignificant acquisition were as follows:

Accounts receivable	\$ 171.3
Inventories	65.9
Prepaid expenses and other current assets	15.4
Property, plant and equipment	297.0
Other intangible assets	179.3
Other noncurrent assets	10.4
Goodwill	296.6
Accounts payable and accrued liabilities	(159.5)
Other noncurrent liabilities	(41.5)
Deferred taxes-net	(116.6)
Total purchase price-net of cash acquired	718.3
Less: debt assumed	118.4
Less: value of common stock issued	300.7
Net cash paid	<u>\$ 299.2</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

The fair values of other intangible assets and goodwill associated with the acquisition of Consolidated Graphics were determined to be Level 3 under the fair value hierarchy. The following table presents the fair values, valuation techniques and related unobservable inputs for these Level 3 measurements:

	Fair Value	Valuation Technique	Unobservable Input	Range
Customer relationships	\$ 161.6	Excess earnings	Discount rate Attrition rate	17.0% - 19.0% 5.0% - 15.0%
Trade names	17.7	Relief-from-royalty method	Discount rate Royalty rate (pre-tax)	19.0% 0.5%

The fair values of property, plant and equipment associated with these acquisitions were determined to be Level 3 under the fair value hierarchy. Property, plant and equipment values were estimated using either the cost or market approach, if a secondhand market existed.

2014 Dispositions

On August 15, 2014, the Company sold the assets and liabilities of Journalism Online, LLC (“Journalism Online”), a provider of online subscription management services, for net proceeds of \$10.5 million resulting in a gain of \$11.2 million during the year ended December 31, 2014. As a result of a final sale price adjustment in accordance with the agreement, a \$0.2 million loss was recognized during the year ended December 31, 2015, resulting in a total net gain of \$11.0 million. The gain and loss were included in net investment and other expense in the Consolidated Statement of Operations. The operations of the Journalism Online business were included in the Strategic Services segment.

On August 11, 2014, the Company’s subsidiary, RR Donnelley Argentina S.A. (“RRDA”), filed for bankruptcy liquidation in bankruptcy court in Argentina. The bankruptcy petition was approved by the court shortly thereafter and a bankruptcy trustee was appointed. As a result of the bankruptcy liquidation, the Company recorded a loss of \$16.4 million in net investment and other expense for the year ended December 31, 2014. Effective as of the court’s approval, the operating results of RRDA are no longer included in the Company’s consolidated results of operations. RRDA had net sales of \$22.1 million and a loss before income taxes of \$3.4 million for the year ended December 31, 2014. The operations of RRDA were included in the International segment.

On February 7, 2014, the Company sold the assets and liabilities of Office Tiger Global Real Estate Service Inc. (“GRES”), its commercial and residential real estate advisory services, for net proceeds of \$1.8 million and a loss of \$0.8 million, which was recognized in net investment and other expense in the Consolidated Statements of Operations. The operations of the GRES business were included in the International segment.

Note 4. Restructuring, Impairment and Other Charges

Restructuring, Impairment and Other Charges Recognized in Results of Operations

2016	Employee Terminations	Other Restructuring Charges	Total Restructuring Charges	Impairment	Other Charges	Total
Variable Print	\$ 1.4	\$ 1.7	\$ 3.1	\$ 557.9	\$ 1.9	\$ 562.9
Strategic Services	1.8	(0.1)	1.7	—	0.4	2.1
International	9.6	1.8	11.4	(2.5)	—	8.9
Corporate	9.1	0.1	9.2	1.2	—	10.4
Total	\$ 21.9	\$ 3.5	\$ 25.4	\$ 556.6	\$ 2.3	\$ 584.3

Restructuring and Impairment Charges

For the year ended December 31, 2016, the Company recorded net restructuring charges of \$21.9 million for employee termination costs. These charges primarily related to the reorganization of certain corporate administrative functions and operations and two facility closures in the International segment. Additionally, the Company incurred lease termination and other restructuring charges of \$3.5 million for the year ended December 31, 2016. For the year ended December 31, 2016, the Company also recorded \$0.9 million of net gains on the sale of previously impaired assets.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Additionally in the year ended December 31, 2016, the Company recorded non-cash charges of \$416.2 million and \$111.6 million to recognize the impairment of goodwill in the commercial and digital print and statement printing reporting units, respectively, which are included within the Variable Print segment. The goodwill impairment charges in the commercial and digital print and statement printing reporting units were due to the continued declines in sales, primarily due to decreased volume, which resulted in a reduction in the estimated fair value of the reporting unit based on lower expectations of future revenue, profitability and cash flows as compared to the expectations as of the October 31, 2016 annual goodwill impairment test. The goodwill impairment charges were determined using the Level 3 inputs, including discounted cash flow analysis, comparable marketplace fair value data and management's assumptions in valuing the significant tangible and intangible assets.

For the year ended December 31, 2016, the Company recorded non-cash charges of \$29.7 million primarily for the impairment of certain acquired customer relationship intangible assets in the commercial and digital print reporting unit within the Variable Print segment. The impairment of the customer relationship intangible assets resulted from lower expectations of future revenue to be derived from those relationships. The impairment of the customer relationship assets was determined using Level 3 inputs and estimated based on cash flow analyses, which included management's assumptions related to future revenues and profitability.

Other Charges

For the year ended December 31, 2016, the Company recorded charges of \$2.3 million for multi-employer pension plan withdrawal obligations unrelated to facility closures. The total liabilities for the withdrawal obligations associated with the Company's decision to withdraw from all multi-employer pension plans included in accrued liabilities and other noncurrent liabilities are \$4.9 million and \$34.8 million, respectively, as of December 31, 2016. See Note 12, *Retirement Plans*, for further discussion of multi-employer pension plans.

The Company's multi-employer pension plan withdrawal liabilities could be affected by the financial stability of other employers participating in the plans and any decisions by those employers to withdraw from the plans in the future. While it is not possible to quantify the potential impact of future events or circumstances, reductions in other employers' participation in multi-employer pension plans, including certain plans from which the Company has previously withdrawn, could have a material impact on the Company's previously estimated withdrawal liabilities, consolidated results of operations, financial position or cash flows.

2015	Employee Terminations	Other Restructuring Charges	Total Restructuring Charges	Impairment	Other Charges	Total
Variable Print	\$ 3.1	\$ 4.7	\$ 7.8	\$ (0.5)	\$ 1.8	\$ 9.1
Strategic Services	4.4	0.1	4.5	0.9	0.4	5.8
International	11.9	3.2	15.1	28.5	—	43.6
Corporate	3.0	1.2	4.2	—	—	4.2
Total	\$ 22.4	\$ 9.2	\$ 31.6	\$ 28.9	\$ 2.2	\$ 62.7

Restructuring and Impairment Charges

For the year ended December 31, 2015, the Company recorded net restructuring charges of \$22.4 million for employee termination costs. These charges primarily related to a facility closure in the International segment, one facility closure in the Variable Print segment and the reorganization of certain operations. Additionally, the Company incurred lease termination and other restructuring charges of \$9.2 million for the year ended December 31, 2015. For the year ended December 31, 2015, the Company also recorded \$1.0 million of net gains primarily related to the sale of previously impaired buildings and machinery and equipment associated with facility closings. The fair values of the buildings and machinery and equipment were determined to be Level 3 under the fair value hierarchy and were estimated based on discussions with real estate brokers, review of comparable properties, if available, discussions with machinery and equipment brokers, dealer quotes and internal expertise related to the current marketplace conditions.

In the third quarter of 2015, as the result of the Company's interim goodwill impairment review performed under the Company's previous segment and reporting unit structure, the Company recorded non-cash charges of \$13.7 million and \$4.3 million to recognize the impairment of goodwill in the former Europe and Latin America reporting units, respectively, both of which are within the International segment. The goodwill impairment charge in the former Europe reporting unit was due to the announced reorganization of certain operations which resulted in a reduction in the estimated fair value of the reporting unit based on lower expectations of future revenue, profitability and cash flows as compared to the expectations as of prior year annual goodwill impairment test. The goodwill impairment charges were determined using Level 3 inputs, including discounted cash flow analyses, comparable marketplace fair value data and management's assumptions in valuing the significant tangible and intangible assets.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

For the year ended December 31, 2015, the Company recorded non-cash charges of \$11.9 million for the impairment of intangible assets, including \$9.2 million and \$2.2 million related to the impairment of certain acquired customer relationship intangible assets in the previous labels reporting unit within the Variable Print segment and the Latin America reporting unit within the International segment, respectively. The impairment of the customer relationship intangible assets resulted from lower expectations of future revenue to be derived from those relationships. The impairment of the customer relationship assets was determined using Level 3 inputs and estimated based on cash flow analyses, which included management's assumptions related to future revenues and profitability.

Other Charges

For the year ended December 31, 2015, the Company recorded charges of \$2.2 million of charges for multi-employer pension plan withdrawal obligations unrelated to facility closures. The total liabilities for the withdrawal obligations associated with the Company's decision to withdraw from all multi-employer pension plans included in accrued liabilities and other noncurrent liabilities are \$4.7 million and \$38.0 million, respectively, as of December 31, 2015. See Note 12, *Retirement Plans*, for further discussion of multi-employer pension plans.

2014	Employee Terminations	Other Restructuring Charges	Total Restructuring Charges	Impairment	Other Charges	Total
Variable Print	\$ 13.2	\$ 7.9	\$ 21.1	\$ 11.4	\$ 7.6	\$ 40.1
Strategic Services	2.8	(0.1)	2.7	—	3.9	6.6
International	6.1	1.3	7.4	13.7	—	21.1
Corporate	2.5	2.0	4.5	—	—	4.5
Total	\$ 24.6	\$ 11.1	\$ 35.7	\$ 25.1	\$ 11.5	\$ 72.3

Restructuring and Impairment Charges

For the year ended December 31, 2014, the Company recorded net restructuring charges of \$24.6 million for employee termination costs. These charges primarily related to the integration of Consolidated Graphics, including the closure of seven Consolidated Graphics facilities, as well as one additional facility closure within the Variable Print segment and the reorganization of certain operations. Additionally, the Company incurred lease termination and other restructuring charges of \$11.1 million for the year ended December 31, 2014, including charges related to multi-employer pension plan withdrawal obligations as a result of facility closures. The Company also recorded \$11.8 million of impairment charges primarily related to buildings and machinery and equipment associated with facility closings. The fair values of the buildings and machinery and equipment were determined to be Level 3 under the fair value hierarchy and were estimated based on discussions with real estate brokers, review of comparable properties, if available, discussions with machinery and equipment brokers, dealer quotes and internal expertise related to the current marketplace conditions.

During the fourth quarter of 2014, the Company recorded non-cash impairment charges of \$7.8 million and \$4.1 million related to the impairment of acquired customer relationship intangible assets within the International and Variable Print segments, respectively. The impairment of the customer relationship intangible assets resulted from a decline in expected future revenue and certain customer losses in the Canada reporting unit within the International segment and the loss of certain customers in the commercial and digital print reporting unit within the Variable Print segment. During the year ended December 31, 2014, the Company also recorded non-cash charges of \$1.4 million related to the impairment of trade names in the commercial and digital print reporting unit within the Variable Print segment as a result of the integration of Consolidated Graphics. The impairment of the customer relationship assets was determined using Level 3 inputs and estimated based on cash flow analyses, which included management's assumptions related to future revenues and profitability.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Other Charges

For the year ended December 31, 2014, the Company recorded charges of \$11.5 million as a result of its decision to withdraw from all multi-employer pension plans serving facilities that are currently operating. These charges for multi-employer pension plan withdrawal obligations, unrelated to facility closures, represent the Company's best estimate of the expected settlement of these withdrawal liabilities. See Note 12, *Retirement Plans*, for further discussion of multi-employer pension plans.

Restructuring Reserve

The restructuring reserve as of December 31, 2016 and 2015, and changes during the year ended December 31, 2016, were as follows:

	December 31, 2015	Restructuring Charges	Foreign Exchange and Other	Cash Paid	December 31, 2016
Employee terminations	\$ 6.1	\$ 21.9	\$ (3.6)	\$ (16.8)	\$ 7.6
Multi-employer pension plan withdrawal obligations	12.7	0.7	—	(1.6)	11.8
Lease terminations and other	2.3	2.8	(0.1)	(3.4)	1.6
Total	<u>\$ 21.1</u>	<u>\$ 25.4</u>	<u>\$ (3.7)</u>	<u>\$ (21.8)</u>	<u>\$ 21.0</u>

The current portion of restructuring reserves of \$6.0 million at December 31, 2016 was included in accrued liabilities, while the long-term portion of \$15.0 million, primarily related to multi-employer pension plan withdrawal obligations related to facility closures and lease termination costs, was included in other noncurrent liabilities at December 31, 2016.

The Company anticipates that payments associated with the employee terminations reflected in the above table will be substantially completed by December 2017.

Payments on all of the Company's multi-employer pension plan withdrawal obligations are scheduled to be substantially completed by 2036. Changes based on uncertainties in these estimated withdrawal obligations could affect the ultimate charges related to multi-employer pension plan withdrawals. See Note 12, *Retirement Plans*, for further discussion on multi-employer pension plans.

The restructuring liabilities classified as "lease terminations and other" consisted of lease terminations, other facility closing costs and contract termination costs. Payments on certain of the lease obligations are scheduled to continue until 2018. Market conditions and the Company's ability to sublease these properties could affect the ultimate charges related to the lease obligations. Any potential recoveries or additional charges could affect amounts reported in the Company's financial statements.

The restructuring reserve as of December 31, 2015 and 2014, and changes during the year ended December 31, 2015, were as follows:

	December 31, 2014	Restructuring Charges	Foreign Exchange and Other	Cash Paid	December 31, 2015
Employee terminations	\$ 8.8	\$ 22.4	\$ (3.5)	\$ (21.6)	\$ 6.1
Multi-employer pension plan withdrawal obligations	13.5	0.5	0.1	(1.4)	12.7
Lease terminations and other	4.3	8.7	(0.3)	(10.4)	2.3
Total	<u>\$ 26.6</u>	<u>\$ 31.6</u>	<u>\$ (3.7)</u>	<u>\$ (33.4)</u>	<u>\$ 21.1</u>

The current portion of restructuring reserves of \$6.6 million at December 31, 2015 was included in accrued liabilities, while the long-term portion of \$14.5 million, primarily related to multi-employer pension plan complete or partial withdrawal obligations related to facility closures and lease termination costs, was included in other noncurrent liabilities at December 31, 2015.

Payments associated with the employee terminations reflected in the above table were completed by December 2016.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Note 5. Goodwill and Other Intangible Assets

As a result of the Separation, goodwill of approximately \$657.9 million was distributed with LSC and Donnelley Financial. The goodwill distributed consisted of the goodwill of the former Publishing and Retail Services segment and certain portions of the goodwill of the Strategic Services segment including the entire goodwill of the former financial reporting unit and a portion of each of the digital and creative solutions and logistics reporting units. The portion of the digital and creative solutions' and logistics' reporting units goodwill distributed was determined based upon the relative fair value as of October 1, 2016 of the businesses being disposed of in comparison to the overall fair value of the reporting unit as a whole. This resulted in the allocation of \$25.5 million, or all, of the goodwill of the digital and creative solutions reporting unit and \$104.2 million of the logistics reporting unit to the LSC disposal group.

The changes in the carrying amount of goodwill for the years ended December 31, 2016 and 2015 were as follows:

	<u>Variable Print</u>	<u>Strategic Services</u>	<u>International</u>	<u>Total</u>
Net book value as of January 1, 2015				
Goodwill	\$ 1,794.6	\$ 336.4	\$ 1,184.4	3,315.4
Accumulated impairment losses	(1,022.9)	(148.7)	(1,044.6)	(2,216.2)
Total	<u>771.7</u>	<u>187.7</u>	<u>139.8</u>	<u>1,099.2</u>
Acquisitions	2.3	7.5	5.4	15.2
Foreign exchange and other adjustments	(2.4)	—	(8.3)	(10.7)
Impairment charges	—	—	(18.0)	(18.0)
Net book value as of December 31, 2015				
Goodwill	1,794.5	343.9	1,098.0	3,236.4
Accumulated impairment losses	(1,022.9)	(148.7)	(979.1)	(2,150.7)
Total	<u>\$ 771.6</u>	<u>\$ 195.2</u>	<u>\$ 118.9</u>	<u>\$ 1,085.7</u>
Acquisitions	21.2	21.3	—	42.5
Foreign exchange and other adjustments	7.5	—	(5.9)	1.6
Impairment charges	(527.8)	—	—	(527.8)
Net book value as of December 31, 2016				
Goodwill	1,823.0	365.2	1,017.9	3,206.1
Accumulated impairment losses	(1,550.5)	(148.7)	(904.9)	(2,604.1)
Total	<u>\$ 272.5</u>	<u>\$ 216.5</u>	<u>\$ 113.0</u>	<u>\$ 602.0</u>

During the fourth quarter of December 31, 2016, the Company recorded non-cash charges of \$416.2 million and \$111.6 million to reflect the impairment of goodwill for the commercial and digital print and statement printing reporting units within the Variable Print segment. During the year ended December 31, 2015, the Company recorded non-cash charges of \$18.0 million to reflect the impairment of goodwill in the International segment. See Note 4, *Restructuring, Impairment and Other Charges*, for further discussion regarding these impairment charges.

The components of other intangible assets at December 31, 2016 and 2015 were as follows:

	<u>December 31, 2016</u>			<u>December 31, 2015</u>		
	<u>Gross Carrying Amount</u>	<u>Accumulated Amortization</u>	<u>Net Book Value</u>	<u>Gross Carrying Amount</u>	<u>Accumulated Amortization</u>	<u>Net Book Value</u>
Customer relationships	\$ 517.9	\$ (370.7)	\$ 147.2	\$ 586.5	\$ (389.9)	\$ 196.6
Patents	2.0	(2.0)	—	98.3	(98.3)	—
Trademarks, licenses and agreements	26.2	(24.4)	1.8	24.5	(23.8)	0.7
Trade names	36.8	(13.9)	22.9	35.7	(12.0)	23.7
Total other intangible assets	<u>\$ 582.9</u>	<u>\$ (411.0)</u>	<u>\$ 171.9</u>	<u>\$ 745.0</u>	<u>\$ (524.0)</u>	<u>\$ 221.0</u>

During the year ended December 31, 2016, the Company recorded non-cash charges of \$29.7 million primarily for the impairment of certain acquired customer relationship intangible assets in the commercial and digital print reporting unit in the Variable Print segment. During the year ended December 31, 2015, the Company recorded non-cash charges of \$11.9 million for the impairment of intangible assets, including \$9.2 million and \$2.2 million related to the impairment of certain acquired customer relationship intangible assets in the previous labels reporting unit within the Variable Print segment and the Latin America reporting unit within the International segment, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

During the years ended December 31, 2016 and 2015, the Company recorded additions to other intangible assets of \$14.1 million and \$5.2 million, respectively, for acquisitions during those years, the components of which were as follows:

	December 31, 2016		December 31, 2015	
	Amount	Weighted Average Amortization Period	Amount	Weighted Average Amortization Period
Customer relationships	\$ 11.0	10.5	\$ 4.9	9.2
Trade names (amortizable)	1.4	4.7	—	0.0
Non-compete agreements	1.7	3.3	0.3	4.3
Total additions	\$ 14.1		\$ 5.2	

Amortization expense for other intangible assets was \$33.7 million, \$46.2 million and \$50.2 million for the years ended December 31, 2016, 2015 and 2014, respectively.

The following table outlines the estimated annual amortization expense related to other intangible assets as of December 31, 2016:

	Amount
2017	\$ 28.6
2018	27.8
2019	24.1
2020	20.3
2021	20.0
2022 and thereafter	51.1
Total	\$ 171.9

Note 6. Accounts Receivable

Transactions affecting the allowance for doubtful accounts receivable during the years ended December 31, 2016, 2015 and 2014 were as follows:

	2016	2015	2014
Balance, beginning of year	\$ 26.0	\$ 27.0	\$ 28.3
Provisions charged to expense	12.1	17.8	14.9
Write-offs and other	(2.2)	(18.8)	(16.2)
Balance, end of year	\$ 35.9	\$ 26.0	\$ 27.0

Note 7. Inventories

The components of the Company's inventories, net of excess and obsolescence reserves for raw materials and finished goods, at December 31, 2016 and 2015 were as follows:

	2016	2015
Raw materials and manufacturing supplies	\$ 133.8	\$ 137.2
Work in process	84.4	84.7
Finished goods	179.4	150.0
LIFO reserve	(18.0)	(19.1)
Total	\$ 379.6	\$ 352.8

The Company recognized a LIFO benefit of \$1.1 million and \$0.1 million, respectively, in 2016 and 2015 and expense of \$1.0 million in 2014.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Note 8. Property, Plant and Equipment

The components of the Company's property, plant and equipment at December 31, 2016 and 2015 were as follows:

	2016	2015
Land	\$ 56.0	\$ 55.2
Buildings	403.0	404.6
Machinery and equipment	1,805.4	1,756.1
	2,264.4	2,215.9
Accumulated depreciation	(1,614.1)	(1,519.3)
Total	<u>\$ 650.3</u>	<u>\$ 696.6</u>

During the years ended December 31, 2016, 2015 and 2014, depreciation expense was \$152.9 million, \$171.4 million, and \$187.9 million, respectively.

Note 9. Fair Value Measurement

Certain assets and liabilities are required to be recorded at fair value on a recurring basis. The Company's assets and liabilities required to be adjusted to fair value on a recurring basis are pension and other postretirement benefits plan assets, available-for-sale securities, foreign exchange forward contracts and interest rate swaps. The following tables summarize the bases used to measure financial assets and liabilities that are carried at fair value on a recurring basis in the consolidated balance sheets.

	Balance as of December 31, 2016	Basis of fair value measurement		
		Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Assets				
Foreign exchange forward contracts	\$ 1.7	\$ —	\$ 1.7	\$ —
Available-for-sale securities	328.7	—	328.7	—
Total assets	<u>\$ 330.4</u>	<u>\$ —</u>	<u>\$ 330.4</u>	<u>\$ —</u>
Liabilities				
Foreign exchange forward contracts	1.5	—	1.5	—
Total liabilities	<u>\$ 1.5</u>	<u>\$ —</u>	<u>\$ 1.5</u>	<u>\$ —</u>

	Balance as of December 31, 2015	Basis of fair value measurement		
		Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Assets				
Foreign exchange forward contracts	\$ 1.8	\$ —	\$ 1.8	\$ —
Interest rate swap	0.4	—	0.4	—
Total assets	<u>\$ 2.2</u>	<u>\$ —</u>	<u>\$ 2.2</u>	<u>\$ —</u>
Liabilities				
Foreign exchange forward contracts	1.5	—	1.5	—
Total liabilities	<u>\$ 1.5</u>	<u>\$ —</u>	<u>\$ 1.5</u>	<u>\$ —</u>

The investment in LSC and Donnelley common stock of \$328.7 million is categorized as a Level 2 security as these shares were not registered as of December 31, 2016. The value of this investment is based on each LSC's and Donnelley Financial's common stock prices as of December 31, 2016, which represents an identical equity instrument registered under the Securities Act of 1933, as amended. See Note 12, *Retirement Plans*, for the fair value of the Company's pension and other postretirement benefits plan assets as of December 31, 2016 and 2015 and Note 14, *Debt*, for the fair value of the Company's debt as of December 31, 2016, which is recorded at book value.

In addition to assets and liabilities that are recorded at fair value on a recurring basis, the Company is required to record certain assets and liabilities at fair value on a nonrecurring basis, generally as a result of acquisitions or the remeasurement of assets resulting in impairment charges. See Note 3, *Acquisitions and Dispositions*, for further discussion on the fair value of assets and liabilities associated with acquisitions.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

The fair value as of the measurement date, net book value as of the end of the year and related impairment charge for assets measured at fair value on a nonrecurring basis subsequent to initial recognition during the years ended December 31, 2016, 2015 and 2014 were as follows:

	Year Ended December 31, 2016		As of December 31, 2016
	Impairment Charge	Fair Value Measurement (Level 3)	Net Book Value
Long-lived assets held for sale or disposal	\$ 0.6	\$ —	\$ —
Goodwill	527.8	15.2	15.2
Other intangible assets	29.7	4.6	4.3
Total	<u>\$ 558.1</u>	<u>\$ 19.8</u>	<u>\$ 19.5</u>

	Year Ended December 31, 2015		As of December 31, 2015
	Impairment Charge	Fair Value Measurement (Level 3)	Net Book Value
Long-lived assets held and used	\$ 0.3	\$ —	\$ —
Long-lived assets held for sale or disposal	1.5	2.8	—
Goodwill	18.0	—	—
Other intangible assets	11.9	—	—
Total	<u>\$ 31.7</u>	<u>\$ 2.8</u>	<u>\$ —</u>

	Year Ended December 31, 2014		As of December 31, 2014
	Impairment Charge	Fair Value Measurement (Level 3)	Net Book Value
Long-lived assets held and used	\$ 5.2	\$ 0.6	\$ 0.7
Long-lived assets held for sale or disposal	8.7	9.2	2.0
Other intangible assets	13.2	—	—
Total	<u>\$ 27.1</u>	<u>\$ 9.8</u>	<u>\$ 2.7</u>

There were no estimated costs to sell related to long-lived assets held for sale that were remeasured during the years ended December 31, 2016 and 2015. The fair values of assets held for sale that were remeasured during the year ended December 31, 2014 were reduced by estimated costs to sell of \$0.5 million.

During the year ended December 31, 2016, the goodwill related to the commercial and digital print and statement printing reporting units were written down to their respective implied fair values of zero and \$15.2 million, respectively. During the year ended December 31, 2015 as performed under the previous reporting structure, goodwill within the former Europe and Latin America reporting units was written down to an implied fair value of zero. See Note 4, *Restructuring, Impairment and Other Charges*, for further discussion regarding these impairment charges.

For the year ended December 31, 2016, the Company recorded a non-cash charge of \$29.7 million primarily for the impairment of certain acquired customer relationship intangible assets in the commercial and digital print reporting unit within the Variable Print segment. After recording this impairment charge, there was \$4.6 million net book value remaining related to this customer relationship asset. See Note 4, *Restructuring, Impairment and Other Charges*, for further discussion regarding these impairment charges.

During the year ended December 31, 2015, the Company recorded impairment charges of \$11.9 million, including \$9.2 million and \$2.2 million for the impairment of certain acquired customer relationship intangible assets in the previous labels reporting unit within the Variable Print segment under the previous reporting structure and the Latin America reporting unit within the International segment, respectively. After recording the impairment charges, there was no remaining value related to these customer relationship assets. See Note 4, *Restructuring, Impairment and Other Charges*, for further discussion regarding these impairment charges.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

During the year ended December 31, 2014, the Company recorded impairment charges of \$7.8 million and \$4.1 million related to the impairment of acquired customer relationship intangible assets in the Canada and commercial and digital print reporting units, respectively. After recording the impairment charges, remaining customer relationship assets in the Canada and commercial and digital print reporting units were \$0.2 million and \$181.8 million, respectively. During the year ended December 31, 2014, \$1.4 million of acquired tradenames related to the commercial and digital print reporting unit were written down to an estimated fair value of zero due to facility closures. After recording the impairment charges, remaining tradename intangible assets in the commercial and digital reporting unit were \$14.3 million as of December 31, 2014. See Note 4, *Restructuring, Impairment and Other Charges*, for further discussion regarding these impairment charges.

The Company's accounting and finance management determines the valuation policies and procedures for Level 3 fair value measurements and is responsible for the development and determination of unobservable inputs.

The fair values of the long-lived assets held and used and long-lived assets held for sale or disposal were determined using Level 3 inputs and were estimated based on discussions with real estate brokers, review of comparable properties, if available, discussions with machinery and equipment brokers, dealer quotes and internal expertise related to the current marketplace conditions. Unobservable inputs obtained from third parties are adjusted as necessary for the condition and attributes of the specific asset.

The following table presents the fair value, valuation techniques and related unobservable inputs for these Level 3 measurements for the years ended December 31, 2016, 2015 and 2014:

	<u>Fair Value</u>	<u>Valuation Technique</u>	<u>Unobservable Input</u>	<u>Range</u>
2016				
Customer relationships	\$ 4.6	Excess earnings	Attrition rate	5.0%
			Discount Rate	13.0%
2015				
Customer relationships	\$ —	Excess earnings	Attrition rate	2.7%
2014				
Customer relationships	\$ —	Excess Earnings	Discount rate	12.0 - 18.0%
			Attrition Rate	6.6% - 12.0%

Note 10. Accrued Liabilities

The components of the Company's accrued liabilities at December 31, 2016 and 2015 were as follows:

	<u>2016</u>	<u>2015</u>
Employee-related liabilities	\$ 175.3	\$ 172.0
Deferred revenue	106.6	95.5
Restructuring liabilities	6.0	6.6
Other	253.8	188.0
Total accrued liabilities	\$ 541.7	\$ 462.1

Employee-related liabilities consist primarily of payroll, sales commission, incentive compensation, employee benefit accruals and workers' compensation. Incentive compensation accruals include amounts earned pursuant to the Company's primary employee incentive compensation plans. Other accrued liabilities include miscellaneous operating accruals, other customer-related liabilities, interest expense accruals and income and other tax liabilities.

Note 11. Commitments and Contingencies

As of December 31, 2016, the Company had commitments of approximately \$30.2 million for the purchase of property, plant and equipment related to incomplete projects. In addition, as of December 31, 2016, the Company had commitments of \$7.6 million for severance payments related to employee restructuring activities. The Company also has contractual commitments of approximately \$59.8 million for outsourced services, including technology, professional, maintenance and other services. The Company has a variety of contracts with suppliers for the purchase of paper, ink and other commodities for delivery in future years at prevailing market prices.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Future minimum rental commitments under operating leases are as follows:

<u>Year Ended December 31</u>	<u>Amount</u>
2017	\$ 85.6
2018	64.9
2019	47.4
2020	33.8
2021	22.1
2022 and thereafter	37.5
	<u>\$ 291.3</u>

The Company has operating lease commitments, including those for vacated facilities, totaling \$291.3 million extending through various periods to 2027. Future rental commitments for leases have not been reduced by minimum non-cancelable sublease rentals aggregating approximately \$23.0 million. The Company remains secondarily liable under these leases in the event that the sub-lessee defaults under the sublease terms. The Company does not believe that material payments will be required as a result of the secondary liability provisions of the primary lease agreements.

Rent expense for facilities in use and equipment was \$117.6 million, \$120.8 million and \$123.6 million for the years ended December 31, 2016, 2015 and 2014, respectively. Rent expense for vacated facilities was recognized as restructuring, impairment and other charges, see Note 4, *Restructuring, Impairment and Other Charges*, for further details.

Litigation

The Company is subject to laws and regulations relating to the protection of the environment. The Company provides 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. The Company has been designated as a potentially responsible party or has received claims in three active federal and state Superfund and other multiparty remediation sites. In addition to these sites, the Company may also have the obligation to remediate seven other previously and currently owned facilities. At the Superfund sites, the Comprehensive Environmental Response, Compensation and Liability Act provides that the Company's liability could be joint and several, meaning that the Company could be required to pay an amount in excess of its proportionate share of the remediation costs.

The Company's 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 the Company's estimated liability. The Company established reserves, recorded in accrued liabilities and other noncurrent liabilities, that it believes are adequate to cover its 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 the Company may undertake in the future. However, in the opinion of management, compliance with the present environmental protection laws, before taking into account estimated recoveries from third parties, will not have a material effect on the Company's consolidated results of operations, financial position or cash flows.

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

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Note 12. Retirement Plans

The Company sponsors various defined benefit retirement income pension plans in the U.S., U.K., Canada and certain other international locations, including both funded and unfunded arrangements. The Company's primary defined benefit plans are frozen. No new employees will be permitted to enter the Company's frozen plans and participants will earn no additional benefits. Benefits are generally based upon years of service and compensation. These defined benefit retirement income plans are funded in conformity with the applicable government regulations. The Company funds at least the minimum amount required for all funded plans using actuarial cost methods and assumptions acceptable under government regulations.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Prior to the Separation, certain active and retired employees of the Company and certain of the Company's retired employees participated in the Company's sponsored benefit plans. Following the Separation, their benefits will be provided directly by Donnelley Financial or LSC. As a result of the spinoff, the related plan obligations and plan assets were remeasured as of September 30, 2016 and transferred to Donnelley Financial or LSC on October 1, 2016. The transfer of these benefits to Donnelley Financial and LSC reduced the Company's benefit plan liabilities by \$426.5 million, deferred tax assets of \$351.3 million, and accumulated other comprehensive losses by \$906.1 million.

In the fourth quarter of 2015, the Company communicated to certain former employees the option to receive a lump-sum pension payment or annuity with payments computed in accordance with statutory requirements, beginning in the second quarter of 2016. Payments to eligible participants who elected to receive a lump-sum pension payment or annuity were funded from existing pension plan assets and constituted a complete settlement of the Company's pension liabilities with respect to these participants. The Company's pension assets and liabilities were remeasured as of the payout date. The discount rates and actuarial assumptions used to calculate the payouts were determined in accordance with federal regulations. As of the remeasurement date, the reduction in the reported pension obligation for these participants was \$354.8 million, compared to payout amounts of approximately \$328.4 million. The Company recorded non-cash settlement charges of \$21.1 million within selling, general and administrative expenses and \$77.7 million within net earnings from discontinued operations during the period ended December 31, 2016 in connection with the settlement payments. These charges resulted from the recognition in earnings of a portion of the actuarial losses recorded in accumulated other comprehensive loss based on the proportion of the obligation settled.

As of December 31, 2015, the Company changed the method used to estimate the interest cost components of net pension and other postretirement benefits plan expense for its defined benefit pension and other postretirement benefit plans. Historically, the interest cost components were estimated using a single weighted-average discount rate derived from the yield curve used to measure the projected benefit obligation at the beginning of the period. The Company has elected to use a full yield curve approach in the estimation of these interest components of net pension and other postretirement benefits plan expense by applying the specific spot rates along the yield curve used in the determination of the projected benefit obligation to the relevant projected cash flows. The Company made this change to improve the correlation between projected benefit cash flows and the corresponding yield curve spot rates and to provide a more precise measurement of interest costs. This change did not affect the measurement and calculation of the Company's total benefit obligations. The Company accounted for this change as a change in estimate.

The Company made contributions of \$12.8 million to its pension plans and \$7.7 million to its other postretirement benefits plans, as well as \$2.0 million to plans of LSC and Donnelley Financial, during the year ended December 31, 2016. The Company expects to make cash contributions of approximately \$17.0 million to its pension and other postretirement benefits plans in 2017.

In addition to the pension plans, the Company sponsors a 401(k) savings plan, which is a defined contribution retirement income plan.

Former employees are entitled to certain healthcare and life insurance benefits provided they have met certain eligibility requirements. Generally, the Company's benefits-eligible U.S. employees become eligible for these retiree healthcare benefits if they meet all of the following requirements at the time of termination: (a) have attained at least 55 or more points (full years of service and age combined), (b) are at least fifty years of age, (c) have at least two years of continuous, regular, full-time, benefits-eligible service and (d) have completed at least two or more years of continuous service with a participating employer, which ends on their termination date. Different requirements need to be met in order to receive subsidized medical and life insurance coverage. Certain of the plan expenses are paid through a tax-exempt trust. Most of the assets of the trust are invested in trust-owned life insurance policies covering certain current and former employees of the Company. The underlying assets of the policies are invested primarily in marketable equity, corporate fixed income and government securities.

During the third quarter of 2016, the Company announced the discontinuation of retiree medical, prescription drug and life insurance benefits for individuals retiring on or after October 1, 2016. This change was accounted for as a significant plan amendment and the other postemployment benefit plan obligations were remeasured as of September 30, 2016. This remeasurement resulted in a reduction to the other postemployment benefit plan obligations of \$35.0 million and a curtailment gain of \$16.2 million within cost of sales and \$3.3 million in selling, general and administrative expenses during the year ended December 31, 2016.

The Company operates a prescription drug program for certain Medicare-eligible retirees under a group-based Company sponsored Medicare Part D program, or Employer Group Waiver Program ("EGWP"). The EGWP subsidies provided to or for the benefit of this program are used to reduce the Company's net retiree medical and prescription drug costs on a group by group basis until such net costs of the Company for such group are eliminated, and any EGWP subsidies received in excess of the amount necessary to offset such net costs are used to reduce the included group of retirees' premiums.

The Company also maintains several pension and other postretirement benefits plans in certain international locations. The expected returns on plan assets and discount rates for these plans are determined based on each plan's investment approach, local interest rates and plan participant profiles.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

The pension and other postretirement benefits plan obligations are calculated using generally accepted actuarial methods and are measured as of December 31. Prior to the plan freezes, actuarial gains and losses were amortized using the corridor method over the average remaining service life of active plan participants. Actuarial gains and losses for frozen plans are amortized using the corridor method over the average remaining expected life of active plan participants.

The components of the net periodic benefit (income) expense and total (income) expense were as follows:

	Pension Benefits			Other Postretirement Benefits		
	2016	2015	2014	2016	2015	2014
Service cost	\$ 1.0	\$ 1.7	\$ 1.9	\$ 3.8	\$ 4.7	\$ 4.6
Interest cost	105.7	170.4	187.8	11.7	15.9	16.5
Expected return on plan assets	(177.5)	(234.6)	(250.5)	(13.8)	(13.1)	(12.2)
Amortization of prior service credit	—	—	—	(12.7)	(26.9)	(25.8)
Amortization of actuarial loss	26.1	40.5	31.9	0.1	—	—
Settlements and curtailments	98.4	—	95.7	(19.5)	—	—
Attributable to DFS and LSC	(43.3)	16.8	(72.3)	—	—	—
Net periodic benefit (income) expense related to continuing operations	<u>\$ 10.4</u>	<u>\$ (5.2)</u>	<u>\$ (5.5)</u>	<u>\$ (30.4)</u>	<u>\$ (19.4)</u>	<u>\$ (16.9)</u>

Weighted average assumption used to calculate net periodic benefit expense:

Discount rate	4.3%	3.9%	5.0%	4.2%	3.9%	4.5%
Rate of compensation increase	0.2%	0.2%	0.2%	n/a	n/a	n/a
Expected return on plan assets	6.8%	7.0%	7.6%	7.3%	7.3%	7.3%

	Pension Benefits		Other Postretirement Benefits	
	2016	2015	2016	2015
Benefit obligation at beginning of year	\$ 3,932.3	\$ 4,258.8	\$ 373.8	\$ 423.1
Service cost	1.0	1.7	3.8	4.7
Interest cost	105.7	170.4	11.7	15.9
Plan participants' contributions	—	—	9.4	10.7
Medicare reimbursements	—	—	5.4	5.7
Actuarial (gain) loss	349.5	(270.2)	5.9	(46.3)
Plan amendments and other	—	6.2	(33.8)	(0.1)
Curtailments and settlements	(304.4)	—	—	—
Foreign currency translation	(40.5)	(48.1)	1.3	(7.8)
Benefits paid	(129.7)	(186.1)	(32.5)	(32.5)
Separation of Donnelley Financial and LSC	(2,915.6)	—	—	—
Divestitures	(23.6)	(0.4)	—	—
Acquisitions	—	—	—	0.4
Benefit obligation at end of year	<u>\$ 974.7</u>	<u>\$ 3,932.3</u>	<u>\$ 345.0</u>	<u>\$ 373.8</u>
Fair value of plan assets at beginning of year	\$ 3,424.1	\$ 3,656.5	\$ 205.5	\$ 212.6
Actual return on assets	424.1	(24.5)	14.8	(1.1)
Settlements	(304.4)	—	—	—
Employer contributions	12.8	14.9	7.7	10.1
Medicare reimbursements	—	—	5.4	5.7
Plan participants' contributions	—	—	9.4	10.7
Separation of Donnelley Financial and LSC	(2,489.1)	—	—	—
Divestitures	(16.8)	—	—	—
Foreign currency translation	(45.6)	(36.7)	—	—
Benefits paid	(129.7)	(186.1)	(32.5)	(32.5)
Fair value of plan assets at end of year	<u>\$ 875.4</u>	<u>\$ 3,424.1</u>	<u>\$ 210.3</u>	<u>\$ 205.5</u>
Total net pension liability recognized as of December 31	(99.3)	(508.2)	(134.7)	(168.3)
Attributable to DFS and LSC	—	388.4	—	—
Total net pension liability recognized as of December 31	<u>\$ (99.3)</u>	<u>\$ (119.8)</u>	<u>\$ (134.7)</u>	<u>\$ (168.3)</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

The accumulated benefit obligation for all defined benefit pension plans was \$961.1 million and \$3,916.9 million at December 31, 2016 and 2015, respectively.

Amounts recognized in the Consolidated Balance Sheets as of December 31, 2016 and 2015 were as follows:

	Pension Benefits		Other Postretirement Benefits	
	2016	2015	2016	2015
Prepaid pension cost (included in other noncurrent assets)	\$ 22.8	\$ 13.0	\$ —	\$ —
Accrued benefit cost (included in accrued liabilities)	(2.7)	(2.6)	(0.6)	(0.7)
Pension liabilities	(119.4)	(130.2)	—	—
Other postretirement benefits plan liabilities	—	—	(134.1)	(167.6)
Net liabilities recognized in the Consolidated Balance Sheets - Continuing Operations	\$ (99.3)	\$ (119.8)	\$ (134.7)	\$ (168.3)

The amounts included in accumulated other comprehensive loss in the Consolidated Balance Sheets, excluding tax effects and in 2015 includes plans sponsored directly by the spinoff entities not presented in the above tables, that have not yet been recognized as components of net periodic benefit cost at December 31, 2016 and 2015 were as follows:

	Pension Benefits		Other Postretirement Benefits	
	2016	2015	2016	2015
Accumulated other comprehensive (loss) income				
Net actuarial (loss) gain	\$ (297.4)	\$ (1,229.9)	\$ 19.2	\$ 24.1
Net transition obligation	—	(0.1)	—	—
Net prior service credit	—	—	32.9	31.5
Total	\$ (297.4)	\$ (1,230.0)	\$ 52.1	\$ 55.6

The pre-tax amounts recognized in other comprehensive income (loss) in 2016 as components of net periodic benefit costs were as follows:

	Pension Benefits		Other Postretirement Benefits	
	2016	2015	2016	2015
Amortization of:				
Net actuarial loss	\$ 26.1	\$ 26.1	\$ 0.1	\$ 0.1
Net prior service credit	—	—	—	(12.7)
Amounts arising during the period:				
Net actuarial loss	—	(102.5)	—	(4.8)
Net prior service credit	—	—	—	33.8
Divestiture	—	1.6	—	—
Curtailment	—	—	—	(19.5)
Settlements	—	98.4	—	—
Foreign currency loss	—	(0.8)	—	(0.4)
Total	\$ 22.8	\$ 22.8	\$ (3.5)	\$ (3.5)

Actuarial gains and losses in excess of 10.0% of the greater of the projected benefit obligation or the market-related value of plan assets were recognized as a component of net periodic benefit costs over the average remaining service period of a plan's active employees. As a result of the plan freezes, the actuarial gains and losses are recognized as a component of net periodic benefit costs over the average remaining life of a plan's active employees. Unrecognized prior service costs or credits are also recognized as a component of net periodic benefit cost over the average remaining service period of a plan's active employees. The amounts in accumulated other comprehensive loss that are expected to be recognized as components of net periodic benefit costs in 2017 are shown below:

	Pension Benefits		Other Postretirement Benefits	
	2016	2015	2016	2015
Amortization of:				
Net actuarial loss	\$ 7.1	\$ 7.1	\$ (0.1)	\$ (0.1)
Net prior service credit	—	—	—	(2.8)
Total	\$ 7.1	\$ 7.1	\$ (2.9)	\$ (2.9)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

The weighted average assumptions used to determine the benefit obligation at the measurement date were as follows:

	<u>Pension Benefits</u>		<u>Other Postretirement Benefits</u>	
	2016	2015	2016	2015
Discount rate	3.8%	4.3%	4.0%	4.2%
Health care cost trend:				
Current				
Pre-Age 65	—	—	6.1%	6.1%
Post-Age 65	—	—	6.1%	6.1%
Ultimate	—	—	5.0%	4.9%

The following table provides a summary of under-funded or unfunded pension benefit plans with projected benefit obligations in excess of plan assets as of December 31, 2016 and 2015:

	<u>Pension Benefits</u>	
	2016	2015
Projected benefit obligation	\$ 744.3	\$ 3,695.0
Fair value of plan assets	622.2	3,173.8

The following table provides a summary of pension plans with accumulated benefit obligations in excess of plan assets as of December 31, 2016 and 2015:

	<u>Pension Benefits</u>	
	2016	2015
Accumulated benefit obligation	\$ 730.7	\$ 3,679.6
Fair value of plan assets	622.2	3,173.8

The current health care cost trend rate gradually declines through 2024 (2034 for Canada) to the ultimate trend rate and remains level thereafter. A one-percentage point change in assumed health care cost trend rates would have the following effects:

	<u>1.0%</u>	<u>1.0%</u>
	Increase	Decrease
Other postretirement benefits obligation	\$ 5.8	\$ (5.4)
Total other postretirement benefits service and interest cost components	0.8	(0.7)

The Company determines its assumption for the discount rate to be used for purposes of computing annual service and interest costs based on an index of high-quality corporate bond yields and matched-funding yield curve analysis as of the measurement date.

The Medicare Prescription Drug, Improvement and Modernization Act of 2003 included a prescription drug benefit under Medicare Part D, as well as a federal subsidy that began in 2006, to sponsors of retiree health care plans that provide a benefit that is at least actuarially equivalent, as defined in the Act, to Medicare Part D. Two of the Company's retiree health care plans were at least actuarially equivalent to Medicare Part D and were eligible for the federal subsidy. During the years ended December 31, 2016 and 2015, Medicare Part D subsidies received by the Company were negligible.

During the year ended December 31, 2016, the Company received approximately \$5.4 million in EGWP subsidies.

Benefit payments are expected to be paid as follows:

	<u>Pension Benefits</u>	<u>Other Postretirement Benefits-Gross</u>	<u>Estimated Subsidy Reimbursements</u>
2017	44.9	26.8	1.3
2018	45.8	26.9	1.4
2019	46.4	26.5	1.5
2020	48.1	26.2	1.5
2021	49.6	25.7	1.5
2022-2026	258.1	122.0	6.5

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Plan Assets

The Company's U.S. pension plans are frozen and the Company has transitioned to a risk management approach for its U.S. pension plan assets. The overall investment objective of this approach is to further reduce the risk of significant decreases in the plan's funded status by allocating a larger portion of the plan's assets to investments expected to hedge the impact of interest rate risks on the plan's obligation. Over time, the target asset allocation percentage for the pension plan is expected to decrease for equity and other "return seeking" investments and increase for fixed income and other "hedging" investments. The assumed long-term rate of return for plan assets, which is determined annually, is likely to decrease as the asset allocation shifts over time. The expected long-term rate of return for plan assets is based upon many factors including asset allocations, historical asset returns, current and expected future market conditions, risk and active management premiums. The target asset allocation percentage as of December 31, 2016, for the primary U.S. pension plan was approximately 55.0% for return seeking investments and approximately 45.0% for hedging investments.

The Company segregated its plan assets by the following major categories and levels for determining their fair value as of December 31, 2016 and 2015. All plan assets that are valued using the net asset value per share ("NAV") practical expedient have not been included within the fair value hierarchy but are separately disclosed.

Cash and cash equivalents— Carrying value approximates fair value. As such, these assets were classified as Level 1. The Company also invests in certain short-term investments which are valued using the amortized cost method. As such, these assets were classified as Level 2.

Equity— The values of individual equity securities were based on quoted prices in active markets. As such, these assets are classified as Level 1. Additionally, this category includes underlying securities in trust owned life insurance policies which are invested in certain equity securities. These investments are not quoted on active markets; therefore, they are classified as Level 2. Additionally, the Company invests in certain equity funds that are valued at calculated NAV.

Fixed income— Fixed income securities are typically priced based on a valuation model rather than a last trade basis and are not exchange-traded. These valuation models involve utilizing dealer quotes, analyzing market information, estimating prepayment speeds and evaluating underlying collateral. Accordingly, the Company classified these fixed income securities as Level 2. The Company also invests in certain fixed income funds and securities in trust owned life insurance policies which are valued at NAV.

Derivatives and other— This category includes assets and liabilities that are futures or swaps traded on a primary exchange and are priced by multiple providers. Accordingly, the Company classified these assets and liabilities as Level 1. This category also includes various other assets in which carrying value approximates fair value, including investments valued at a NAV. Additionally, this category includes investments in commodity and structured credit funds that are not quoted on active markets; therefore, they are classified as Level 2.

Real estate —The fair market value of real estate investment trusts is based on NAV.

Private equity— Includes the Company's interest in various private equity funds that are valued by the investment manager on a periodic basis with models that use market, income and cost valuation methods. The valuation inputs are not highly observable, and these interests are not actively traded on an open market. Accordingly, private equity was categorized as Level 3.

For Level 2 and Level 3 plan assets, management reviews significant investments on a quarterly basis including investigation of unusual fluctuations in price or returns and obtaining an understanding of the pricing methodology to assess the reliability of third-party pricing estimates.

The valuation methodologies described above may generate a fair value calculation that may not be indicative of net realizable value or future fair values. While the Company believes the valuation methodologies used are appropriate, the use of different methodologies or assumptions in calculating fair value could result in different amounts. The Company invests in various assets in which valuation is determined by NAV. The Company believes that the NAV is representative of fair value at the reporting date, as there are no significant restrictions on redemption of these investments or other reasons to indicate that the investment would be redeemed at an amount different than the NAV.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

The fair values of the Company's pension plan assets at December 31, 2016 and 2015, by asset category were as follows:

Asset Category	December 31, 2016				December 31, 2015			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Cash and cash equivalents	\$ 17.5	\$ 12.9	\$ 4.6	\$ —	\$ 124.0	\$ 93.3	\$ 30.7	\$ —
Equity	144.6	144.5	0.1	—	816.7	816.6	0.1	—
Fixed income	222.7	0.7	222.0	—	1,371.9	0.6	1,371.3	—
Derivatives and other	2.3	—	2.3	—	1.5	—	1.5	—
Subtotal	\$ 387.1	\$ 158.1	\$ 229.0	\$ —	\$ 2,314.1	\$ 910.5	\$ 1,403.6	\$ —
Plan assets measured at NAV								
Equity funds	\$ 245.5				\$ 717.5			
Fixed income	193.4				184.4			
Derivatives and other	16.6				16.5			
Real estate	32.8				146.5			
Private Equity	—				45.1			
Total plan assets measured at NAV	\$ 488.3				\$ 1,110.0			
Total	\$ 875.4				\$ 3,424.1			

The fair values of the Company's other postretirement benefits plan assets at December 31, 2016 and 2015, by asset category were as follows:

Asset Category	December 31, 2016			December 31, 2015		
	Total	Level 1	Level 2	Total	Level 1	Level 2
Cash and cash equivalents	\$ 21.3	\$ —	\$ 21.3	\$ 5.4	\$ —	\$ 5.4
Other	1.4	1.4	—	1.2	1.2	—
Subtotal	\$ 22.7	\$ 1.4	\$ 21.3	\$ 6.6	\$ 1.2	\$ 5.4
Investments measured at NAV						
Equity funds	\$ 149.8			\$ 143.5		
Fixed income funds	37.8			55.4		
Total investments measured at NAV	\$ 187.6			\$ 198.9		
Total	\$ 210.3			\$ 205.5		

Employee 401(k) Savings Plan — For the benefit of most of its U.S. employees, the Company maintains a defined contribution retirement savings plan that is intended to be qualified under Section 401(a) of the Internal Revenue Code. Under this plan, employees may contribute a percentage of eligible compensation on both a before-tax and after-tax basis. The Company may provide a 401(k) discretionary match to participants, but did not in 2016, 2015 or 2014.

Multi-Employer Pension Plans — Multi-employer plans receive contributions from two or more unrelated employers pursuant to one or more collective bargaining agreements and the assets contributed by one employer may be used to fund the benefits of all employees covered within the plan. The risk and level of uncertainty related to participating in these multi-employer pension plans differs significantly from the risk associated with the Company-sponsored defined benefit plans. For example, investment decisions are made by parties unrelated to the Company and the financial stability of other employers participating in a plan may affect the Company's obligations under the plan.

During the year ended December 31, 2016, the Company recorded charges of \$2.3 million for multi-employer pension plans withdrawal obligations unrelated to facility closures. These charges were recorded as restructuring, impairment and other charges and represent the Company's best estimate of the expected settlement of these withdrawal liabilities. For the year ended December 31, 2015, the Company recorded restructuring, impairment and other charges of \$2.2 million associated with its estimated liability for withdrawing from defined benefit multi-employer pension plans related to facility closures. For the year ended December 31, 2014, the Company recorded restructuring, impairment and other charges of \$11.5 million related to complete or partial withdrawal from certain multi-employer pension plans primarily related to facility closures. See Note 4, *Restructuring, impairments and other charges*, for further details of charges related to complete or partial multi-employer pension plan withdrawal liabilities recognized in the Consolidated Statements of Operations.

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(In millions, except per share data and unless otherwise indicated)-(Continued)

Note 13. Income Taxes

Income taxes have been based on the following components of earnings (loss) from continuing operations before income taxes for the years ended December 31, 2016, 2015 and 2014:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
U.S.	\$ (617.9)	\$ (36.3)	\$ (194.8)
Foreign	120.7	25.6	98.3
Total	<u>\$ (497.2)</u>	<u>\$ (10.7)</u>	<u>\$ (96.5)</u>

The components of income tax expense (benefit) from continuing operations for the years ended December 31, 2016, 2015 and 2014 were as follows:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Federal:			
Current	\$ (7.3)	\$ 8.5	\$ (70.4)
Deferred	(51.7)	(11.9)	(10.5)
State:			
Current	(6.0)	(8.3)	(11.7)
Deferred	12.5	(4.6)	6.1
Foreign:			
Current	34.4	19.7	39.5
Deferred	5.8	17.6	(9.2)
Total	<u>\$ (12.3)</u>	<u>\$ 21.0</u>	<u>\$ (56.2)</u>

The following table outlines the reconciliation of differences between the Federal statutory tax rate and the Company's effective income tax rate:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Federal statutory tax rate	35.0%	35.0%	35.0%
Change in valuation allowances	(7.1)	(225.5)	(6.0)
Venezuelan devaluation and sale	—	(122.8)	—
State and local income taxes, net of U.S. federal income tax benefit	—	36.0	5.7
Impairment charges	(32.3)	(57.8)	—
Acquisition-related expenses	—	(0.3)	(0.8)
Foreign tax	(1.2)	(19.8)	(2.7)
Adjustment of uncertain tax positions and interest	0.5	45.9	2.7
Reorganization	3.9	—	15.4
Foreign tax rate differential	3.0	169.7	8.3
Other	0.7	(56.7)	0.6
Effective income tax rate	<u>2.5%</u>	<u>(196.3%)</u>	<u>58.2%</u>

Included in 2016 is the impact of the non-deductible goodwill impairment charges and \$9.5 million of valuation allowance provision, net of federal tax benefits, on certain deferred taxes assets within state and local jurisdictions.

Included in 2015 is an \$11.3 million valuation allowance provision on certain deferred tax assets within the International segment and the impact of the non-deductible pre-tax loss of \$30.3 million related to the Venezuela currency remeasurement and the related impact of the devaluation.

Included in 2014 is a \$15.2 million tax benefit related to the decline in value of an entity within the Strategic Services segment.

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Deferred income taxes

The significant deferred tax assets and liabilities at December 31, 2016 and 2015 were as follows:

	2016	2015
Deferred tax assets:		
Pension and other postretirement benefits plan liabilities	\$ 100.1	\$ 120.3
Net operating losses and other tax carryforwards	164.9	156.6
Accrued liabilities	86.1	86.6
Foreign depreciation	14.6	16.6
Other	25.1	30.5
Total deferred tax assets	390.8	410.6
Valuation allowances	(154.1)	(130.8)
Net deferred tax assets	\$ 236.7	\$ 279.8
Deferred tax liabilities:		
Accelerated depreciation	\$ (68.2)	\$ (77.6)
Other intangible assets	(36.0)	(75.7)
Inventories	(7.6)	(11.6)
Other	(23.1)	(28.3)
Total deferred tax liabilities	(134.9)	(193.2)
Net deferred tax assets	\$ 101.8	\$ 86.6

Transactions affecting the valuation allowances on deferred tax assets during the years ended December 31, 2016, 2015 and 2014 were as follows:

	2016	2015	2014
Balance, beginning of year	\$ 130.8	\$ 144.3	\$ 132.8
Current year expense-net	35.2	11.8	20.9
Write-offs	(1.0)	(15.0)	(2.5)
Foreign exchange and other	(10.9)	(10.3)	(6.9)
Balance, end of year	\$ 154.1	\$ 130.8	\$ 144.3

As of December 31, 2016, the Company had domestic and foreign net operating loss and other tax carryforwards of approximately \$63.3 million and \$101.6 million (\$68.2 million and \$88.4 million, respectively, at December 31, 2015), of which \$34.7 million expires between 2017 and 2026. Limitations on the utilization of these tax assets may apply. The Company has provided valuation allowances to reduce the carrying value of certain deferred tax assets, as management has concluded that, based on the weight of available evidence, it is more likely than not that the deferred tax assets will not be fully realized.

Deferred income taxes are not provided on the excess of the investment value for financial reporting over the tax basis of investments in those foreign subsidiaries for which such excess is considered to be permanently reinvested in those operations. The Company has recognized deferred tax liabilities of \$6.7 million and \$4.3 million as of December 31, 2016 and December 31, 2015, respectively, related to local taxes on certain foreign earnings which are not considered to be permanently reinvested. Undistributed earnings of foreign subsidiaries that are considered indefinitely reinvested outside of the U.S. were approximately \$955.9 million as of December 31, 2016. Upon repatriation of these earnings to the U.S. in the form of dividends or otherwise, the Company may be subject to U.S. income taxes and foreign taxes. The tax cost would depend on income tax laws and circumstances at the time of distribution.

Cash payments for income taxes were \$108.2 million, \$129.1 million and \$119.8 million in 2016, 2015 and 2014, respectively. Cash refunds for income taxes were \$7.2 million, \$14.8 million and \$13.7 million in 2016, 2015 and 2014, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

The Company's income taxes payable for federal and state purposes has been reduced by the tax benefits associated with the exercise of employee stock options and the vesting of restricted stock units. A component of the income tax benefit, calculated as the tax effect of the difference between the fair market value at the time stock options are exercised or restricted stock units vest and the grant date fair market value, directly increases or reduces RR Donnelley stockholders' equity. For the years ended December 31, 2016, 2015 and 2014, the tax expense recognized as a reduction of RR Donnelley's stockholders' equity was \$2.3 million, \$ 3.2 million and \$2.9 million, respectively.

See Note 17, *Comprehensive Income* , for details of the income tax expense or benefit allocated to each component of other comprehensive income.

Uncertain tax positions

Changes in the Company's unrecognized tax benefits at December 31, 2016, 2015 and 2014 were as follows:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Balance at beginning of year	\$ 51.0	\$ 58.5	\$ 33.8
Acquisitions	—	—	30.9
Additions for tax positions of the current year	0.6	1.1	1.9
Additions for tax positions of prior years	—	—	0.4
Reductions for tax positions of prior years	(1.5)	(5.4)	(1.4)
Settlements during the year	(1.8)	(0.3)	(2.9)
Lapses of applicable statutes of limitations	(6.4)	(2.9)	(4.2)
Balance at end of year	<u>\$ 41.9</u>	<u>\$ 51.0</u>	<u>\$ 58.5</u>

As of December 31, 2016, 2015 and 2014, the Company had \$41.9 million, \$51.0 million and \$58.5 million, respectively, of unrecognized tax benefits. Unrecognized tax benefits of \$26.1 million as of December 31, 2016, if recognized, would have decreased income taxes and the corresponding effective income tax rate and increased net earnings. This potential impact on net earnings reflects the reduction of these unrecognized tax benefits, net of certain deferred tax assets and the federal tax benefit of state income tax items.

As of December 31, 2016, it is reasonably possible that the total amount of unrecognized tax benefits will decrease within twelve months by as much as \$5.6 million due to the resolution of audits or expirations of statutes of limitations related to U.S. federal, state and international tax positions.

The Company classifies interest expense and any related penalties related to income tax uncertainties as a component of income tax expense. The total interest benefits related to tax uncertainties recognized in the Consolidated Statements of Operations were \$(0.5) million and \$(0.1) million for the years ended December 31, 2016 and December 31, 2015, respectively, due to the reversal of interest accrued on previously unrecognized tax benefits. The total interest expense, net of tax benefits, was \$0.1 million for the year ended December 31, 2014. There were no benefits from the reversal of accrued penalties for the year ended December 31, 2016, 2015 and 2014. Accrued interest of \$4.0 million and \$4.7 million related to income tax uncertainties were reported as a component of other noncurrent liabilities in the Consolidated Balance Sheets at December 31, 2016 and 2015, respectively. There were no accrued penalties related to income tax uncertainties for the years ended December 31, 2016 and 2015.

The Company has tax years from 2010 that remain open and subject to examination by the IRS, certain state taxing authorities or certain foreign tax jurisdictions.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Note 14. Debt

The Company's debt at December 31, 2016 and 2015 consisted of the following:

	<u>2016</u>	<u>2015</u>
Borrowings under the credit facility	\$ 185.0	\$ —
8.60% senior notes due August 15, 2016	—	219.6
11.25% senior notes due February 1, 2019 (a)	172.2	172.2
7.625% senior notes due June 15, 2020	350.0	350.0
7.875% senior notes due March 15, 2021	448.8	448.5
8.875% debentures due April 15, 2021	80.9	80.9
7.00% senior notes due February 15, 2022	140.0	140.0
6.50% senior notes due November 15, 2023	350.0	350.0
6.00% senior notes due April 1, 2024	400.0	400.0
6.625% debentures due April 15, 2029	199.5	199.5
8.820% debentures due April 15, 2031	69.0	69.0
Other (b)	8.5	13.3
Unamortized debt issuance costs	(16.5)	(24.3)
Total debt	2,387.4	2,418.7
Less: current portion	(8.2)	(231.9)
Long-term debt	\$ 2,379.2	\$ 2,186.8

- (a) As of December 31, 2015, the interest rate on the 11.25% senior notes due February 1, 2019 was 12.75% as a result of downgrades in the ratings of the notes by the rating agencies. As a result of a ratings downgrade on February 2, 2016, the interest rate increased from 12.75% to 13.0% in February 2016. As a result of a ratings downgrade on October 6, 2016, the rate increased to 13.25%. The maximum interest rate on these notes is 13.25%.
- (b) Includes miscellaneous debt obligations and capital leases.

The fair values of the senior notes and debentures, which were determined using the market approach based upon interest rates available to the Company for borrowings with similar terms and maturities, were determined to be Level 2 under the fair value hierarchy. The fair value of the Company's total debt was greater than its book value by approximately \$4.3 million at December 31, 2016 and less than its book value by approximately \$39.7 million at December 31, 2015.

On September 30, 2016, the Company entered into an amended and restated Credit Agreement (the "Credit Agreement") providing for \$800.0 million in credit facilities (the "Revolving Facility"). The commitments under the Revolving Facility will expire, and any borrowings outstanding under the Revolving Facility will become due and payable, on September 30, 2021. The borrowings and any repayments of such borrowings, under the amended and restated Credit Agreement which began in October 2016, have been presented on a gross basis on the Consolidated Statements of Cash Flows and the borrowings are classified as long term. Interest rates on borrowings are equal to, at the Company's option, a base rate plus a margin ranging from 1.125% to 1.50%, or LIBOR plus a margin ranging from 2.125% to 2.50%, in either case based upon the leverage ratio of RR Donnelley. In addition, the Company will pay a facility fee on the actual daily amount of the aggregate revolving commitments regardless of usage ranging from 0.375% to 0.50%, based upon the leverage ratio of the Company. As a result of the reduction in borrowing capacity, the Company recognized a \$1.4 million loss related to unamortized debt issuance costs within loss on debt extinguishments in the Consolidated Statements of Operations for the period ended December 31, 2016.

The Credit Agreement is subject to a number of covenants, including a maximum Leverage Ratio, as defined and calculated pursuant to the Credit Agreement, that, in part, restrict the Company's ability to incur additional indebtedness, create liens, engage in mergers and consolidations, make restricted payments and dispose of certain assets. The Credit Agreement generally allows annual dividend payments of up to \$60.0 million in aggregate, though additional dividends may be allowed subject to certain conditions.

The weighted average interest rate on borrowings under the Company's credit facility was 2.5% during the year ended December 31, 2016. The weighted average interest rate on borrowing under the Company's credit facility was 2.0% during the year ended December 31, 2015.

Cash on hand and borrowings under the credit facility were used to pay the \$219.8 million of 8.6% senior notes that matured on August 15, 2016.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Cash on hand and borrowings under the credit facility were used to pay the \$200.0 million 5.50% senior notes that matured on May 15, 2015.

On April 1, 2014, cash on hand and borrowings under the credit facility were used to pay the \$258.2 million 4.95% senior notes that matured on April 1, 2014.

On March 20, 2014, the Company issued \$400.0 million of 6.00% senior notes due April 1, 2024. Interest on the notes is payable semi-annually on April 1 and October 1, and commenced on October 1, 2014. The net proceeds from the offering along with borrowings under the Credit Agreement were used to repurchase \$211.1 million of the 8.25% senior notes due March 15, 2019, \$100.0 million of the 7.25% senior notes due May 15, 2018, and \$50.0 million of the 7.625% senior notes due June 15, 2020. The repurchases resulted in a pre-tax loss on debt extinguishment of \$77.1 million for the year ended December 31, 2014 related to the premiums paid, unamortized debt issuance costs, elimination of the \$2.8 million fair value adjustment on the 8.25% senior notes and other expenses.

As of December 31, 2016, the Company had \$77.8 million in outstanding letters of credit, of which \$57.7 million were issued under the Credit Agreement. The letters of credit issued under the Credit Agreement did not reduce availability under the Credit Agreement at December 31, 2016, as the amounts issued were less than the reduction in availability from the Leverage Ratio covenant. As of December 31, 2016, the Company also had \$140.4 million in other uncommitted credit facilities, primarily outside the U.S., (the "Other Facilities"). As of December 31, 2016, bank acceptance drafts, letters of credit and guarantees of \$67.8 million were issued, and reduced availability, under the Company's Other Facilities. As of December 31, 2016 and 2015, total borrowings under the Credit Agreement and the Other Facilities (the "Combined Facilities") were \$192.5 million and \$11.2 million, respectively.

At December 31, 2016, the future maturities of debt, including capitalized leases, were as follows:

	<u>Amount</u>
2017	\$ 8.2
2018	0.2
2019	172.2
2020	350.0
2021	716.0
2022 and thereafter	1,159.0
Total (a)	<u>\$ 2,405.6</u>

(a) Excludes unamortized debt issuance costs of \$16.5 million and \$1.7 million of bond discount which do not represent contractual commitments with a fixed amount or maturity date.

Spinoff Transactions

In connection with the spinoff transactions, the Company, Donnelley Financial and LSC executed various debt transactions in order to capitalize each company. As these debt transactions were executed in order to successfully complete the spinoff capitalization transactions, the Company has classified the corporate level debt repurchased, resulting losses on debt extinguishments and all related interest expense as discontinued operations or liabilities held for disposition.

On September 30, 2016, the Company's then wholly-owned subsidiary Donnelley Financial issued senior notes and incurred a senior secured term loan B facility with total aggregate principals of \$300.0 million and \$350.0 million, respectively. Additionally on September 30, 2016, the Company's then wholly-owned subsidiary LSC issued senior notes and incurred a senior secured term loan B facility with total aggregate principals of \$450.0 million and \$375.0 million, respectively. All of the related net proceeds were distributed to the Company in connection with the Separation. After the Separation, RR Donnelley has no obligations as it relates to these senior notes, senior secured term loan B facilities or any other LSC or Donnelley Financial indebtedness.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

On August 31, 2016, the Company and certain third party financial institutions (such financial institutions collectively, the “Third Party Purchasers”), launched cash tender offers for certain of the Company’s outstanding debt securities, including the Company’s 6.125% senior notes due January 15, 2017 (the “2017 Notes”), 7.250% senior notes due May 15, 2018 the (“2018 Notes”), 8.250% senior notes due March 15, 2019 (the “2019 Notes”) and 7.000% senior notes due February 15, 2022 (the “2022 Notes”). On September 16, 2016, the Third Party Purchasers purchased \$274.4 million in aggregate principal amount of the 2017 Notes and 2018 Notes (the “Third Party Purchase Notes”). On September 30, 2016, the Company purchased approximately \$503.6 million in aggregate principal amount of the 2017 Notes, the 2018 Notes, the 2019 Notes and the 2022 Notes (the “Company Purchase Notes”), and exchanged \$300.0 million in aggregate principal amount of the Donnelley Financial senior notes for the Third Party Purchase Notes. The Company cancelled the Third Party Purchase Notes and Company Purchase Notes on September 30, 2016. As a result, the Company recognized an \$85.3 million loss on debt extinguishments in the period ending December 31, 2016 related to premiums and other related transaction costs within net earnings from discontinued operations.

On October 6, 2016, the Company redeemed the outstanding \$45.8 million principal amount of the 2018 Notes and the outstanding \$21.3 principal amount of the 2019 Notes plus accrued and unpaid interest. Additionally, the Company redeemed the outstanding \$155.2 million aggregate principal of the 2017 Notes on November 2, 2016. As a result, the Company recognized an additional \$10.8 million loss on debt extinguishments within net earnings of discontinued operations in the fourth quarter of 2016.

Interest expense

The following table summarizes interest expense included in the Consolidated Statements of Operations:

	2016	2015	2014
Interest incurred	\$ 206.1	\$ 211.6	\$ 220.9
Less: interest income	(4.6)	(3.7)	(6.1)
Less: interest capitalized as property, plant and equipment	(2.8)	(3.8)	(3.6)
Interest expense, net	<u>\$ 198.7</u>	<u>\$ 204.1</u>	<u>\$ 211.2</u>

Interest paid, net of interest received, was \$272.7 million, \$272.5 million and \$275.2 million in 2016, 2015 and 2014, respectively.

Note 15. Derivatives

All derivatives are recorded as other current or noncurrent assets or other current or noncurrent liabilities in the Consolidated Balance Sheets at their respective fair values. Unrealized gains and losses related to derivatives are recorded in other comprehensive income (loss), net of applicable income taxes, or in the Consolidated Statements of Operations, depending on the purpose for which the derivative is held. For derivatives designated and that qualify as cash flow hedges, the effective portion of the unrealized gain or loss related to the derivatives are generally recorded in other comprehensive income (loss) until the transaction affects earnings. For derivatives designated and that qualify as fair value hedges, the gain or loss on the derivative, as well as the offsetting gain or loss on the hedged item attributable to the hedged risk, are recognized in the Consolidated Statements of Operations. Changes in the fair value of derivatives that do not meet the criteria for designation as a hedge at inception, or fail to meet the criteria thereafter, are recognized currently in the Consolidated Statements of Operations. At the inception of a hedge transaction, the Company formally documents the hedge relationship and the risk management objective for undertaking the hedge. In addition, the Company assesses 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 currently in the Consolidated Statements of Operations.

The Company is exposed to the impact of foreign currency fluctuations in certain countries in which it operates. The exposure to foreign currency movements is limited in many countries because the operating revenues and expenses of its various subsidiaries and business units are substantially in the local currency of the country in which they operate. To the extent borrowings, sales, purchases, revenues, expenses or other transactions are not in the local currency of the subsidiary or operating unit, the Company is exposed to currency risk. Periodically, the Company uses foreign exchange spot and forward contracts to hedge exposures resulting from foreign exchange fluctuations. Accordingly, the gains and losses associated with the fair values of foreign currency exchange contracts are recognized currently in the Consolidated Statements of Operations and are generally offset by gains and losses on underlying payables, receivables and net investments in foreign subsidiaries. The Company does not use derivative financial instruments for trading or speculative purposes. The aggregate notional value of the forward contracts at December 31, 2016 and 2015 was \$172.2 million and \$268.4 million, respectively. The fair values of foreign exchange forward contracts were determined to be Level 2 under the fair value hierarchy and are valued using market exchange rates.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

On March 13, 2012, the Company entered into interest rate swap agreements to manage interest rate risk exposure, effectively changing the interest rate on \$400.0 million of its fixed-rate senior notes to a floating-rate based on LIBOR plus a basis point spread. The interest rate swaps, with a notional value of \$400.0 million at inception, were designated as fair value hedges against changes in the value of the Company's \$450.0 million 8.25% senior notes due March 15, 2019, which were attributable to changes in the benchmark interest rate. During the year ended December 31, 2014, the Company repurchased \$211.1 million of the 8.25% senior notes due March 15, 2019, and related interest rate swaps with a notional amount of \$210.0 million were terminated, resulting in payments of \$4.2 million for the fair value of the interest rate swaps. During the year ended December 31, 2016, in connection with the tender of the Company's 8.25% senior notes due March 15, 2019, the Company terminated the remaining \$190.0 million notional value of the interest rate swap agreements which resulted in cash received of \$2.5 million for the fair value of the interest rate swaps. As of December 31, 2016, the Company has no outstanding interest rate swap agreements.

On April 9, 2010, the Company entered into interest rate swap agreements to manage interest rate risk exposure, effectively changing the interest rate on \$600.0 million of its fixed-rate senior notes to a floating-rate LIBOR plus a basis point spread. The interest rate swaps, with a notional value of \$600.0 million at inception, are designated as fair value hedges against changes in the value of the Company's 4.95% senior notes due April 1, 2014, which are attributable to changes in the benchmark interest rate. During March 2012, the Company repurchased \$341.8 million of the 4.95% senior notes due April 1, 2014, and related interest rate swaps with a notional amount of \$342.0 million were terminated, resulting in proceeds of \$11.0 million for the fair value of the interest rate swaps. In conjunction with the 4.95% senior notes maturity in April 2014, the remaining interest rate swap agreements matured.

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 fixed cash payments and the discounted expected variable cash receipts. The variable cash receipts are based on the expectation of future interest rates derived from observed market interest rate curves. In addition, 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. The Company evaluates the credit value adjustments of the interest rate swap agreements, which take into account the possibility of counterparty and the Company's own default, on at least a quarterly basis.

The Company's foreign exchange forward contracts and interest rate swaps are subject to enforceable master netting agreements that allow the Company to settle positive and negative positions with the respective counterparties. The Company settles foreign exchange forward contracts on a net basis when possible. Foreign exchange forward contracts that can be settled on a net basis are presented net in the Consolidated Balance Sheets. Interest rate swaps were settled on a gross basis and were presented gross in the Consolidated Balance Sheets.

The Company manages credit risk for its derivative positions on a counterparty-by-counterparty basis, considering the net portfolio exposure with each counterparty, consistent with its risk management strategy for such transactions. The Company's agreements with each of its counterparties contain a provision where the Company could be declared in default on its derivative obligations if it either defaults or, in certain cases, is capable of being declared in default of any of its indebtedness greater than specified thresholds. These agreements also contain a provision where the Company could be declared in default subsequent to a merger or restructuring type event if the creditworthiness of the resulting entity is materially weaker.

At December 31, 2016 and 2015, the total fair value of the Company's foreign exchange forward contracts, which were the only derivatives not designated as hedges, and fair value hedges, along with the accounts in the Consolidated Balance Sheets in which the fair value amounts were included, were as follows:

	<u>2016</u>	<u>2015</u>
Derivatives not designated as hedges		
Prepaid expenses and other current assets	\$ 1.7	\$ 1.8
Accrued liabilities	1.5	1.5
Derivatives designated as fair value hedges		
Other noncurrent assets	\$ —	\$ 0.4

The pre-tax (gains) losses related to derivatives not designated as hedges recognized in the Consolidated Statements of Operations for the years ended December 31, 2016, 2015 and 2014 were as follows:

	<u>Classification of (Gain) Loss Recognized in the Consolidated Statements of Operations</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>
Derivatives not designated as hedges				
Foreign exchange forward contracts	Selling, general and administrative expenses	\$ (5.7)	\$ (28.2)	\$ (33.3)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

For derivatives designated as fair value hedges, the pre-tax (gains) losses related to the hedged items, attributable to changes in the hedged benchmark interest rate and the offsetting (gain) loss on the related interest rate swaps for the years ended December 31, 2016, 2015 and 2014 were as follows:

	Classification of (Gain) Loss Recognized in the	2016	2015	2014
	Consolidated Statements of Operations			
Fair Value Hedges				
Interest rate swaps	Investment and other expense-net	\$ 0.4	\$ (1.7)	\$ (2.1)
Hedged items	Investment and other expense-net	(0.8)	1.3	1.3
Total (gain) loss recognized as ineffectiveness in the Consolidated Statements of Operations	Investment and other expense-net	<u>\$ (0.4)</u>	<u>\$ (0.4)</u>	<u>\$ (0.8)</u>

The Company also recognized a net reduction to interest expense of \$1.0 million, \$2.0 million and \$3.8 million for the years ended December 31, 2016, 2015 and 2014, respectively, related to the Company's fair value hedges, which includes interest accruals on the derivatives and amortization of the basis in the hedged items.

Note 16. Earnings per Share

Basic earnings per share is calculated by dividing net earnings attributable to RR Donnelley 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 considered anti-dilutive and 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 the Company's stock price during the applicable period. In periods when the Company is in a net loss from continuing operations, share-based awards are excluded from the calculation of earnings per share as their inclusion would have an antidilutive effect.

During the years ended December 31, 2016, 2015 and 2014, no shares of common stock were purchased by the Company, however, shares were withheld for tax liabilities upon the vesting of equity awards. During the years ended December 31, 2015 and 2014, the Company issued approximately 2.7 million and 5.7 million shares of common stock, respectively, in conjunction with acquisitions.

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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 years ended December 31, 2016, 2015 and 2014 were as follows:

	<u>2016 (1)</u>	<u>2015 (1)</u>	<u>2014 (1)</u>
Basic net (loss) earnings per share attributable to RR Donnelley common stockholders:			
Continuing operations	\$ (6.95)	\$ (0.28)	\$ (0.66)
Discontinued operations	\$ (0.14)	\$ 2.48	\$ 2.43
Net (loss) earnings attributable to RR Donnelley stockholders	\$ (7.09)	\$ 2.20	\$ 1.77
Diluted net (loss) earnings per share attributable to RR Donnelley common stockholders:			
Continuing operations	\$ (6.95)	\$ (0.28)	\$ (0.66)
Discontinued operations	\$ (0.14)	\$ 2.48	\$ 2.43
Net (loss) earnings attributable to RR Donnelley stockholders	\$ (7.09)	\$ 2.20	\$ 1.77
Numerator:			
Net loss attributable to RR Donnelley common stockholders - continuing operations	\$ (486.2)	\$ (19.0)	\$ (43.7)
Net (loss) earnings from discontinued operations, net of income taxes	(9.7)	170.1	161.1
Net (loss) earnings attributable to RR Donnelley common stockholders	(495.9)	151.1	117.4
Denominator:			
Weighted average number of common shares outstanding	70.0	68.5	66.2
Dilutive options and awards	—	—	—
Diluted weighted average number of common shares outstanding	<u>70.0</u>	<u>68.5</u>	<u>66.2</u>
Weighted average number of anti-dilutive share-based awards:			
Stock options	0.9	0.8	0.8
Performance share units	—	0.2	0.2
Restricted stock units	0.3	0.2	0.3
Total	<u>1.2</u>	<u>1.2</u>	<u>1.3</u>
Dividends declared per common share	\$ 2.48	\$ 3.12	\$ 3.12

- (1) Earnings per share amounts, dividends declared per common share and adjusted weighted average common shares outstanding for all periods reflect RR Donnelley's 1-for-3 reverse stock split, which was effective October 1, 2016.

Note 17. Comprehensive Income

The components of other comprehensive (loss) income and income tax expense allocated to each component for the years ended December 31, 2016, 2015 and 2014 was as follows:

	<u>2016</u>			<u>2015</u>			<u>2014</u>		
	<u>Before Tax Amount</u>	<u>Income Tax Expense</u>	<u>Net of Tax Amount</u>	<u>Before Tax Amount</u>	<u>Income Tax Expense</u>	<u>Net of Tax Amount</u>	<u>Before Tax Amount</u>	<u>Income Tax Expense</u>	<u>Net of Tax Amount</u>
Translation adjustments	\$ (38.3)	\$ —	\$ (38.3)	\$ (55.7)	\$ —	\$ (55.7)	\$ (45.2)	\$ —	\$ (45.2)
Adjustment for net periodic pension and other postretirement benefits plan cost	20.2	9.0	11.2	60.2	25.4	34.8	(390.9)	(150.0)	(240.9)
Unrealized gain on available-for-sale securities	122.3	3.0	119.3	—	—	—	—	—	—
Change in fair value of derivatives	—	—	—	0.1	—	0.1	0.2	0.1	0.1
Other comprehensive (loss) income	<u>\$ 104.2</u>	<u>\$ 12.0</u>	<u>\$ 92.2</u>	<u>\$ 4.6</u>	<u>\$ 25.4</u>	<u>\$ (20.8)</u>	<u>\$ (435.9)</u>	<u>\$ (149.9)</u>	<u>\$ (286.0)</u>

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During the year ended December 31, 2016, translation adjustments and income tax expense on pension and other postretirement benefits plan cost were adjusted to reflect previously recorded deferred taxes at their historical exchange rates.

The following table summarizes changes in accumulated other comprehensive loss by component for the years ended December 31, 2016, 2015 and 2014:

	Changes in the Fair Value of Derivatives	Changes in the Fair Value of Available-for- Sale Securities	Pension and Other Postretirement Benefits Plan Cost	Translation Adjustments	Total
Balance at January 1, 2014	\$ (0.2)	\$ —	\$ (521.4)	\$ 33.5	\$ (488.1)
Other comprehensive income (loss) before reclassifications	—	—	(303.4)	(34.7)	(338.1)
Amounts reclassified from accumulated other comprehensive loss	0.1	—	62.5	(10)	52.6
Net change in accumulated other comprehensive loss	0.1	—	(240.9)	(44.7)	(285.5)
Balance at December 31, 2014	<u>\$ (0.1)</u>	<u>\$ —</u>	<u>\$ (762.3)</u>	<u>\$ (11.2)</u>	<u>\$ (773.6)</u>
Other comprehensive loss before reclassifications	—	—	22.1	(67.6)	(45.5)
Amounts reclassified from accumulated other comprehensive loss	0.1	—	8.9	—	9.0
Amounts reclassified from cumulative translation adjustment	—	—	3.8	13.1	16.9
Net change in accumulated other comprehensive loss	0.1	—	34.8	(54.5)	(19.6)
Balance at December 31, 2015	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (727.5)</u>	<u>\$ (65.7)</u>	<u>\$ (793.2)</u>
Other comprehensive income (loss) before reclassifications	—	119.3	(42.7)	(37.1)	39.5
Amounts reclassified from accumulated other comprehensive loss	—	—	52.7	—	52.7
Amounts reclassified due to disposition of an operating entity	—	—	1.2	(0.7)	0.5
Net change in accumulated other comprehensive loss	—	119.3	11.2	(37.8)	92.7
Distribution to Donnelley Financial and LSC	—	—	556.8	88.0	644.8
Balance at December 31, 2016	<u>\$ —</u>	<u>\$ 119.3</u>	<u>\$ (159.5)</u>	<u>\$ (15.5)</u>	<u>\$ (55.7)</u>

Reclassifications from accumulated other comprehensive loss for the year ended December 31, 2016, 2015 and 2014 were as follows:

	2016	2015	2014	Classification in the Consolidated Statements of Operations
Amortization of pension and other postretirement benefits plan cost:				
Net actuarial loss	\$ 26.2	\$ 40.5	\$ 31.9	(a)
Net prior service credit	(12.7)	(26.9)	(25.8)	(a)
Curtailments and settlements	78.9	0.2	95.7	(a)
Reclassifications before tax	92.4	13.8	101.8	
Income tax expense	39.7	4.9	39.3	
Reclassifications, net of tax	<u>\$ 52.7</u>	<u>\$ 8.9</u>	<u>\$ 62.5</u>	

- (a) These accumulated other comprehensive (loss) income components are included in the calculation of net periodic pension and other postretirement benefits plan (income) expense recognized in cost of sales and selling, general and administrative expenses in the Consolidated Statements of Operations (see Note 12, *Retirement Plans*).

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Note 18 . Stock and Incentive Programs for Employees and Directors

The Company recognizes compensation expense based on estimated grant date fair values for all share-based awards issued to employees and directors, including stock options, restricted stock units and performance share units. The Company estimates the fair value of share-based awards based on assumptions as of the grant date. The Company recognizes these compensation costs for only those awards expected to vest, on a straight-line basis over the requisite service period of the award, which is generally the vesting term of three to four years for restricted stock awards and stock options and the performance period for performance share units. The Company estimates the number of awards expected to vest based, in part, on historical forfeiture rates and also based on management's expectations of employee turnover within the specific employee groups receiving each type of award. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods, if actual forfeitures differ from those estimates.

Impact of Spinoff Transactions and Reverse Stock Split

On October 1, 2016, in connection with the spinoff transactions, the Company adjusted its outstanding share-based awards in accordance with the terms of the Separation and Distribution Agreement (the "Equitable Adjustment"). For purposes of the vesting of these share-based awards, continued employment or service with the Company or with Donnelley Financial or LSC is treated as continued employment for purposes of the Company's, Donnelley Financial's, and LSC's share-based awards. The adjustments were as follows:

- Stock options, RSUs and PSUs awards granted prior to January 1, 2015 were converted into the same number of RR Donnelley stock options (with an adjusted exercise price), RSUs and PSUs as well as an equal number of both Donnelley Financial and LSC stock options, RSUs and PSUs. The underlying performance conditions for the PSU's were modified to end the performance period as of September 30, 2016 with no change to the vesting period.
- RSUs and PSUs awards granted after January 1, 2015 were converted into RSUs and PSUs of each participant's employer post spinoff. The underlying performance conditions for the PSU's were modified to end the performance period as of September 30, 2016 with no change to the vesting period.

The modified awards in RR Donnelley stock were also adjusted to reflect the impact of the 1-for-3 reverse stock split discussed in Note 1, *Basis of Presentation*.

No incremental fair value, or compensation cost, was recognized as a result of the above modifications.

Share-Based Compensation Expense

The total share-based compensation expense for continuing operations was \$7.4 million, \$10.1 million and \$10.1 million for the years ended December 31, 2016, 2015 and 2014, respectively. The resulting income tax benefit was \$2.9 million, \$3.9 million and \$3.9 million for the years ended December 31, 2016, 2015 and 2014, respectively. As of December 31, 2016, \$12.1 million of total unrecognized compensation expense related to share-based compensation plans is expected to be recognized over a weighted-average period of 1.7 years. Excess tax benefits, shown as financing cash inflows in the Consolidated Statements of Cash Flows, were \$2.6 million, \$3.2 million and \$2.9 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Share-Based Compensation Plans

The Company has one share-based compensation plan under which it may grant future awards, as described below, and one terminated or expired share-based compensation plan under which awards remain outstanding.

The 2012 Performance Incentive Plan (the "2012 PIP") was approved by stockholders to provide incentives to key employees of the Company and its subsidiaries. Awards under the 2012 PIP are generally not restricted to any specific form or structure and could include, without limitation, stock options, stock units, restricted stock awards, cash or stock bonuses and stock appreciation rights. There were 10.0 million shares, or 3.3 million adjusted for the stock split, of common stock reserved and authorized for issuance under the 2012 PIP. At December 31, 2016, there were 1.1 million shares of common stock authorized and available for grant under the 2012 PIP.

General Terms of Awards

Under various incentive plans, the Company has granted certain employees non-qualified stock options, restricted stock units, and performance share units. The Human Resources Committee of the Board of Directors has discretion to establish the terms and conditions for grants, including the number of shares, vesting and required service or other performance criteria. The maximum term of any award under the 2012 PIP and previous plans is ten years.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

The exercise price of a stock option is equal to the closing price of the Company's common stock on the option grant date and generally vest over four years. Options generally expire ten years from the date of grant or five years after the date of retirement, whichever is earlier.

The rights granted to the recipient of restricted stock unit awards generally accrue ratably over the restriction or vesting period, which is generally four years. The Company has also granted restricted stock unit awards which cliff vest three years from the grant date. Restricted 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. The Company records compensation expense of restricted stock unit awards based on the fair value of the awards at the date of grant ratably over the period during which the restrictions lapse. Dividends are not paid on restricted stock units.

The Company also issues restricted stock units as share-based compensation for members of the Board of Directors. Director restricted stock units granted after January 2009 vest ratably over three years from the date of grant with the opportunity to defer any tranche of vesting restricted stock units until termination of service on the Board of Directors. Awards granted between January 2008 and January 2009 vested ratably over three years from the date of grant and were amended in May 2009 to provide the opportunity to defer any tranche of vesting restricted stock units until termination of service on the Board of Directors. For awards granted prior to January 2008, one-third of the restricted stock units vested on the third anniversary of the grant date, and the remaining two-thirds of the restricted stock units vested upon termination of the holder's service on the Board of Directors; the holder could also elect to defer delivery of the initial one-third of the restricted stock units until termination of service on the Board of Directors. In the event of termination of a holder's service on the Board of Directors prior to a vesting date, all restricted stock units of such holder will vest. All awards granted prior to December 31, 2007 are payable in shares of common stock or cash. In 2009, the option to have awards paid in cash was removed for awards granted in 2008 and future years. Awards that may be paid in cash are classified as liability awards due to their expected settlement in cash, and are included in accrued liabilities in the Consolidated Balance Sheets. Approximately 12,148, 86,372 and 86,372 restricted stock units classified as liability awards were outstanding at December 31, 2016, 2015 and 2014, respectively. Compensation expense for these awards is measured based upon the fair value of the awards at the end of each reporting period. Awards payable only in shares are classified as equity awards due to their expected settlement in common stock. Compensation expense for these awards is measured based upon the fair value of the awards at the date of grant. Dividend equivalents are accrued for shares awarded to the Board of Directors and paid in the form of cash.

The Company has granted performance share unit awards to certain executive officers and senior management. Distributions under these awards are payable at the end of their respective performance periods in common stock or cash, at the Company's discretion. The number of share units that vest can range from zero to 150% for the 2015 awards and from zero to 100% for the 2014 awards, depending on achievement of a targeted performance metric for a performance period of three years inclusive of the year in which the award was granted. These awards are subject to forfeiture upon termination by the Company under certain circumstances prior to vesting. The Company expenses the cost of the performance share unit awards based on the fair value of the awards at the date of grant and the estimated achievement of the performance metric, ratably over the performance period of three years.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Stock Options

There were no options granted during the years ended December 31, 2016 and 2015.

Stock option awards as of December 31, 2016 and 2015, and changes during the year ended December 31, 2016 were as follows:

	Shares Under Option (thousands)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (millions)
Outstanding at December 31, 2015	3,707	\$ 19.66	3.6	\$ 8.4
Exercised	(85)	13.23		
Cancelled/forfeited/expired	(3)	15.77		
Equitable adjustment	(2,068)	28.50		
Outstanding at December 31, 2016	<u>1,551</u>	<u>37.19</u>	2.2	1.7
Vested and exercisable at December 31, 2016	1,551	\$ 37.19	2.2	\$ 1.7

The aggregate intrinsic value in the table above represents the total pre-tax intrinsic value (the difference between the Company's closing stock price on December 31, 2016 and 2015, respectively, and the exercise price, multiplied by the number of in-the-money options) that would have been received by the option holders had all option holders exercised their in-the-money options on December 31, 2016 and 2015. Total intrinsic value of options exercised for the years ended December 31, 2016, 2015 and 2014 was \$0.3 million, \$0.8 million and \$1.1 million, respectively.

There was no unrecognized compensation expense related to stock options as of December 31, 2016.

Cash proceeds received from the option exercises for the year ended December 31, 2016, 2015 and 2014 was \$1.1 million, \$1.8 million and \$1.6 million, respectively.

Restricted Stock Units

Nonvested restricted stock unit awards as of December 31, 2016 and 2015, and changes during the year ended December 31, 2016 were as follows:

	Shares (thousands)	Weighted Average Grant Date Fair Value
Nonvested at December 31, 2015	1,670	\$ 13.72
Granted	1,746	14.97
Vested	(730)	12.37
Forfeited	(118)	14.56
Equitable adjustment	(1,735)	13.77
Nonvested at December 31, 2016	<u>833</u>	<u>\$ 17.23</u>

As of December 31, 2016, there was \$11.8 million of unrecognized share-based compensation which will be recognized over a weighted-average period of 2.4 years. The fair value of these awards was determined based on the Company's stock price on the grant date reduced by the present value of expected dividends through the vesting period.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Performance Share Units

Nonvested performance share unit awards as of December 31, 2016 and 2015, and changes during the year ended December 31, 2016, were as follows:

	Shares (thousands)	Weighted Average Grant Date Fair Value
Nonvested at December 31, 2015	732	\$ 16.61
Forfeited	(46)	16.67
Vested	(95)	16.46
Equitable adjustment	(554)	16.59
Nonvested at December 31, 2016	37	\$ 16.73

As of December 31, 2016, there was \$0.3 million of unrecognized compensation expense related to performance share unit awards, which is expected to be recognized over a weighted average period of one year.

Note 19. Preferred Stock

The Company has two million shares of \$1.00 par value preferred stock authorized for issuance. The Board of Directors may divide the preferred stock into one or more series and fix the redemption, dividend, voting, conversion, sinking fund, liquidation and other rights. The Company has no present plans to issue any preferred stock.

Note 20. Segment Information

During the fourth quarter of 2016, management realigned the Company's reportable segments to reflect the impact of the spinoff transactions and to reflect the management reporting structure of the remaining business and the manner in which the chief operating decision maker regularly assesses information for decision-making purposes. All prior year amounts have been reclassified to conform to the Company's current reporting structure.

The Company's segments and their product and service offerings are summarized below:

Variable Print

The Variable Print segment includes the Company's U.S. short-run and transactional printing operations. This segment's primary product offerings include commercial and digital print, direct mail, labels, statement printing, forms and packaging. The Variable Print segment accounted for 45.6% of the Company's consolidated net sales in 2016.

Strategic Services

The Strategic Services segment includes the Company's logistics services, print management offerings and digital and creative solutions. The Strategic Services segment accounted for 25.1% of the Company's consolidated net sales in 2016.

International

The International segment includes the Company's non-U.S. printing operations in Asia, Latin America and Canada. This segment's primary product and service offerings include magazines, catalogs, retail inserts, books, directories, direct mail, packaging, forms, labels, manuals, statement printing, commercial and digital print, logistics services and digital and creative solutions. Additionally, this segment includes the Company's business process outsourcing business and Global Turnkey Solutions operations. Business process outsourcing provides transactional print and outsourcing services, statement printing, direct mail and print management offerings through its operations in Europe, Asia and North America. Global Turnkey Solutions provides outsourcing capabilities, including product configuration, customized kitting and order fulfillment for technology, medical device and other companies around the world through its operations in Europe, North America and Asia. The International segment accounted for 29.3% of the Company's consolidated net sales in 2016.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Corporate

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

Information by Segment

The Company has disclosed income (loss) from operations as the primary measure of segment earnings (loss). This is the measure of profitability used by the Company's chief operating decision-maker and is most consistent with the presentation of profitability reported within the Consolidated Financial Statements.

	<u>Total Sales</u>	<u>Intersegment Sales</u>	<u>Net Sales</u>	<u>Income (Loss) from Operations</u>	<u>Assets of Operations</u>	<u>Depreciation and Amortization</u>	<u>Capital Expenditures</u>
Year ended December 31, 2016							
Variable Print	\$ 3,155.0	\$ (9.6)	\$ 3,145.4	\$ (349.5)	\$ 1,619.4	\$ 121.5	\$ 56.9
Strategic Services	1,883.9	(157.0)	1,726.9	26.8	603.9	19.4	12.7
International	2,066.0	(42.6)	2,023.4	150.7	1,414.2	61.0	32.8
Total operating segments	<u>7,104.9</u>	<u>(209.2)</u>	<u>6,895.7</u>	<u>(172.0)</u>	<u>3,637.5</u>	<u>201.9</u>	<u>102.4</u>
Corporate	—	—	—	(128.6)	647.2	2.3	20.7
Total operations	<u>\$ 7,104.9</u>	<u>\$ (209.2)</u>	<u>\$ 6,895.7</u>	<u>\$ (300.6)</u>	<u>\$ 4,284.7</u>	<u>\$ 204.2</u>	<u>\$ 123.1</u>

Year ended December 31, 2015

Variable Print	\$ 3,224.1	\$ (9.2)	\$ 3,214.9	\$ 208.2	\$ 2,150.8	\$ 134.1	\$ 52.3
Strategic Services	1,752.0	(147.4)	1,604.6	39.5	475.2	19.5	19.0
International	2,158.4	(40.6)	2,117.8	86.7	1,438.8	75.7	45.4
Total operating segments	<u>7,134.5</u>	<u>(197.2)</u>	<u>6,937.3</u>	<u>334.4</u>	<u>4,064.8</u>	<u>229.3</u>	<u>116.7</u>
Corporate	—	—	—	(97.1)	226.2	3.2	16.9
Total operations	<u>\$ 7,134.5</u>	<u>\$ (197.2)</u>	<u>\$ 6,937.3</u>	<u>\$ 237.3</u>	<u>\$ 4,291.0</u>	<u>\$ 232.5</u>	<u>\$ 133.6</u>

Year ended December 31, 2014

Variable Print	\$ 3,281.1	\$ (12.6)	\$ 3,268.5	\$ 184.8	\$ 2,255.7	\$ 139.7	\$ 43.8
Strategic Services	1,674.2	(111.2)	1,563.0	50.9	471.9	19.4	18.5
International	2,371.6	(30.4)	2,341.2	113.8	1,591.1	87.7	60.8
Total operating segments	<u>7,326.9</u>	<u>(154.2)</u>	<u>7,172.7</u>	<u>349.5</u>	<u>4,318.7</u>	<u>246.8</u>	<u>123.1</u>
Corporate	—	—	—	(135.6)	432.4	7.8	10.9
Total operations	<u>\$ 7,326.9</u>	<u>\$ (154.2)</u>	<u>\$ 7,172.7</u>	<u>\$ 213.9</u>	<u>\$ 4,751.1</u>	<u>\$ 254.6</u>	<u>\$ 134.0</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Corporate assets primarily consisted of the following items at December 31, 2016, 2015 and 2014:

	2016	2015	2014
Cash and cash equivalents	\$ 19.3	\$ (45.9)	\$ 94.1
Deferred income tax assets, net of valuation allowances	67.5	41.8	79.6
Software, net	43.0	48.5	46.0
Deferred compensation plan assets and Company owned life insurance assets	75.3	77.4	71.7
Investment in LSC and Donnelley Financial	328.7	—	—
Property, plant and equipment, net	30.2	41.6	43.0
Other	83.2	62.8	98.0
Total Corporate assets	<u>\$ 647.2</u>	<u>\$ 226.2</u>	<u>\$ 432.4</u>

Restructuring, impairment and other charges by segment for 2016, 2015 and 2014 are described in Note 4, *Restructuring, Impairments and Other Charges*.

Note 21. Geographic Area and Products and Services Information

The following table presents net sales by geographic region. Net sales by geographic region are based upon the sales location.

	2016	2015	2014
U.S.	\$ 5,278.6	\$ 5,222.8	\$ 5,196.1
Asia	766.1	787.7	810.0
Other	851.0	926.8	1,166.6
Consolidated net sales	<u>\$ 6,895.7</u>	<u>\$ 6,937.3</u>	<u>\$ 7,172.7</u>

The following table presents long-lived assets by geographic region. Long-lived assets include net property, plant and equipment, noncurrent deferred tax assets and other noncurrent assets.

	2016	2015	2014
U.S.	\$ 720.6	\$ 732.7	\$ 790.1
Other	273.3	286.1	343.9
Consolidated long-lived assets	<u>\$ 993.9</u>	<u>\$ 1,018.8</u>	<u>\$ 1,134.0</u>

The following table summarizes net sales by the Company's products and services categories for the years ended December 31, 2016, 2015 and 2014:

	2016 Net Sales	2015 Net Sales	2014 Net Sales
Products and services			
Magazines, catalogs and retail inserts	\$ 260.1	\$ 203.0	\$ 245.0
Commercial and digital print	1,902.3	1,928.5	1,888.1
Books	439.4	371.4	398.1
Statements	561.3	595.3	626.7
Direct mail	537.4	530.2	608.0
Labels	472.1	505.3	529.4
Packaging and related products	464.6	482.5	475.3
Forms	329.2	350.0	453.8
Global Turnkey Solutions	321.7	345.9	341.8
Total products	<u>\$ 5,288.1</u>	<u>\$ 5,312.1</u>	<u>\$ 5,566.2</u>
Logistics services	1,242.5	1,227.7	1,172.8
Business process outsourcing	223.7	241.9	241.4
Digital and creative solutions	141.4	155.6	192.3
Total services	<u>1,607.6</u>	<u>1,625.2</u>	<u>1,606.5</u>
Total net sales	<u>\$ 6,895.7</u>	<u>\$ 6,937.3</u>	<u>\$ 7,172.7</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

Note 22. Venezuela Currency Remeasurement

As described in Note 3, *Acquisitions and Dispositions*, on April 29, 2015 the Company sold its 50.1% interest in its Venezuelan operating entity.

Since January 1, 2010, the three-year cumulative inflation for Venezuela using the blended Consumer Price Index and National Consumer Price Index has exceeded 100%. As a result, Venezuela's economy is considered highly inflationary and the financial statements of the Company's Venezuelan subsidiaries were remeasured as if the functional currency were the U.S. Dollar. Prior to March 31, 2014, the financial statements were remeasured based on the official rate determined by the government of Venezuela.

During the first quarter of 2014, the Venezuelan government expanded the operation of the Supplementary System for the Administration of Foreign Currency ("SICAD 1") currency exchange mechanism for use with certain transactions. In addition, the Venezuelan government also began operating the SICAD 2 exchange which the government indicated was available to all entities for all transactions. The Venezuelan government indicated that the official rate of 6.3 Bolivars per U.S. Dollar would be reserved only for settlement of U.S. Dollar denominated purchases of "essential goods and services." As of December 31, 2014, the SICAD 1 and SICAD 2 exchange rates were 12.0 and 50.0 Bolivars per U.S. Dollar, respectively. Beginning March 31, 2014, certain assets of the Company's Venezuelan subsidiaries were remeasured at the SICAD 2 rate as the Company believed those assets would ultimately be utilized to settle U.S. Dollar denominated liabilities using SICAD 2. Remaining net monetary assets were remeasured at the SICAD 1 rate, as the Company believed SICAD 1 would be applicable for future transactions, and dividend remittances, if any, from the Company's Venezuelan subsidiaries. During the three months ended June 30, 2014, certain transactions pending approval at the official rate of 6.3 Bolivars per U.S. Dollar were approved, resulting in foreign exchange gains. As a result of the remeasurement at the SICAD 1 and SICAD 2 rates and foreign exchange gains resulting from certain transactions approved at the official rate during the year ended December 31, 2014, a net pre-tax loss, net of foreign exchange gains, of \$18.4 million (\$13.8 million after-tax) was recognized in net investment and other expense, of which \$5.6 million was included in loss attributable to noncontrolling interests.

In February 2015, the Venezuelan government discontinued the SICAD 2 rate and introduced a new currency exchange rate mechanism ("SIMADI"). As of February 28, 2015, monetary assets and liabilities of the Company's Venezuelan subsidiaries were remeasured at the SIMADI rate as the Company believed the SIMADI was the exchange rate mechanism most likely to be available to the Company's Venezuelan subsidiaries to settle U.S. Dollar denominated transactions. As of March 31, 2015, the SIMADI rate was 193 Bolivars per U.S. Dollar.

As a result of the remeasurement at the SIMADI rate and the related impact of the devaluation, during the year ended December 31, 2015, a pre-tax loss of \$30.3 million (\$27.5 million after-tax) was recognized in net investment and other expense, of which \$10.5 million was included in loss attributable to noncontrolling interests.

Note 23. New Accounting Pronouncements

In January 2017, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2017-04 "Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment," which eliminates Step 2 from the current goodwill impairment test, including determining the implied fair value of goodwill and comparing it with the carrying amount of that goodwill. The standard requires entities to record impairment charges based on the excess of a reporting unit's carrying amount over its fair value. ASU 2017-04 will be effective in the first quarter of 2020; however early adoption is permitted for interim and annual goodwill impairment tests performed after January 1, 2017. The adoption of ASU 2017-04 may impact the results of future goodwill impairment tests and therefore could impact the Company's consolidated financial position and results of operations. The Company has elected to early adopt this guidance and will apply this guidance to all impairment analyses performed after January 1, 2017.

In March 2016, the FASB issued ASU No. 2016-09 "Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting." Under the new guidance, when awards vest or are settled, the excess tax benefits and tax deficiencies are recorded as income tax expense or benefit in the income statement instead of in additional paid-in capital. This guidance will be applied prospectively. Furthermore, the guidance requires excess tax benefits to be presented as an operating activity on the statement of cash flows rather than as a financing activity, which can be applied retrospectively or prospectively. Under the new guidance, an election can be made regarding whether to account for forfeitures of share-based payments by recognizing forfeitures of awards as they occur or estimate the number of awards expected to be forfeited, as is currently required. This guidance is to be applied using a modified retrospective transition method, with a cumulative adjustment to retained earnings. The Company has adopted this guidance as of January 1, 2017 and does not expect the adoption to have a material impact on the Company's consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In millions, except per share data and unless otherwise indicated)-(Continued)

In February 2016, the FASB issued ASU No. 2016-02 “Leases (Topic 842)” which requires lessees to put most leases on the balance sheet but recognize expense on the income statement in a manner similar to current accounting. For lessors, ASU 2016-02 also modifies the classification criteria and the accounting for sales-type and direct financing leases. The standard requires a modified retrospective approach for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements and is effective in the first quarter of 2019. Early adoption of ASU 2016-02 is permitted; however the Company plans to adopt the standard in the first quarter of 2019. The Company is evaluating the impact of ASU 2016-02.

In May 2014, the FASB issued ASU No. 2014-09 “Revenue from Contracts with Customers (Topic 606),” which outlines a single comprehensive model for entities to use in accounting for revenue using a five-step process that supersedes virtually all existing revenue guidance. ASU 2014-09 also requires additional quantitative and qualitative disclosures. During 2016, the FASB issued ASU 2016-08 “Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net),” ASU 2016-10 “Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing,” and ASU 2016-12 “Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients,” which clarify the revenue recognition implementation guidance on principal versus agent considerations, identifying performance obligations, determining whether an entity's promise to grant a license provides a customer with either a right to use or a right to access the entity's intellectual property, assessing the collectability criteria, presentation of sales and similar taxes, noncash consideration and various other items. The amendments in these ASUs affect the guidance in ASU 2014-09, and the effective date and transition requirements are the same as those for ASU 2014-09 which, as amended by ASU 2015-14 “Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date,” will be effective for the Company on January 1, 2018. The standard allows the option of either a full retrospective adoption, meaning the standard is applied to all periods presented, or a modified retrospective adoption, meaning the standard is applied only to the most current period.

Based upon preliminary results of management's evaluation, the most impactful aspects of the guidance relate to the timing of recognition for the revenue from customized products over time versus at a point in time, as well as inventory billed but not yet shipped. The Company has amounts of customized products in the Variable Print and International segments which are currently recognized when the products are completed and shipped to the customer. Currently, the Company defers revenue for inventory billed but not yet shipped which under the new revenue standard, the Company may be able to recognize revenue for certain inventory billed but not yet shipped. The actual revenue recognition treatment required under this new standard will be dependent on contract specific terms. The Company is still in the process of evaluating and designing the necessary changes to its business processes, systems and controls to support recognition and disclosure under the new standard. The Company will adopt the standard in the first quarter of 2018 and currently anticipates applying the modified retrospective approach.

R E P O R T O F I N D E P E N D E N T R E G I S T E R E D P U B L I C A C C O U N T I N G F I R M

To the Board of Directors and Stockholders of
R.R. Donnelley & Sons Company
Chicago, Illinois

We have audited the accompanying consolidated balance sheets of R.R. Donnelley & Sons Company and subsidiaries (the "Company") as of December 31, 2016 and 2015, and the related consolidated statements of operations, comprehensive income, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of R.R. Donnelley & Sons Company and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control- Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 28, 2017 expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP
Chicago, Illinois
February 28, 2017

U NAUDITED INTERIM FINANCIAL INFORMATION
(In millions, except per-share data)

	Year Ended December 31,				
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Full Year
2016					
Net sales	\$ 1,645.6	\$ 1,632.6	\$ 1,741.2	\$ 1,876.3	\$ 6,895.7
Gross profit	332.5	316.4	364.2	363.7	1,376.8
Income (loss) from operations	57.6	24.7	84.0	(466.9)	(300.6)
Net earnings (loss) from continuing operations	3.9	(23.0)	22.3	(488.1)	(484.9)
Net earnings (loss) from discontinued operations, net of income taxes	36.2	8.7	(29.1)	(25.5)	(9.7)
Net earnings (loss)	40.1	(14.3)	(6.8)	(513.6)	(494.6)
Less: income attributable to noncontrolling interests	0.3	0.2	0.3	0.5	1.3
Net earnings (loss) attributable to RR Donnelley common stockholders	39.8	(14.5)	(7.1)	(514.1)	(495.9)
Basic net earnings (loss) per share attributable to RR Donnelley common stockholders:					
Continuing operations	0.05	(0.33)	0.31	(6.98)	(6.95)
Discontinued operations	0.52	0.12	(0.41)	(0.36)	(0.14)
Net earnings (loss) attributable to RR Donnelley stockholders	0.57	(0.21)	(0.10)	(7.34)	(7.09)
Diluted net earnings (loss) per share attributable to RR Donnelley common stockholders:					
Continuing operations	0.05	(0.33)	0.31	(6.98)	(6.95)
Discontinued operations	0.52	0.12	(0.41)	(0.36)	(0.14)
Net earnings (loss) attributable to RR Donnelley stockholders	0.57	(0.21)	(0.10)	(7.34)	(7.09)
Closing stock price high	\$ 27.68	\$ 29.47	\$ 31.14	\$ 23.81	\$ 31.14
Closing stock price low	\$ 20.46	\$ 25.44	\$ 25.81	\$ 15.70	\$ 15.70
Closing stock price at quarter-end	\$ 27.15	\$ 28.01	\$ 26.02	\$ 16.32	\$ 16.32
2015					
Net sales	\$ 1,737.0	\$ 1,679.4	\$ 1,711.6	\$ 1,809.3	\$ 6,937.3
Gross profit	346.9	338.7	345.9	373.6	1,405.1
Income from operations	45.9	59.9	44.1	87.4	237.3
Net earnings (loss) from continuing operations	3.2	(7.9)	(10.9)	(16.1)	(31.7)
Net earnings from discontinued operations, net of income taxes	8.7	51.5	22.5	87.4	170.1
Net earnings	11.9	43.6	11.6	71.3	138.4
Less: (loss) income attributable to noncontrolling interests	(10.4)	0.1	(2.7)	0.3	(12.7)
Net earnings attributable to RR Donnelley common stockholders	22.3	43.5	14.3	71.0	151.1
Basic net earnings (loss) per share attributable to RR Donnelley common stockholders:					
Continuing operations	0.20	(0.12)	(0.12)	(0.24)	(0.28)
Discontinued operations	0.13	0.76	0.31	1.26	2.48
Net earnings attributable to RR Donnelley stockholders	0.33	0.64	0.21	1.02	2.20
Diluted net earnings (loss) per share attributable to RR Donnelley common stockholders:					
Continuing operations	0.20	(0.12)	(0.12)	(0.24)	(0.28)
Discontinued operations	0.13	0.76	0.31	1.26	2.48
Net earnings attributable to RR Donnelley stockholders	0.33	0.64	0.21	1.02	2.20
Closing stock price high	\$ 32.59	\$ 33.32	\$ 29.80	\$ 28.51	\$ 33.32
Closing stock price low	\$ 25.92	\$ 28.85	\$ 23.69	\$ 23.84	\$ 23.69
Closing stock price at quarter-end	\$ 31.77	\$ 28.85	\$ 24.10	\$ 24.37	\$ 24.37

Per share data is computed independently for each of the periods presented. As a result, the sum of the amounts for the quarter may not equal the total for the year.

All stock prices for periods prior to October 1, 2016 have been adjusted to reflect the spinoff transactions as well as the Company's 1-for-3 reverse stock split.

The quarterly results above include the following significant items:

	Year ended December 31, 2016				
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Full Year
Restructuring, impairment and other charges - net	\$ 5.3	\$ 8.2	\$ 10.8	\$ 560.0	\$ 584.3
Acquisition-related expenses	0.6	1.4	0.7	—	2.7
Spinoff-related transaction expenses	—	—	—	8.0	8.0
Gain from the sale of certain of the Company's affordable housing investments	—	(0.1)	—	—	(0.1)
Loss from the impairment of an equity investment	—	—	—	1.4	1.4
Pension settlement charges	—	20.4	0.3	0.4	21.1
OPEB curtailment gain	—	—	(19.7)	0.2	(19.5)
Net gain on disposals of businesses	(12.3)	—	0.3	0.1	(11.9)
Total charges before taxes	\$ (6.4)	\$ 29.9	\$ (7.6)	\$ 570.1	\$ 586.0
Deferred income tax benefit related to investment in LSC	—	—	—	(0.4)	\$ (0.4)
Total charges, net of taxes	\$ (8.2)	\$ 24.1	\$ (5.8)	\$ 524.4	\$ 534.5

	Year ended December 31, 2015				
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Full Year
Restructuring, impairment and other charges - net	\$ 13.4	\$ 9.6	\$ 26.7	\$ 13.0	\$ 62.7
Loss on Venezuela currency remeasurement	29.9	0.4	—	—	30.3
Loss primarily related to the disposal of the Venezuelan operating entity	—	15.7	—	—	15.7
Acquisition-related expenses	—	0.2	0.1	0.2	0.5
Gain from the sale of certain of the Company's affordable housing investments	—	(3.9)	—	—	(3.9)
Loss from the impairment of the Company's investment in the Brazilian operations of Courier	—	—	2.8	—	2.8
Loss from the impairment of an equity investment	—	—	—	1.3	1.3
Total charges before taxes	\$ 43.3	\$ 22.0	\$ 29.6	\$ 14.5	\$ 109.4
Total charges, net of taxes	\$ 2.8	\$ 20.8	\$ 21.8	\$ 53.4	\$ 98.8

INDEX TO EXHIBITS

- 2.1 Agreement and Plan of Merger by and among Courier Corporation, R. R. Donnelley & Sons Company, Raven Solutions, Inc. and Raven Ventures LLC, dated as of February 5, 2015 (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K dated February 11, 2015, filed on February 11, 2015)
- 2.2 Separation and Distribution Agreement, dated as of September 14, 2016, by and among R.R. Donnelley & Sons Company, LSC Communications, Inc. and Donnelley Financial Solutions, Inc. (incorporated by reference to Exhibit 2.1 to the Company's Current Report on 8-K filed October 3, 2016).
- 2.3 Transition Services Agreement, dated as of September 14, 2016, between LSC Communications, Inc. and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 2.2 to the Company's Current Report on 8-K filed October 3, 2016).
- 2.4 Transition Services Agreement, dated as of September 14, 2016, between Donnelley Financial Solutions, Inc. and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 2.3 to the Company's Current Report on 8-K filed October 3, 2016).
- 2.5 Tax Disaffiliation Agreement, dated as of September 14, 2016, between LSC Communications, Inc. and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 2.4 to the Company's Current Report on 8-K filed October 3, 2016).
- 2.6 Tax Disaffiliation Agreement, dated as of September 14, 2016, between Donnelley Financial Solutions, Inc. and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 2.5 to the Company's Current Report on 8-K filed October 3, 2016).
- 2.7 Patent Assignment and License Agreement, dated as of September 27, 2016, between LSC Communications US, LLC. and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 2.6 to the Company's Current Report on 8-K filed October 3, 2016).
- 2.8 Patent Assignment and License Agreement, dated as of September 27, 2016, between Donnelley Financial Solutions, LLC and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 2.7 to the Company's Current Report on 8-K filed October 3, 2016).
- 2.9 Trademark Assignment and License Agreement, dated as of September 27, 2016, between LSC Communications US, LLC. and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 2.8 to the Company's Current Report on 8-K filed October 3, 2016).
- 2.10 Trademark Assignment and License Agreement, dated as of September 27, 2016, between Donnelley Financial, LLC and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 2.9 to the Company's Current Report on 8-K filed October 3, 2016).
- 2.11 Data Assignment and License Agreement, dated as of September 27, 2016, between LSC Communications US, LLC and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 2.10 to the Company's Current Report on 8-K filed October 3, 2016).
- 2.12 Data Assignment and License Agreement, dated as of September 27, 2016, between Donnelley Financial, LLC and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 2.11 to the Company's Current Report on 8-K filed October 3, 2016).
- 2.13 Software, Copyright and Trade Secret Assignment and License Agreement, dated as of September 27, 2016, between LSC Communications US, LLC and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 2.12 to the Company's Current Report on 8-K filed October 3, 2016).
- 2.14 Software, Copyright and Trade Secret Assignment and License Agreement, dated as of September 27, 2016, between Donnelley Financial, LLC and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 2.13 to the Company's Current Report on 8-K filed October 3, 2016).
- 3.1 Restatement of Certificate of Incorporation of R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 3.3 to the Company's Current Report on 8-K filed October 3, 2016).

- 3.2 Amended and Restated By-Laws of R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 3.4 to the Company's Current Report on 8-K filed October 3, 2016).
- 4.1 Instruments, other than those defining the rights of holders of long-term debt not registered under the Securities Exchange Act of 1934 of the registrant and of all subsidiaries for which consolidated or unconsolidated financial statements are required to be filed are being omitted pursuant to paragraph (4)(iii)(A) of Item 601 of Regulation S-K. Registrant agrees to furnish a copy of any such instrument to the Commission upon request.
- 4.2 Indenture dated as of November 1, 1990 between the Company and Citibank, N.A., as Trustee (incorporated by reference to Exhibit 4 filed with the Company's Form SE filed on March 26, 1992)
- 4.3 Indenture dated as of March 10, 2004 between the Company and LaSalle National Bank Association, as Trustee (incorporated by reference to Exhibit 4.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2004, filed on May 10, 2004)
- 4.4 Indenture dated as of May 23, 2005 between the Company and LaSalle Bank National Association, as Trustee (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated May 23, 2005, filed on May 25, 2005)
- 4.5 Indenture dated as of January 3, 2007 between the Company and LaSalle Bank National Association, as Trustee (incorporated by reference to Exhibit 4.1 to the Company's Registration Statement on Form S-3 filed on January 3, 2007)
- 4.6 Stockholder Registration Rights Agreement, dated as of September 14, 2016, between LSC Communications, Inc. and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 4.1 to the Company's Current Report on 8-K filed October 3, 2016).
- 4.7 Stockholder Registration Rights Agreement, dated as of September 14, 2016, between Donnelley Financial, Inc. and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 4.2 to the Company's Current Report on 8-K filed October 3, 2016).
- 10.1 Policy on Retirement Benefits, Phantom Stock Grants and Stock Options for Directors (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2008, filed on August 6, 2008)*
- 10.2 Non-Employee Director Compensation Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, filed on May 7, 2015)*
- 10.3 Directors' Deferred Compensation Agreement, as amended (incorporated by reference to Exhibit 10(b) to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 1998, filed on November 12, 1998)*
- 10.4 Amended and Restated Non-Qualified Deferred Compensation Plan (incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, filed on May 7, 2015)*
- 10.5 2012 Performance Incentive Plan (incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2013, filed on July 30, 2013)*
- 10.6 2004 Performance Incentive Plan (incorporated by reference to Exhibit 10.9 to the Company's Annual Report on Form 10-K for the year ended December 31, 2008, filed on February 25, 2009)*
- 10.7 Amended and Restated R.R. Donnelley & Sons Company Unfunded Supplemental Benefit Plan (incorporated by reference to Exhibit 10.11 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010, filed on November 3, 2010)*
- 10.8 Amendment to Amended and Restated R.R. Donnelley & Sons Company Unfunded Supplemental Benefit Plan (incorporated by reference to Exhibit 10.12 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010, filed on November 3, 2010)*
- 10.9 Supplemental Executive Retirement Plan for Designated Executives—B (incorporated by reference to Exhibit 10.1 to Moore Wallace Incorporated's (Commission file number 1-8014) Quarterly Report on Form 10-Q for the quarter ended September 30, 2001, filed on November 14, 2001)*

- 10.10 Form of Option Agreement for certain executive officers (incorporated by reference to Exhibit 10.17 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2004, filed on March 14, 2005)*
- 10.11 Form of Restricted Stock Unit Award Agreement for certain executive officers, as amended (incorporated by reference to Exhibit 10.17 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008, filed on February 25, 2009)*
- 10.12 Form of Restricted Stock Unit Award Agreement for certain executive officers (incorporated by reference to Exhibit 10.12 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, filed on May 7, 2015)*
- 10.13 Form of Restricted Stock Unit Award Agreement for directors (incorporated by reference to Exhibit 10.21 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2004, filed on March 14, 2005)*
- 10.14 Form of Restricted Stock Unit Award Agreement for directors (incorporated by reference to Exhibit 10.25 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2007, filed on February 27, 2008)*
- 10.15 Form of Amendment to Director Restricted Stock Unit Awards dated May 21, 2009 (incorporated by reference to Exhibit 10.23 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, filed on August 5, 2009)*
- 10.16 Form of Amendment to Director Restricted Stock Unit Awards (incorporated by reference to Exhibit 10.22 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008, filed on February 25, 2009)*
- 10.17 Form of Restricted Stock Unit Award Agreement for directors (incorporated by reference to Exhibit 10.23 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2008, filed on February 25, 2009)*
- 10.18 Form of Director Restricted Stock Unit Awards (incorporated by reference to Exhibit 10.26 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, filed on August 5, 2009)*
- 10.19 Form of Performance Share Unit Award Agreement (incorporated by reference to Exhibit 10.19 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, filed on May 7, 2015)*
- 10.20 Form of Performance Share Unit Award Agreement (incorporated by reference to Exhibit 10.23 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2014, filed on May 1, 2014)*
- 10.21 Form of Performance Share Unit Award Agreement (incorporated by reference to Exhibit 10.20 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, filed on April 25, 2013)*
- 10.22 Form of Cash Retention Award Agreement (incorporated by reference to Exhibit 10.21 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, filed on April 25, 2013)*
- 10.23 Form of Cash Bonus Award Agreement for certain executive officers (incorporated by reference to Exhibit 10.30 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, filed on May 2, 2012)*
- 10.24 Form of Long Term Incentive Cash Award Agreement (incorporated by reference to Exhibit 10.22 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2014, filed on May 1, 2014)*
- 10.25 Form of Amendment to Cash Retention Awards (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated March 2, 2016, filed on March 2, 2016)*
- 10.26 Form of Amended and Restated Indemnification Agreement for directors (incorporated by reference to Exhibit 10.31 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2013, filed on February 26, 2014)*
- 10.27 Amended and Restated Annual Incentive Plan (incorporated by reference to Exhibit 10.32 to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, filed on May 7, 2015)*
- 10.28 Amended and Restated Credit Agreement, dated as of September 30, 2016, among R.R. Donnelley & Sons Company, the guarantors party thereto, Bank of America, N.A., as Administrative Agent, Swing Line Lender and an L/C Issuer, Citigroup Global Markets Inc. and JPMorgan Chase Bank, N.A., as Co-Syndication Agents (incorporated by reference to Exhibit 10.1 to the Company's Current Report on 8-K filed October 3, 2016).

10.29	R.R. Donnelley & Sons Company Non-Employee Director Compensation Plan (incorporated by reference to Exhibit 10.2 to the Company's Current Report on 8-K filed October 3, 2016).*
10.30	Employment Agreement, dated as of October 1, 2016, between Daniel L. Knotts and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 10.3 to the Company's Current Report on 8-K filed October 3, 2016).*
10.31	Employment Agreement, dated as of October 1, 2016, between Thomas M. Carroll III and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 10.4 to the Company's Current Report on 8-K filed October 3, 2016).*
10.32	Employment Agreement, dated as of October 1, 2016, between Jeffrey G. Gorski and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 10.5 to the Company's Current Report on 8-K filed October 3, 2016).*
10.33	Employment Agreement, dated as of October 1, 2016, between John Pecaric and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 10.6 to the Company's Current Report on 8-K filed October 3, 2016).*
10.34	Employment Agreement, dated as of October 1, 2016, between Terry D. Peterson and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 10.7 to the Company's Current Report on 8-K filed October 3, 2016).*
10.35	Employment Agreement, dated as of October 1, 2016, between Deborah L. Steiner and R.R. Donnelley & Sons Company (incorporated by reference to Exhibit 10.8 to the Company's Current Report on 8-K filed October 3, 2016).*
10.36	Form of Indemnification Agreement for directors (incorporated by reference to Exhibit 10.36 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 31, 2016, filed on November 2, 2016)*
12	Statements of Computation of Ratio of Earnings to Fixed Charges (filed herewith)
14	Code of Ethics (incorporated by reference to Exhibit 14 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2003, filed on March 1, 2004)
21	Subsidiaries of the Company (filed herewith)
23	Consent of Deloitte & Touche LLP (filed herewith)
24	Power of Attorney (filed herewith)
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 (filed herewith)
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 (filed herewith)
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 (filed herewith)
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 (filed herewith)
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

* Management contract or compensatory plan or arrangement.

RR Donnelley & Sons Company
COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES
(in millions, except ratios)

	Years ended December 31,				
	2016	2015	2014	2013	2012
Earnings available for fixed charges:					
Earnings (loss) from continuing operations before income taxes and noncontrolling interests	\$ (497.2)	\$ (10.7)	\$ (96.5)	\$ (98.1)	\$ (105.7)
Less: Equity (loss) income of minority-owned companies included in earnings (loss) from continuing operations before income taxes and noncontrolling interests	(1.0)	(0.3)	0.4	(0.3)	(0.1)
Less: (Loss) income attributable to noncontrolling interests	1.3	(12.7)	3.4	7.0	(2.2)
Add: Fixed charges before capitalized interest	312.0	338.6	342.4	322.2	314.4
Add: Amortization of capitalized interest	2.4	3.5	3.2	3.4	3.4
Total earnings available for fixed charges	\$ (183.1)	\$ 344.4	\$ 245.3	\$ 220.8	\$ 214.4
Fixed charges:					
Interest expense	\$ 258.2	\$ 281.3	\$ 291.0	\$ 272.9	\$ 267.0
Interest portion of rental expense	53.8	57.3	51.4	49.3	47.4
Total fixed charges before capitalized interest	312.0	338.6	342.4	322.2	314.4
Capitalized interest	4.6	3.9	3.6	3.1	4.1
Total fixed charges	\$ 316.6	\$ 342.5	\$ 346.0	\$ 325.3	\$ 318.5
Ratio of earnings to fixed charges (a)	(0.58)	1.01	0.71	0.68	0.67

- (a) In 2016, 2014, 2013, and 2012, earnings were inadequate to cover fixed charges by \$499.7 million, \$100.7 million, \$104.5 million, and \$104.1 million, respectively, due to certain charges in each year.

**R.R. Donnelley & Sons Company
Subsidiaries**

<u>Entity Name</u>	<u>Domestic Jurisdiction</u>
77 Cap General Partner, Inc.	Delaware
77 Capital Partners II., L.P.	Delaware
AGS Custom Graphics, Inc.	Maryland
American Lithographers, Inc.	California
Asia Printers Group Limited	Cayman Islands
Austin Printing Company	Georgia
Automated Graphic Systems, LLC	Maryland
Banta Corporation	Wisconsin
Banta Europe B.V.	Netherlands
Banta Global Turnkey (Shenzhen) Co., Ltd.	China
Banta Global Turnkey (Singapore) PTE LTD	Singapore
Banta Global Turnkey LLC	Texas
Banta Global Turnkey Ltd. [Ireland]	Ireland
Banta Global Turnkey, Ltd. [Scotland]	West Lothian
Banta Global Turnkey, s.r.o.	Czech Republic
Beijing Donnelley Commercial Co., Ltd.	Beijing
Bridgetown Printing Co.	Oregon
CDS Publications, Inc.	Oregon
CGX Yamagata Japan GK	Japan
Chas. P. Young Company	Texas
Clear Visions, Inc.	Texas
Columbia Color, Inc.	California
Consolidated Carqueville Printing Company	Illinois
Consolidated Global Group, Inc.	Texas
Consolidated Graphics B.V.	Netherlands
Consolidated Graphics de Mexico S. de R.L. de CV	Mexico
Consolidated Graphics International, Inc.	Delaware
Consolidated Graphics Print Management Group, Inc.	Delaware
Consolidated Graphics Properties II, Inc.	Texas
Consolidated Graphics Services, Inc.	Delaware
Consolidated Graphics Technology Services and Solutions, Inc.	Texas
Consolidated Graphics, Inc.	Texas
Copy-Mor, Inc.	Illinois
Courier International Holdings, LLC	Delaware
Courier Printing Company	Tennessee
Courier Tecnologia em Serviços Gráficos Ltda.	Brazil
CP Solutions, Inc.	Oklahoma
Critical Mail Continuity Services Limited	England and Wales
Data Entry Holdings Limited (Jersey)	Channel Islands
Data Entry International Limited (Cyprus)	Cyprus
DDM-Digital Imaging, Data Processing and Mailing Services, L.C.	Florida
DEI Group Limited	England and Wales
Devonshire Appointments Limited	England and Wales
Devonshire Recruitment Group Limited	England and Wales
Digital Page Brazil LLC	Delaware
Digital Page Grafica e Editora S.A.	Brazil
Direct Color, Inc.	California
Dongguan Donnelley Printing Co., Ltd.	China
Donnelley Cochrane Grafica Editora Do Brasil Ltda.	Brazil
Eagle Press, Inc.	California
e-doc Group Pension Scheme Trustee Limited	England and Wales
edotech Trustee Company Limited	England and Wales
EGT Printing Solutions, LLC	Michigan
Electric City Printing Company	South Carolina
Emerald City Graphics, Inc.	Washington
Fittje Bros. Printing Co.	Colorado
Frederic Printing Company	Colorado

Garner Printing Company	Iowa
Gilliland Printing, Inc.	Kansas
Graphic Technology of Maryland, Inc.	Maryland
GSL Fine Lithographers	California
Gulf Printing Company	Texas
H&N Printing & Graphics, Inc.	Maryland
Hickory Printing Solutions, LLC	North Carolina
Hub Marketing Solutions, LLC	Massachusetts
Impresora Donneco Internacional, S. de R.L. de C.V.	Mexico
Ironwood Lithographers, Inc.	Arizona
Kelmscott Communications LLC	Delaware
Keys Printing Company	South Carolina
King Yip (Dongguan) Printing & Packaging Factory Ltd.	China
Lincoln Printing Corporation	Indiana
Mercury Printing Company, LLC	Tennessee
Metropolitan Printing Services, LLC	Indiana
Moore (St.Lucia) Ltd	St. Lucia
Moore Canada Corporation	Nova Scotia
Moore International B.V.	Netherlands
Moore Paragon (Caribbean) Limited	Barbados
Moore Paragon Limited	Grenada
Moore Response Marketing BVBA	Belgium
Moore Trinidad Ltd	Trinidad
Mount Vernon Printing Company	Maryland
Nies/Artcraft, Inc.	Missouri
OfficeTiger BV	Netherlands
OfficeTiger Holdings Inc.	Delaware
OfficeTiger LLC	Delaware
PBM Graphics, Inc.	North Carolina
PCA, LLC	Maryland
Piccari Press, Inc.	Pennsylvania
Precision Dialogue Direct, Inc.	Illinois
Precision Dialogue Marketing, LLC	Ohio
Precision Dialogue, Inc.	Delaware
Precision Litho, Inc.	California
Pride Printers, Inc.	Massachusetts
Printing Control Services Incorporated	Washington
Printing, Inc.	Kansas
R R Donnelley Outsource (Private) Limited	Sri Lanka
R. R. Donnelley (Santiago) Holdings LLC	Delaware
R. R. Donnelley Argentina, S.A.	Argentina
R. R. Donnelley Business Communication Services Limited	England and Wales
R. R. Donnelley Chile Limitada	Chile
R. R. Donnelley de Costa Rica, S.A.	Costa Rica
R. R. Donnelley de El Salvador, S.A. de C.V.	El Salvador
R. R. Donnelley de Guatemala, S.A.	Guatemala
R. R. Donnelley de Honduras, S.A. de C.V.	Honduras
R. R. Donnelley Document Solutions (Germany) GmbH	Germany
R. R. Donnelley Document Solutions (Ireland) Limited	Ireland
R. R. Donnelley Document Solutions Sp. z.o.o.	Poland
R. R. Donnelley Europe B.V.	Netherlands
R. R. Donnelley Global, Inc	Delaware
R. R. Donnelley Holdings C.V.	Netherlands
R. R. Donnelley Hungary Printing and Trading Limited Liability Company	Hungary
R. R. Donnelley Latin America L.L.C.	Delaware
R. R. Donnelley Netherlands B.V.	Netherlands
R. R. Donnelley Publishing India Private Limited	India
R.R. Donnelley de Puerto Rico, Corp.	Puerto Rico
R.R. Donnelley Holdings B.V.	Netherlands
R.R. Donnelley UK Directory Limited	England and Wales
RR Donnelley (Chengdu) Printing Co., Ltd.	Chengdu
RR Donnelley (China) Holding Co., Ltd.	China
RR Donnelley (Kunshan) Packing Technology Co., Ltd.	China
RR Donnelley (Mauritius) Holdings Ltd	Mauritius

RR Donnelley (Shanghai) Commercial Co., Ltd.
 RR Donnelley (Shanghai) Information Technology Co., Ltd.
 RR Donnelley Asia Printing Solutions Limited
 RR Donnelley Communication Solutions (France) SAS
 RR Donnelley Document Solutions (Netherlands) B.V.
 RR Donnelley Editora e Grafica Ltda.
 RR Donnelley Electronics (Suzhou) Co., Ltd.
 RR Donnelley Electronics (Wuhan) Co., Ltd.
 RR Donnelley Global Business Process Outsourcing Limited
 RR Donnelley Global Document Solutions Group Limited
 RR Donnelley Global Turnkey Solutions (Kunshan) Co., Ltd.
 RR Donnelley Global Turnkey Solutions Limited
 RR Donnelley Global Turnkey Solutions Mexico, S. de R.L. de C.V.
 RR Donnelley GTS Sp zoo
 RR Donnelley Holdings (Australia) Pty Ltd
 RR Donnelley Holdings Japan GK
 RR Donnelley India Outsource Private Limited
 RR Donnelley Italy S.r.l.
 RR Donnelley Korea Electronic Solution LLC
 RR Donnelley Logistics Services Worldwide, Inc.
 RR Donnelley Philippines Inc.
 RR Donnelley Prague s.r.o
 RR Donnelley Spain, S.L.
 RRD BPO Holdings Limited
 RRD Dutch Holdco, Inc.
 RRD GDS Limited
 RRD Holdings C.V.
 RRD Netherlands LLC
 RRD SSC Europe BVBA
 RRD West Caldwell, LLC
 Rush Press, Inc.
 S & S Graphics, LLC
 Shanghai Donnelley PreMedia Technology Co., Ltd.
 Shanghai Donnelley Printing Co., Ltd.
 Shenzhen Donnelley Printing Co., Ltd.
 Sierra Industrial S. de R.L. de C.V.
 South China Printing Company Limited
 Spangler Graphics Property, LLC
 Spangler Graphics, LLC
 StorterChilds Printing Co., Inc.
 Superior Colour Graphics, Inc.
 Tewel Warren Printing Company
 The Graphics Group, Inc.
 The Hennegan Company
 The Jackson Group LLC
 The Jarvis Press, Inc.
 The McKay Press, Inc.
 Theo. Davis Sons, Incorporated
 Thousand Oaks Printing & Specialties, Inc.
 Tucker Printers, Inc.
 Valcour Printing, Inc.
 Veritas Document Solutions, LLC
 Walnut Circle Press, Inc.
 Watermark Press, Ltd.
 Wentworth Corporation
 Westland Printers, Inc.
 Wetzel Brothers, LLC
 Woodridge Press, Inc.

China
 Shanghai
 Hong Kong
 France
 Netherlands
 Brazil
 Jiangsu Province
 China
 England and Wales
 England and Wales
 China
 Ireland
 Mexico
 Poland
 NSW
 Japan
 Chennai
 Italy
 Korea
 Delaware
 Philippines
 Czech Republic
 Spain
 England and Wales
 Delaware
 England and Wales
 Netherlands
 Delaware
 Belgium
 Delaware
 California
 Maryland
 Shanghai
 China
 China
 Mexico
 Hong Kong
 Kansas
 Kansas
 Florida
 Michigan
 Colorado
 Texas
 Kentucky
 Indiana
 Texas
 Michigan
 North Carolina
 California
 Texas
 Missouri
 Delaware
 North Carolina
 California
 South Carolina
 Maryland
 Wisconsin
 California

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-83414, 333-80995, 333-113258, 333-159393, 333-186881 and 333-214398 on Form S-8, and Registration Statement No. 333-192570 and 333-202945 on Form S-4 of our reports dated February 28, 2017, relating to the consolidated financial statements of R.R. Donnelley & Sons Company and subsidiaries (the “Company”), and the effectiveness of the Company’s internal control over financial reporting, appearing in this Annual Report on Form 10-K of R.R. Donnelley & Sons Company and Subsidiaries for the year ended December 31, 2016.

/s/ DELOITTE & TOUCHE LLP

Chicago, Illinois
February 28, 2017

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Deborah L. Steiner, Jeffrey G. Gorski and Terry D. Peterson, or any of them, his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, in any and all capacities, to sign the Annual Report on Form 10-K of R.R. Donnelley & Sons Company for its fiscal year ended December 31, 2016 and any and all amendments thereto, and to file the same with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or her substitute, may lawfully do or cause to be done by virtue hereof. This Power of Attorney shall be effective from the date on which it is signed until June 30, 2017.

Dated: February 22, 2017

/s/ Jeffrey G. Katz

Jeffrey G. Katz

/s/ Timothy R. McLevish

Timothy R. McLevish

/s/ Susan M. Gianinno

Susan M. Gianinno

/s/ P. Cody Phipps

P.Cody Phipps

/s/ John C. Pope

John C. Pope

/s/ Jamie Moldafsky

Jamie Moldafsky

**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 Annual Report on Form 10-K 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: February 28, 2017

/s/ DANIEL L. KNOTTS

Daniel L. Knotts
President and Chief Executive Officer

**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 Annual Report on Form 10-K 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: February 28, 2017

/s/ TERRY D. PETERSON

Terry D. Peterson

Executive Vice President and Chief Financial Officer

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 Annual Report of R. R. Donnelley & Sons Company (the "Company") on Form 10-K for the period ended December 31, 2016 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Daniel 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.

February 28, 2017

/s/ DANIEL L. KNOTTS

Daniel L. Knotts
President and Chief Executive Officer

**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 Annual Report of R. R. Donnelley & Sons Company (the "Company") on Form 10-K for the period ended December 31, 2016 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.

February 28, 2017

/s/ TERRY D. PETERSON

Terry D. Peterson
Executive Vice President and Chief Financial Officer