



DEAR FELLOW STOCKHOLDERS,

2017 was a pivotal year for the new RRD and I am proud of the significant progress we made to advance our strategic transformation and deliver solid results. We are a marketing and business communications company, focused on helping our clients create better connections with their customers across the full breadth of the customer journey. Our marketing solutions empower brands to execute marketing programs with maximum return by enabling their customers to experience those brands in their own way. Our business communication offerings improve the ability of our clients to service and strengthen the bonds with their customers across the full business relationship. Together, these offerings provide our clients with a powerful combination of differentiated solutions that enhance customer engagement and drive business impact.

Our 2017 results validate our path forward as we successfully executed against our strategic priorities and achieved our goal of returning to growth. Thanks to the hard work of our dedicated and talented employees around the world, our 2017 net sales were \$6.9 billion — up 1.6 percent on a reported basis and flat for the year on an organic basis⁽¹⁾. Our organic sales results represented our best performance since 2014. We delivered full year non-GAAP diluted earnings per share⁽¹⁾ of \$1.20, up substantially from the \$0.69 per share reported in 2016. Our operating cash flow for the full year increased 71 percent to \$218 million, we reduced our debt by \$278 million and we improved our leverage ratio by nearly 10 percent.

As our clients' needs continue to evolve, we are identifying more ways to help them successfully navigate an increasingly complex and fragmented marketplace. During the year, we undertook an extensive study of our clients, potential clients and competitors, collecting insights from numerous experts and over 1,000 primary resources. We identified a clear gap between the needs of our clients and the current solutions available to them. Our clients' customers are demanding more timely and personalized experiences across a growing array of channels, yet major silos exist between digital and physical channels, as well as between marketing and operational solutions. This divide exists within our clients' companies as well as within the companies trying to serve them.

We are using our existing capabilities and developing new offerings to enable our clients to better manage the full range of interactions with their customers. These capabilities and offerings include all the points of contact our clients have with their customers before, during and after a sale. We are uniquely capable of supporting the wide breadth of this full customer journey — from the marketing programs that attract new and repeat customers to their brands, to the operations that extend the brand by serving and supporting those customers. Our solutions provide our clients with a means to increase the total impact of their efforts, while decreasing cost and complexity.

And as we progress on our transformational journey, we remain committed to our established strategic goals:

- Profitably growing our core businesses
- Extending our differentiated platform of products and services
- Scaling our multichannel capabilities
- Delivering operational excellence
- Maintaining a disciplined approach to capital allocation

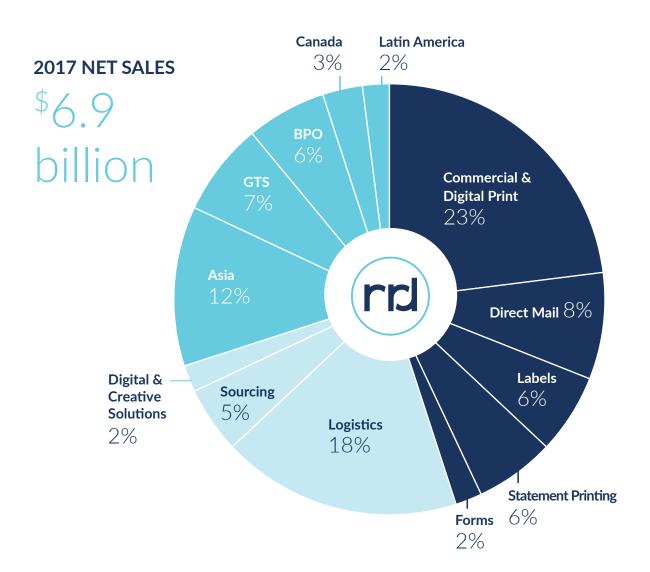
In 2018, we will continue to expand our capabilities to provide our clients with the products and services they need to keep their customers at the center of everything they do. While our capabilities are extensive, our mission is simple. We help our clients better connect with their customers. We will continue to innovate and evolve to deliver on that mission in an ever-changing business environment. And we will do so in a way that promotes the well-being of our employees, the highest standards of ethics and integrity, and long-term sustainable growth, all of which we believe will continue to enhance long-term value for our stockholders.

Daniel L. Knotts

President & Chief Executive Officer

April 2018

⁽¹⁾Organic net sales and non-GAAP diluted earnings per share are financial measures that are not prepared in accordance with generally accepted accounting principles in the United States ("GAAP"). A reconciliation of these non-GAAP financial measures to the comparable GAAP measure can be found at the end of this Annual Report and in our press release dated February 27, 2018, which was also an exhibit to the 8-K furnished with the SEC on February 27, 2018.







Strategic Services 25% of 2017 Net Sales



International 30% of 2017 Net Sales

| Variable Print | Strategic Services | International |
|--|--|---|
| Commercial and Digital PrintDirect Mail | LogisticsSourcing | AsiaGlobal Turnkey Solutions (GTS) |
| • Labels | Digital & Creative Solutions | Business Process Outsourcing (BPO) |
| Statement PrintingForms | | Canada Latin America |

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

FORM 10-K

| ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(a 1934 For the fiscal year ended December 31, 2017 | a) OF THE SECURITIES EXCHANGE ACT OF |
|---|--|
| ☐ TRANSITION REPORT PURSUANT TO SECTION 13 OF OF 1934 | R 15(d) OF THE SECURITIES EXCHANGE ACT |
| For the transition period from Commission file number | to · 1-4694 |
| R. R. DONNELLEY & S (Exact name of registrant as specification) | SONS COMPANY Tied in its charter) |
| Delaware | 36-1004130 |
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |
| 35 West Wacker Drive, Chicago, Illinois (Address of principal executive offices) | 60601 (ZIP Code) |
| Registrant's telephone number, including a | |
| Securities registered pursuant to Sect Title of each | ion 12(b) of the Act: Name of each exchange on which |
| Class | registered |
| Common Stock (Par Value \$0.01) | New York Stock Exchange |
| Indicated by check mark if the registrant is a well-known seasoned issuer, as de | efined in Rule 405 of the Securities Act. Yes 🗵 No 🗌 |
| Indicate by check mark if the registrant is not required to file reports pursuant t | o Section 13 or Section 15(d) of the Act. Yes \(\subseteq \) No \(\subseteq \) |
| Indicate by check mark whether the registrant (1) has filed all reports required of 1934 during the preceding 12 months (or for such shorter period that the registrar such filing requirements for the past 90 days. Yes \boxtimes No \square | |
| Indicate by check mark whether the registrant has submitted electronically and File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§2 such shorter period that the registrant was required to submit and post such files). | 229.405 of this chapter) during the preceding 12 months (or for |
| Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 contained, to the best of registrant's knowledge, in definitive proxy or information sor any amendment to this Form 10-K. | |
| Indicate by check mark whether the registrant is a large accelerated filer, an accompany or an emerging growth company. See the definitions of "large accelerated "emerging growth company" in Rule 12b-2 of the Exchange Act: | |
| Large accelerated filer ⊠ | Accelerated filer |
| Non-accelerated filer | Smaller reporting company |
| | Emerging growth company |
| If an emerging growth company, indicate by check mark if the registrant has el any new or revised financial accounting standards provided pursuant to Section $13(a)$ | a) of the Exchange Act. |
| Indicate by check mark whether the registrant is a shell company (as defined in | |
| The aggregate market value of the shares of registrant's common stock held by June 30, 2017 was \$866,581,829. | • |
| As of February 22, 2018, 70,083,915 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 17, 2018 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 ("RRD," the "Company," "we," "us," and "our"), a Delaware corporation, helps organizations communicate more effectively by working to create, manage, produce, distribute and process content on behalf of our clients. We assist clients in developing and executing multichannel communication strategies that engage audiences, reduce costs, drive revenues and increase compliance. Our innovative content management offering, production platform, logistics services, supply chain management, outsourcing capabilities and customized consultative expertise assists our clients in the delivery of integrated messages across multiple media to highly targeted audiences at optimal times to their customers in virtually every private and public sector. We have strategically located operations that provide local service and responsiveness while leveraging the economic, geographic and technological advantages of a global organization.

Competitive Strategy

Our long-standing client 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 client 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 multichannel 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

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 2017, the Variable Print segment accounted for 44.9% 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 clients' 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 clients to help them re-imagine their in-store experience by 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 51.7% of the Variable Print segment's net sales for the fiscal year ended December 31, 2017.

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 copyrighting, 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 clients to communicate to an audience of any size. We believe we are well positioned to meet our direct mail clients' specific needs by offering cadenced, multiple touch mailings and multimedia communications such as websites, email and mobile contact. Through advanced data analytics, we assist our clients 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 17.5% of the Variable Print segment's net sales for the fiscal year ended December 31, 2017.

Labels

We produce custom labels for clients 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 for us. Labels accounted for 12.9% of the Variable Print segment's net sales for the fiscal year ended December 31, 2017.

Statement Printing

We enable enhanced relationships between our clients and their customers by creating and managing critical business communications across multiple channels. These essential business communications include customer billing, financial statements, healthcare communications and insurance documents. We support these communications according to customer preferences allowing clients 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. Our platform, scale and breadth of offering combined with our technology and innovation provide our clients with low cost solutions that assist them in servicing their customers. Statement printing accounted for 12.4% of the Variable Print segment's net sales for the fiscal year ended December 31, 2017.

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 5.5% of the Variable Print segment's net sales for the fiscal year ended December 31, 2017.

Strategic Services

The Strategic Services segment accounted for 25.4% of our consolidated net sales in 2017 and includes the following reporting units: logistics, sourcing and digital and creative solutions.

Logistics

Our 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 clients 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 clients. 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 clients. 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 69.8% of the Strategic Services segment's net sales for the fiscal year ended December 31, 2017.

Sourcing

We utilize ISO certified platforms to provide print management solutions including consulting and systems solutions to allow our clients to more efficiently and cost-effectively manage their print needs. We allow our clients to use our proprietary CustomBuy software for increased visibility, control and rationalization of expenditures, and consult our clients 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 clients with the development and fulfillment of promotional product strategies that meet their desired objectives within budgetary constraints. Sourcing accounted for 21.7% of the Strategic Services segment's net sales for the year ended December 31, 2017.

Digital and Creative Solutions

We utilize 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 clients and their agencies to life. We assist our clients 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 8.5% of the Strategic Services segment's net sales for the year ended December 31, 2017.

International

The International segment includes our non-U.S. printing operations in Asia, Canada, Latin America and Europe, as well as our Global Turnkey Solutions and business process outsourcing reporting units. This segment accounted for 29.7% of our consolidated net sales in 2017.

Asia

We are a strategically integrated network of eleven locations, which provides in-box materials, packaging, labels, and export and domestic book production to our major international clients. Asia accounted for 40.3% of the International segment's net sales for the year ended December 31, 2017.

Global Turnkey Solutions

We provide complex supply chain management and outsourcing capabilities, including product configuration, packaging, customized kitting and order fulfillment for companies around the world through our operations in Europe, North America, and Asia. Global Turnkey Solutions accounted for 23.0% of the International segment's net sales for the fiscal year ended December 31, 2017.

Business Process Outsourcing

We provide 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. Business process outsourcing accounted for 18.7% of the International segment's net sales for the fiscal year ended December 31, 2017.

Canada

We provide 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. Canada accounted for 9.5% of the International segment's net sales for the fiscal year ended December 31, 2017.

Latin America

We have 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 clients. Latin America accounted for 8.5% of the International segment's net sales for the fiscal year ended December 31, 2017.

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 (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 our international 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 16, *Segment Information*, to the Consolidated Financial Statements and within Note 17, *Geographic Area and Products and Services Information*, to the Consolidated Financial Statements.

Spinoff Transactions

On October 1, 2016, we completed the separation of our financial communications and data services business ("Donnelley Financial Solutions, Inc." or "Donnelley Financial") and our 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 each of Donnelley Financial and LSC, to RRD stockholders (the "Distribution"). The Distribution was made to RRD 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 RRD 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 common stock and approximately 6.2 million shares of LSC common stock.

In March 2017, we sold the approximately 6.2 million shares of LSC common stock retained by us and used the proceeds to repay a portion of the outstanding borrowings under the Company's then-existing credit facility. In June 2017 and August 2017, we exchanged our approximately 6.2 million shares of Donnelley Financial common stock for certain outstanding senior indebtedness of the Company, which obligations were subsequently cancelled and discharged upon delivery to the Company. As of December 31, 2017, we no longer held any shares of the common stock of either Donnelley Financial or LSC.

The financial results of Donnelley Financial and LSC for periods prior to the Distribution are presented as discontinued operations on the Consolidated Statements of Operations and, as such, have been excluded from both continuing operations and segment results for all periods presented. Additionally, sales from RRD to Donnelley Financial and LSC previously eliminated in consolidation have been recast and are now shown as external sales of RRD within the financial results of continuing operations. See Note 2, *Discontinued Operations*, to the Consolidated Financial Statements for additional information.

Business Acquisition 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 January 11, 2016, we sold two entities within the business process outsourcing reporting unit.

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

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

Competitive Environment

Our clients operate in an evolving and ever-changing 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. Some of the key factors facing our clients include regulatory changes, sensitivity to economic conditions, raw material pricing volatility and USPS actions. In addition, 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 clients to create, manage, deliver and optimize their multichannel 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 clients. We are also able to manage the storage and distribution of products for our clients by offering warehousing and inventory management solutions that allow clients to store printed materials and to efficiently ship them using our platform. Our logistics operations offer our clients access to our proprietary technology that is designed to determine the most efficient and cost-effective method of shipping depending on our clients' 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 clients' 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.

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 clients 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.

Seasonality

Advertising and consumer spending trends affect demand in several of the end-markets we serve. As such, we have some seasonality in the second half of the year in our business, despite the breadth of our product and service offerings.

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. Some of the paper we use is supplied directly by clients. 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 2017 and volatility in the future is expected. Generally, clients directly absorb the impact of changing prices on client-supplied paper. With respect to paper we purchase, we have historically passed most changes in price through to our clients. 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 clients' demand for printed products. We have undertaken various strategic initiatives to mitigate any foreseeable supply disruptions with respect to our ink requirements.

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, energy prices and market cost of transportation 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 clients in order to offset the impact of related cost increases. Decreases in fuel prices are also passed on to clients which negatively impact sales and income from operations. However, our logistics operations is restricted in its ability to pass on increased cost of transportation costs to some clients in the short term. Therefore, increases in the market cost of transportation will negatively impact income from operations. We generally cannot pass on to clients 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 client demand or 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 U.S. and foreign postal services, through retail channels, electronically or by direct shipment to client facilities. Through our logistics operations, we manage the distribution of most client products we print in the U.S. and Canada to maximize efficiency and reduce costs for clients.

As a leading provider of print logistics and among the largest mailers of marketing mail in the U.S., we work closely with our clients 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 clients' 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 clients' cost structures.

On January 22, 2017, the USPS implemented a CPI based postage increase of approximately 1.0%, as allowed under postal law, entitled the 2006 Postal Accountability and Enhancement Act ("PAEA").

In addition, there is a pending bi-partisan legislative proposal (still in Committee) agreed to on March 16, 2017 that seeks to stabilize the financial condition of the USPS, which among other things calls for levying a 2.15% increase on market-dominant mail products. Nevertheless, the Postal Regulatory Commission ("PRC") on November 6, 2017 adjusted and approved a USPS filing for a CPI based average price increases of 1.9% to 2.0% depending on the class of mail, which became effective January 21, 2018.

Additionally, as required by PAEA, the PRC initiated a comprehensive review of PAEA on December 20, 2016, to determine if the current system for regulating rates and classes for market-dominant products is still achieving the original objectives of the law. On December 1, 2017, the PRC issued its findings and concluded that the current system was not meeting all of PAEA's original objectives. To remedy this situation, the PRC has proposed recommendations, which among other things, allows the Postal Service flexibility of "CPI + 2%" on market-dominant mail products for a 5 year period of time. The PRC has asked for industry stakeholder input, comments and alternative suggestions to these recommendations which are due by March 1, 2018. This will be followed by a reply comment period ending March 30, 2018. The impact of these actions cannot currently be estimated.

Mail delivery services through the USPS accounted for approximately 29% of the revenue within our logistics reporting unit during the fiscal year ended December 31, 2017.

Clients

We have more than 50,000 clients worldwide, including 99% of the Fortune 100, 96% of the Fortune 500 and 89% of the Fortune 1000. Our services enable some of the world's largest companies to create, manage and deliver comprehensive and cost-effective multi-channel communications around the world. In connection with the Separation, we entered into a number of agreements with LSC and Donnelley Financial with respect to our ongoing commercial relationships. For the year ended December 31, 2017, LSC and Donnelley Financial accounted for 10.1% of total net sales in our Strategic Services segment. For each of the years ended December 31, 2017, 2016 and 2015, no single client accounted for 10% or more of the Company's consolidated net sales.

Technology, Research and Development

We invest in technology and 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 clients' growing utilization of digital and print technologies. In addition, these technologies help expand our capabilities to provide additional services to clients 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 client 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 clients who entrust us with highly sensitive 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 clients 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 regard 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, 2017, the Company had 42,700 employees.

As of December 31, 2017, 438 of our U.S. employees were covered by collective bargaining agreements at twelve of our U.S. facilities, representing 2.5% of our U.S. workforce. We have collective bargaining agreements with unionized employees in China, Canada, Mexico, Brazil, Chile 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.rrdonnelley.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 Committees of the Board of Directors and our Principles of Ethical Business Conduct are also available on the Investor Relations portion of www.rrdonnelley.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 Annual Report on Form 10-K and any documents incorporated by reference contain forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. These statements are subject to risks and uncertainties and are based on 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. The Company claims 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 clients;
- changes in customer preferences or a failure to otherwise manage relationships with our significant clients;
- loss of brand reputation and decreases in quality of client support and service offerings;
- political and regulatory risks and uncertainty in the countries in which we operate or sell our products and services;
- 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) or increases in shipping costs;
- the ability of the Company to improve operating efficiency rapidly enough to meet market conditions;
- 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;
- increased pricing pressure as a result of the competitive environment in which the Company operates;
- successful negotiation, execution and integration of acquisitions;

- increasing health care and benefits costs for employees and retirees;
- changes in the Company's pension and other postretirement obligations;
- adverse trends or events in our operations outside of the United States;
- the effect of inflation, changes in currency exchange rates and changes in interest rates;
- catastrophic events which may damage the Company's facilities or otherwise disrupt the business;
- the effect of changes in laws and regulations, including changes in accounting standards, trade, tax, environmental
 compliance, health and welfare benefits, price controls and other regulatory matters and the cost, which could be substantial,
 of complying with these laws and regulations;
- changes in the regulations applicable to the Company's clients, which may adversely impact demand for the Company's products and services;
- factors that affect client demand, including changes in postal rates, postal regulations and service levels, changes in the capital markets, changes in advertising markets, clients' budgetary constraints and changes in clients' short-range and long-range plans;
- failures or errors in the Company's products and services;
- 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;
- · 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 disclaims any obligation to publicly release the results of any revisions to these forward-looking statements that may be made to reflect future events or circumstances after the date of such statements or to reflect the occurrence of anticipated or unanticipated events. The Company undertakes 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 our clients' businesses, may 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 clients' advertising spending, which is driven in part by economic conditions and customer spending, a prolonged downturn in the global economy and an uncertain economic outlook may further reduce the demand for printing and related services that we provide to these clients. Delays or reductions in clients' spending could have an adverse effect on demand for our products and services which may adversely affect our results of operations, financial position and cash flows. 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, client difficulties may result in increases in bad debt write-offs and allowances for doubtful accounts receivable. 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.

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

Many of the end markets in which our clients compete are experiencing changes due to technological progress and changes in customer 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 clients. If we are unable to continue to utilize new and existing technologies to adapt to new distribution methods and address changing customer preferences, our business may be adversely affected.

Technological developments and changing demands of clients may require additional investment in new equipment and technologies. We must monitor changes in our clients' markets and develop new solutions to meet clients' needs. The development of such solutions may be costly and there is no assurance that these solutions will be accepted by clients. If we are unable to adapt to technological changes on a timely basis or at an acceptable cost, clients' 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. Customers continue to accept electronic substitution in statement printing and forms while online and digital advertising is impacting clients' printed advertising spend. The extent to which customers will continue to accept electronic delivery is uncertain and it is difficult to predict future acceptance of these alternatives. Electronic delivery has adversely affected our products, such as forms and statement printing. To the extent that customers, clients and regulators continue to accept these alternatives, demand for our products and services may be further adversely affected.

During 2017, our five largest clients accounted for 11.1% of our net sales in the aggregate. 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 clients, 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 clients may result in a reduction in sales or change in the mix of products we sell to significant clients. This may adversely affect our results of operations, financial condition and cash flows.

Additionally, disputes with significant suppliers, including those related to pricing or performance, may adversely affect our ability to supply products to our clients and also our results of operations, financial condition and cash flows.

Our business is dependent upon brand reputation and the quality of our client support and services offerings. If we fail to offer effective client support and services, our brand reputation would be harmed and clients may not use our solutions, which will have an adverse effect on our results of operations.

A high level of client 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 client support and service to meet or exceed the expectations of our clients, we may experience a loss of clients and market share and a decline in our brand reputation which may result in reduced client demand for our solutions. Furthermore, our brand reputation may 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, any or all of which could adversely affect our operations.

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

Our operations may be substantially affected by both domestic and international political or regulatory risk including general 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 would reduce net income due to withholding requirements or the imposition of tariffs or other restrictions.

In addition, potential political uncertainty in our developed markets, 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 reduce global market liquidity and restrict the ability of key market participants to operate in certain financial markets. Any of these factors may adversely affect our results of operations, financial position and cash flows. 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.

We are subject to taxation related risks in multiple jurisdictions.

We are a U.S.-based global company subject to tax in multiple U.S. and foreign tax jurisdictions. Significant judgment is required in determining our global provision for income taxes, deferred tax assets and liabilities and in evaluating our tax positions on a worldwide basis. While we believe our tax positions are consistent with the tax laws in the jurisdictions in which we conduct our business, it is possible that these positions may be overturned by jurisdictional tax authorities, which may have a significant impact on our global provision for income taxes.

Tax laws are dynamic and subject to change as new laws are passed and new interpretations of the law are issued or applied. The Tax Cuts and Jobs Act of 2017 (the "Tax Act") was signed into law on December 22, 2017 and represents the most significant change to U.S. tax law since 1986. As a result of the Tax Act, we are subject to a one-time transition tax on foreign earnings and have recorded a provisional estimate for this item, as well as other items, in our 2017 results of operations. We continue to analyze the impact of the Tax Act on our Company. In the future, we may be subject to additional taxes as required under the Tax Act, including current tax on foreign earnings and possibly significant limitations on deductions for certain items, such as interest on debt. In addition, we may be required to make material adjustments to provisional items recorded. All of these factors may adversely affect our results of operations, financial position and cash flows.

Many countries are actively considering changes to existing tax laws that, if enacted, could increase our tax obligations in countries where we do business. If U.S. or other foreign tax authorities change applicable tax laws, our overall taxes could increase, which may adversely affect our business, results of operations, financial position and cash flows.

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.

We have a substantial amount of outstanding debt at December 31, 2017 which could adversely affect our business, results of operations, financial condition and cash flows. Uncertainty and volatility in global financial markets may cause financial institutions to fail, lenders to reduce lending or 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. Any future capital markets transactions will be dependent on our financial performance as well as 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 and our ability to refinance existing debt will depend on a variety of factors such as our financial performance, 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. In September 2017, we amended and restated our revolving credit facility (the "Credit Agreement"). The Credit Agreement provides for a senior secured asset-based revolving credit facility, which is scheduled to mature on September 29, 2022, of up to \$800.0 million, subject to a borrowing base. The maximum availability under the Credit Agreement increases and decreases with changes in the amount of accounts receivable, inventory, machinery, equipment and fee-owned real estate of the Company and the Guarantors (collectively, the "Borrowing Base"), subject to certain eligibility criteria and advance rates.

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.

Our Credit Agreement limits our borrowing capacity to the value of certain of our assets. In addition, our Credit Agreement is secured by certain assets of the Company and its domestic subsidiaries, and lenders may exercise remedies against the collateral in the event of our default.

Our borrowing capacity under our Credit Agreement is equal to the lesser of (i) \$800.0 million and (ii) the Borrowing Base. In the event of any material decrease in the amount of or appraised value of the assets in the Borrowing Base, our borrowing capacity would similarly decrease, which could adversely affect our business and liquidity.

Certain restrictions on operations become applicable if our availability falls below certain thresholds. These restrictions could impose significant operating and financial limitations and restrictions on us, including restrictions on our ability to enter into particular transactions and to engage in other actions that we may believe are advisable or necessary for our business.

In the event of a default under our Credit Agreement, the lenders' commitment to extend further credit under our Credit Agreement could be terminated, our outstanding obligations could become immediately due and payable, outstanding letters of credit may be required to be cash collateralized and remedies may be exercised against the collateral. If we are unable to borrow under our Credit Agreement, we may not have the necessary cash resources for our operations and, if any event of default occurs, there is no assurance that we would have the cash resources available to repay such accelerated obligations, refinance such indebtedness on commercially reasonable terms, or at all, or cash collateralize our letters of credit, which would have a material adverse effect on our business, financial condition, results of operations and liquidity.

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

We may not be able to reduce or extinguish 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 are significant. In addition, our ability to make payments on, repay or refinance, such debt, will depend largely upon our future operating performance.

The indentures governing our outstanding notes and debentures 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 minimum fixed charge coverage 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 may 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 clients through higher prices. Increases in the cost of materials may adversely affect clients' demand for our printing and related services. Other unforeseen developments in these markets may result in a decrease in the supply of paper, ink or other raw materials which may adversely affect our results of operations and financial condition.

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

Because the markets in which we operate 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.

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

In prior years we have recorded significant goodwill and other long-lived asset impairments and continue to hold goodwill, other long-lived assets and deferred tax assets on our balance sheet. A decline in expected profitability may 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 of these assets or, in the case of deferred tax assets, recognition of a valuation allowance through a charge to income. Such events have had and may continue to have an adverse effect on our results of operations, financial position and cash flows.

Our services depend on the reliability of computer systems we and our vendors maintain. If our systems fail or are unreliable, our operations may be adversely affected.

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 may disrupt our business and adversely affect our ability to operate and compete in the markets we serve. 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 a range of other hardware, software and network problems. We also periodically upgrade and install new systems, which if installed or programmed incorrectly, may cause significant disruptions. If a disruption occurs, we may incur losses and costs for interruption of our operations, which may adversely affect our results of operations, financial condition and cash flows.

We may suffer a data breach of sensitive information. If our efforts to protect the security of such information are unsuccessful, any such failures may result in significant costs to investigate and remediate the data-breach, private litigation expense and costly government enforcement actions and penalties, and may have an adverse effect on our operations and reputation.

Maintaining the confidentiality, integrity and availability of our systems, software and solutions is an issue of critical importance for us and for our clients and users who rely on us to protect the confidentiality of certain information they provide us. Many of our clients' 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. Confidential and sensitive information stored in our systems are susceptible to cybercrime, or threats of intentional disruption, which are increasing in terms of sophistication and frequency. 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 other such events may damage our reputation, subject us to regulatory enforcement action and cause significant reputational harm for our clients, all of which may adversely affect our results of operations, financial condition and cash flows.

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 Company. If our competitors are able to successfully combine with one another or otherwise consolidate, the competitive landscape would be significantly altered. Such consolidation would 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 may adversely affect our results of operations, financial position and cash flows.

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 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 employees and retirees. 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 may increase, adversely affecting our profitability. Changes to health care regulations in the U.S. 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. Market conditions may lead to changes in the discount rates used to value the year-end benefit obligations of the plans, which may 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.

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

We have significant operations outside the U.S. Conducting business outside the U.S. 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 clients 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, terrorism and the impact of regional and global infectious illnesses in the countries in which we and our clients, 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, may impair our ability to effectively deliver our products and services, result in unexpected 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 may adversely affect our 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 may, in certain circumstances, adversely affect our results of operations, financial position and cash flows.

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 may 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 clients, and create inefficiencies in our supply chain. An event of this nature may also prevent us from maintaining ongoing operations and 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 would affect our ability to conduct normal business operations, which may adversely affect our results of operations, financial position and cash flows.

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

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 may 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 may result in additional costs, which may adversely affect our results of operations, financial condition and cash flows.

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

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

Postal costs are a significant component of many of our clients' cost structure and postal rate changes can influence the number of pieces and types of mailings that our clients mail. 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. As allowed under postal law, entitled the 2006 Postal Accountability and Enhancement Act ("PAEA"), the USPS implemented a CPI based postage increase on January 22, 2017 of approximately 1.0%. In addition, there is a pending bi-partisan legislative proposal (still in Committee) agreed to on March 16, 2017 that seeks to stabilize the financial condition of the USPS, which among other things calls for levying a 2.15% increase on market-dominant mail products. Nevertheless, the Postal Regulatory Commission ("PRC") on November 6, 2017 adjusted and approved a USPS filing for a CPI based average price increase of 1.927% for First-Class Mail, 1.936% for Marketing Mail (aka Standard Mail), 1.924% for Periodicals Mail, 1.960% for Package Services Mail and 1.987% for Special Services which became effective January 21, 2018.

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 impact of the USPS's restructuring plans, many of which require legislative action, cannot currently be estimated. If implemented, such changes would impact our clients' ability or willingness to communicate by mail. Declines in print volumes mailed would have an adverse effect on our results of operations, financial condition and cash flows.

Increased transportation costs and changes in the relationships with independent shipping companies may have an adverse effect on our business.

We rely upon third party carriers 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 clients in a timely and accurate manner may damage our reputation and brand and may cause us to lose clients. 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. We may be unable to engage alternative carriers on a timely basis or on terms favorable to us, if at all, which may have an adverse effect on our results of operations, financial condition and cash flows.

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), may have an adverse effect on our results of operations, financial condition and cash flows. Additionally, deterioration of the financial condition of these third-party carriers may have an adverse effect on our shipping costs. Any future increases in shipping rates may have an adverse effect on our results of operations, financial condition and cash flows, particularly if we are unable to pass on these higher costs to our clients.

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 may 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 clients, 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, client dissatisfaction and reductions in net sales and margins, any of which may have an adverse effect on our results of operations, financial condition and cash flows.

We may be unable to hire and retain talented employees, including management.

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 may have an adverse 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 clients and employees and from leaving and joining a competitor within a specified period. Our inability to hire and retain talented employees or the loss of senior members of our senior management team may result in challenges or temporary difficulty in managing our business, which may adversely affect our results of operations, financial condition or 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 RRD 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 RRD 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, 2017, the Company leased or owned 237 U.S. facilities, some of which had multiple buildings and warehouses, and these U.S. facilities encompassed approximately 17.8 million square feet. The Company leased or owned 91 international facilities, some of which had multiple buildings and warehouses, encompassing approximately 6.7 million square feet primarily in Asia, Europe, Canada and Latin America. Of the Company's U.S. and international facilities, approximately 9.4 million square feet of space was owned, while the remaining 15.1 million square feet of space was leased.

ITEM 3. LEGAL PROCEEDINGS

From time to time, the Company's clients 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 8, *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, 2018)

| Name and Positions with the Company | Age | Business Experience |
|--|-----|--|
| Daniel L. Knotts President and Chief Executive Officer | 53 | Since October 2016, Mr. Knotts has served as the Chief Executive Officer of RRD 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. |
| Terry D. Peterson | 53 | Since October 2016, Mr. Peterson has served as RRD's Executive Vice President and Chief Financial Officer. Prior to joining RRD, 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 from 2004 to 2009 including Vice President, Investor Relations and Chief Accounting Officer, Controller and Chief Accounting Officer and Director of Internal Audit. |
| John Pecaric | 52 | Since October 2016, Mr. Pecaric has been the Executive Vice President of Global Markets for RRD. Prior to this, Mr. Pecaric served as Group President – International where he led RRD'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 RRD. |
| Deborah L. Steiner | 47 | Since October 2016, Ms. Steiner has been the Executive Vice President and General Counsel of RRD. Prior to this, Ms. Steiner was the Company's Vice President, Associate General Counsel since April 2012. From 2005 until 2012, Ms. Steiner was Counsel at Latham & Watkins LLP. |
| Michael J. Sharp | 56 | Since November 2017, Mr. Sharp has served as RRD's Senior Vice President, Controller and Chief Accounting Officer. Prior to joining RRD, Mr. Sharp served as the Vice President and Chief Financial Officer of AAR Corporation from 2015 to 2016. Prior to that, Mr. Sharp served in various capacities at AAR Corporation including Vice President, Controller and Chief Accounting Officer from 1999 to 2015, interim Vice President and Chief Financial Officer from 2012 to 2013 and the Corporate Controller from 1996 to 1999. |

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, RRD'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 ("NASDAQ").

As of February 23, 2018, there were 4,123 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, 2017 and 2016, are contained in the chart below:

| | | | Closi | ng Commo | n Stock Pri | ces (3) |
|----------------|-----------------------|--------|------------------|----------|-------------|---------|
| | Dividends Paid (1)(2) | | Paid (1)(2) 2017 | | 2016 | |
| | 2017 | 2016 | High | Low | High | Low |
| First Quarter | \$0.14 | \$0.78 | \$18.28 | \$11.35 | \$27.68 | \$20.46 |
| Second Quarter | 0.14 | 0.78 | 14.20 | 11.21 | 29.47 | 25.44 |
| Third Quarter | 0.14 | 0.78 | 12.74 | 8.66 | 31.14 | 25.81 |
| Fourth Quarter | 0.14 | 0.14 | 10.66 | 7.32 | 23.81 | 15.70 |

- (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

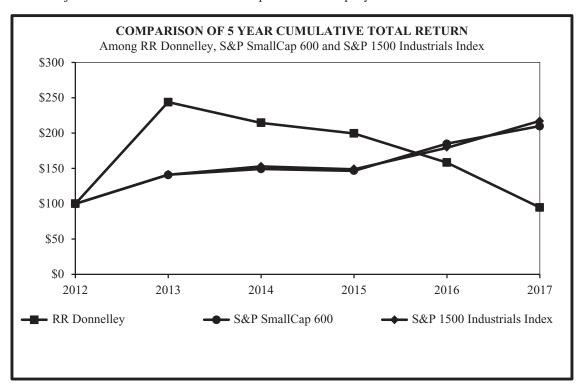
There were no repurchases of equity securities during the three months ended December 31, 2017.

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 an initial investment of \$100 on December 31, 2012 and that all dividends have been reinvested. 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.



| | Base Period | Fiscal Years Ended December 31, | | | , | |
|----------------------------|----------------|---------------------------------|--------|--------|--------|--------|
| Company Name/Index | 2012 | 2013 | | 2015 | | 2017 |
| RR Donnelley | 100 | 243.93 | 214.67 | 199.56 | 158.43 | 94.90 |
| S&P SmallCap 600 | 100 | 141.31 | 149.45 | 146.50 | 185.40 | 209.94 |
| S&P 1500 Industrials Index | 100 | 141.19 | 153.15 | 149.00 | 179.40 | 217.19 |

ITEM 6. SELECTED FINANCIAL DATA

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

| | 2017 | 2016 | 2015 | 2014 | 2013 |
|--|-----------|----------------|-----------|----------------|-----------|
| Continuing Operations ⁽¹⁾ | | | | | |
| Net sales | \$6,939.6 | \$6,833.0 | \$6,880.7 | \$7,118.0 | \$6,103.5 |
| Net (loss) earnings from continuing operations | (33.2) | | | | |
| Net (loss) earnings attributable to RRD common stockholders per diluted share ⁽²⁾ | (0.49) | ` / | (0.28) | ` ′ | |
| Financial Position and Other Data | (****) | (01) =) | (===) | (0.00) | |
| Total assets ⁽³⁾ | 3,904.5 | 4,268.8 | 7,264.6 | 7,598.0 | 7,192.9 |
| Long-term debt ⁽³⁾ | 2,098.9 | 2,379.2 | 3,188.3 | 3,398.6 | 3,553.9 |
| Cash dividends per common share ⁽²⁾ | 0.56 | 2.48 | 3.12 | 3.12 | 3.12 |
| (1) Includes the following significant items: | 0.50 | 2.10 | 5.12 | 3.12 | 3.12 |
| (1) Includes the following significant teems. | | | | | |
| | 2017 | 2016 | 2015 | 2014 | 2013 |
| Restructuring, impairment and other charges-net | \$ 53.0 | \$584.3 | \$ 62.7 | \$ 72.3 | \$ 46.3 |
| Acquisition-related expenses | _ | 2.7 | 0.5 | 7.0 | 4.8 |
| Spinoff-related transaction expenses | 3.3 | 8.0 | _ | _ | _ |
| Gain from the sale of certain of the Company's affordable housing investments | (1.3) | (0.1) | (3.9) | _ | _ |
| Pension settlement charges | 1.6 | 21.1 | _ | _ | _ |
| OPEB curtailment gain | _ | (19.5) | _ | _ | _ |
| Net (gain) loss on disposal 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 | _ | _ |
| Net gain on sale of LSC and Donnelley Financial shares | (42.4) | _ | _ | _ | _ |
| Loss from the impairment of an equity investment | _ | 1.4 | 1.3 | 1.3 | 3.0 |
| Loss on debt extinguishment | 20.1 | _ | _ | 77.1 | 81.9 |
| Loss on bankruptcy liquidation of RRDA | _ | _ | _ | 16.4 | _ |
| Purchase accounting inventory adjustments | _ | | _ | 12.1 | _ |
| Total charges before taxes | \$ 34.3 | \$586.0 | \$109.4 | \$194.2 | \$157.1 |
| Total after-tax impact of the above charges, excluding the impact of noncontrolling | | | | | |
| interests | 11.2 | 534.9 | 87.9 | 138.3 | 106.5 |
| 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) |
| Deferred income tax benefit | (3.0) | (0.4) | _ | _ | _ |
| Tax expense related to the enactment of the Tax Act | 110.3 | _ | _ | _ | _ |
| Total charges, net of taxes | \$118.5 | \$534.5 | \$ 87.9 | \$123.1 | \$ 99.3 |
| 2000 0000 000 00 000 000 000 000 000 00 | === | === | ==== | === | === |

⁽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. See 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 RRD'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 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 RRD to Donnelley Financial and LSC previously eliminated in consolidation have been recast and are now shown as external sales of RRD within the financial results from 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, packaging, labels, forms, manuals and other related products procured through our print management offering. Our service offerings primarily consist of logistics, certain business outsourcing services and digital and creative solutions.

Revision of Net Sales and Cost of Sales

During the third quarter of 2017, the Company identified an error in the accounting for certain contracts with an inventory buy-back option within the Asia reporting unit, which is in the International segment. As a result, the error which had no impact on reported gross margins or income from operations and which was determined by management to be immaterial to the previously issued financial statements, has been corrected herein from the amounts previously reported. See Note 1, *Basis of Presentation and Summary of Significant Accounting Policies*, to the Consolidated Financial Statements for additional information regarding the revision.

Executive Overview

2017 OVERVIEW

Net sales increased \$106.6 million, or 1.6%, for the year ended December 31, 2017 versus 2016. The increase in net sales was driven by higher volume in the Asia and sourcing reporting units, partially offset by lower volume in the Variable Print segment and certain other reporting units within the International segment, lower postage pass-through sales in the logistics reporting unit as well as price pressures across all segments.

The Company continues to strategically assess opportunities to reduce its cost structure and enhance productivity throughout the business. During the year ended December 31, 2017, the Company realized cost savings from previous restructuring activities, including the reorganization of administrative and support functions across all segments, as well as facility consolidations.

Net cash provided by operating activities for the year ended December 31, 2017 was \$217.9 million as compared to \$127.2 million for the year ended December 31, 2016. The increase in net cash flow from operating activities was primarily driven by improvements in working capital in 2017 versus 2016, lower interest expense, lower spinoff-related transaction payments in 2017 versus 2016 and lower tax payments.

2017 Financial Performance - Continuing Operations

The changes in the Company's income (loss) from operations, operating margin, net loss attributable to RRD common stockholders and net loss attributable to RRD common stockholders per diluted share for the year ended December 31, 2017, from the year ended December 31, 2016, were due to the following:

** · *

| | (Loss) Income from Operations | Operating Margin | Net Loss From Continuing Operations Attributable to RRD Common Stockholders | Net Loss Attributable to RRD Stockholders Per Diluted Share |
|--|-------------------------------------|---------------------|--|---|
| | (in ı | nillions, except | margin and per sha | are data) |
| For the year ended December 31, 2016 | \$(300.6) | (4.4%) | \$(486.2) | \$(6.95) |
| 2017 restructuring, impairment and other charges-net | (53.0) | (0.8%) | (40.0) | (0.57) |
| 2016 restructuring, impairment and other charges-net | 584.3 | 8.5% | 538.1 | 7.68 |
| Spinoff-related transaction expenses | 4.7 | 0.1% | 2.8 | 0.04 |
| OPEB curtailment gain | (19.5) | (0.3%) | (12.0) | (0.17) |
| Pension settlement charges | 19.5 | 0.3% | 11.5 | 0.16 |
| Acquisition-related expenses | 2.7 | _ | 1.8 | 0.03 |
| Net gain on disposal of businesses | (11.9) | (0.2%) | (12.1) | (0.17) |
| Loss on debt extinguishments | _ | _ | (12.6) | (0.18) |
| Net gain on investments | _ | _ | 46.2 | 0.66 |
| Income tax adjustment | _ | | 2.6 | 0.04 |
| Tax expense related to the enactment of the Tax Act | _ | _ | (110.3) | (1.57) |
| Operations, including the impact of foreign exchange | 0.3 | 0.1% | 35.8 | 0.51 |
| For the year ended December 31, 2017 | \$ 226.5 | 3.3% | \$ (34.4) | \$(0.49) |

2017 restructuring, impairment and other charges-net: included pre-tax charges of \$23.5 million for employee termination costs; \$21.3 million for the impairment of goodwill in the digital and creative solutions reporting unit within the Strategic Services segment; \$4.8 million of lease termination and other restructuring costs; \$2.3 million for multi-employer pension plan withdrawal obligations unrelated to facility closures; \$0.2 million related to the impairment of intangible assets in the commercial and digital print reporting unit within the Variable Print segment; and \$0.9 million impairment charges of other long-lived assets related to facility closures. See Note 4, Restructuring, Impairment and Other Charges, to the Consolidated Financial Statements for further discussion.

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; \$3.5 million of lease termination and other restructuring costs; \$2.3 million of other charges; and \$0.9 million net gain on the sale of previously impaired other long-lived assets. 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 \$3.3 million (\$2.1 million after-tax) related to consulting and other expenses for the year ended December 31, 2017 associated with the Separation and Distribution. For the year ended December 31, 2016, these pre-tax charges were of \$8.0 million (\$4.9 million after-tax).

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.

Pension settlement charges: included pre-tax charges of \$1.6 million (\$1.4 million after-tax) for the year ended December 31, 2017 related to lump-sum pension settlement payments. For the year ended December 31, 2016, these pre-tax charges were \$21.1 million (\$12.9 million after-tax).

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.

Net gain on disposal of businesses: included a pre-tax gain of \$11.9 million (\$12.1 million after-tax) for the year ended December 31, 2016, related to the disposal of entities in the International segment.

Loss on debt extinguishments: included a pre-tax net loss of \$20.1 million (\$12.6 million after-tax), recorded in the Corporate segment, related to the premiums paid in connection with the tender offers, unamortized debt issuance costs and other expenses due to the debt-for-equity exchange of senior notes, the repurchase of debentures and senior notes and the amendment and restatement of the credit agreement during the year ended December 31, 2017. See Note 11, *Debt*, to the Consolidated Financial Statements for further discussion.

Net gain on investments: included a pre-tax non-cash net realized gain of \$94.0 million (\$95.7 million after-tax) resulting from the debt-for-equity exchange of the Company's retained shares of Donnelley Financial for certain outstanding senior notes and a pre-tax gain of \$1.3 million (\$0.8 million after-tax) resulting from the sale of certain of the Company's affordable housing investments, partially offset by a pre-tax loss of \$51.6 million (\$51.6 million after-tax) resulting from the sale of the Company's retained shares in LSC during the year ended December 31, 2017. The year ended December 31, 2016 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.

Income tax adjustment: included the recognition of \$3.0 million and \$0.4 million deferred income tax benefit during the years ended December 31, 2017 and 2016, respectively.

Tax expense related to the enactment of the Tax Act: reflects the impact associated with the enactment of the Tax Act which included a provisional estimate for the one-time transition tax on foreign earnings of \$103.5 million, as well as a provisional adjustment to the net deferred tax assets for the reduced corporate income tax rate of \$6.8 million.

OUTLOOK

Vision and Strategy

RRD works with its clients 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 clients' evolving needs.

The Company's global platform provides differentiated solutions for its clients 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 RRD to develop strong client 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 clients and the Company intends to expand its capabilities in order to make it easier for clients 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 capital expenditures, targeted acquisitions, principal and interest payments on debt obligations and distributions to stockholders. The Company believes that a strong financial condition is important to clients 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, the timing of tax payments and the impact of working capital changes.

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.

2018 Outlook

In 2018, the Company expects net sales to range from a slight decrease to a slight increase as compared to 2017 primarily driven by organic growth in the International segment, 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 and the economies of the foreign countries in which we operate will remain stable. The Company will continue to leverage its client relationships in order to provide a larger share of their communications needs. In addition, the Company expects to continue cost control and productivity initiatives, including selected facility consolidations.

The Company initiated several restructuring actions during the years ended December 31, 2017, 2016 and 2015 to further reduce the Company's overall cost structure. These restructuring actions included the closures of manufacturing facilities as well as the reorganization and consolidation of certain operations. These and future cost reduction actions are expected to have a positive impact on operating earnings in 2018 and in future years. In addition, the Company expects to identify other cost reduction opportunities and possibly take further actions in 2018, 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.

We expect lower interest expense on lower average borrowings in 2018 and we expect the effective tax rate to be higher than the statutory rate primarily due to anticipated limitations on the Company's domestic interest expense deduction as a result of the Tax Act.

Cash flows from operations in 2018 are expected to range from a slight decrease to a slight increase versus 2017 as lower interest expense and expected targeted working capital improvements will be offset by higher payments for income taxes. The Company expects capital expenditures to be between \$100 million to \$115 million.

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, 2017 AS COMPARED TO THE YEAR ENDED DECEMBER 31, 2016

The following table shows the results of operations for continuing operations for the years ended December 31, 2017 and 2016, which reflects the results of an acquired business from the relevant acquisition date:

| | Year Ended December 31, | | | |
|---|-------------------------|-----------------|--------------|----------|
| | 2017 | 2016 | \$ Change | % Change |
| | (in | millions, excep | t percentage | s) |
| Products net sales | \$5,326.0 | \$5,225.4 | \$ 100.6 | 1.9% |
| Services net sales | 1,613.6 | 1,607.6 | 6.0 | 0.4% |
| Total net sales | 6,939.6 | 6,833.0 | 106.6 | 1.6% |
| Products cost of sales (exclusive of depreciation and amortization) | 4,260.5 | 4,101.7 | 158.8 | 3.9% |
| Services cost of sales (exclusive of depreciation and amortization) | 1,358.8 | 1,354.5 | 4.3 | 0.3% |
| Total cost of sales | 5,619.3 | 5,456.2 | 163.1 | 3.0% |
| Products gross profit | 1,065.5 | 1,123.7 | (58.2) | (5.2%) |
| Services gross profit | 254.8 | 253.1 | 1.7 | 0.7% |
| Total gross profit | 1,320.3 | 1,376.8 | (56.5) | (4.1%) |
| and amortization) | 849.4 | 900.8 | (51.4) | (5.7%) |
| Restructuring, impairment and other charges-net | 53.0 | 584.3 | (531.3) | (90.9%) |
| Depreciation and amortization | 191.4 | 204.2 | (12.8) | (6.3%) |
| Other operating income | | (11.9) | 11.9 | (100.0%) |
| Income (loss) from operations | \$ 226.5 | \$ (300.6) | \$ 527.1 | nm |

Consolidated

Net sales of products for the year ended December 31, 2017 increased \$100.6 million, or 1.9%, to \$5,326.0 million versus the same period in 2016, including an \$8.0 million, or 0.2%, increase due to changes in foreign exchange rates. Net sales of products increased due to higher volume in the Asia and sourcing reporting units, partially offset by lower volume in the Variable Print segment and certain other reporting units within the International segment, as well as price pressures.

Net sales from services for the year ended December 31, 2017 increased \$6.0 million, or 0.4%, to \$1,613.6 million versus the same period in 2016, including a \$5.6 million, or 0.3%, decrease due to changes in foreign exchange rates. Net sales from services increased due to higher volume in freight brokerage and courier services as well as increased fuel surcharges in the logistics reporting unit, partially offset by lower postage pass-through sales in logistics, lower volume in business process outsourcing and price pressures.

Products cost of sales increased \$158.8 million, or 3.9%, for the year ended December 31, 2017 versus the same period in 2016 primarily due to higher volume in the Asia and sourcing reporting units as well as cost inflation, including higher paper costs in Asia, partially offset by lower volume in the Variable Print segment and certain reporting units within the International segment and cost control initiatives across the organization. As a percentage of net sales, products cost of sales increased 1.5% to 80.0% for the year ended December 31, 2017 versus the same period in 2016.

Services cost of sales increased \$4.3 million, or 0.3%, for the year ended December 31, 2017 versus the same period in 2016 and was in line with the increase in net sales from services.

Products gross profit decreased \$58.2 million to \$1,065.5 million for the year ended December 31, 2017 versus the same period in 2016 primarily due to price pressures, cost inflation and lower volume in the Variable Print segment and certain reporting units within the International segment, partially offset by higher volume in the Asia reporting unit and cost control initiatives. Products gross margin decreased from 21.5% to 20.0%, driven by price pressures and an unfavorable revenue mix within much of the International and Variable Print segments and the sourcing reporting unit, partially offset by cost control initiatives.

Services gross profit increased \$1.7 million to \$254.8 million for the year ended December 31, 2017 versus the same period in 2016 due to increased fuel surcharges in the logistics reporting unit, partially offset by lower volume in the business process outsourcing reporting unit and price pressures. Services gross margin increased slightly from 15.7% to 15.8%.

Selling, general and administrative expenses decreased \$51.4 million to \$849.4 million for the year ended December 31, 2017 versus the same period in 2016. After including the unfavorable impact of foreign exchange rates of \$13.4 million during the year ended December 31, 2017, selling, general and administrative expenses decreased due to the prior year pension settlement charges, lower bad debt, general consulting and legal expenses, lower corporate and other overhead costs and cost control initiatives. As a percentage of net sales, selling, general and administrative expenses decreased from 13.2% to 12.2% for the year ended December 31, 2017 versus the same period in 2016.

For the year ended December 31, 2017, the Company recorded net restructuring, impairment and other charges of \$53.0 million. These charges principally included a non-cash charge of \$21.3 million for the impairment of goodwill in the digital and creative solutions reporting unit within the Strategic Services segment as well as \$23.5 million of employee termination costs, which were related to the reorganization of selling, general and administrative functions primarily within the Corporate, International and Variable Print segments, ceasing the Company's relationship in a joint venture in the International segment and one facility closure in the Strategic Services segment. The Company also incurred lease termination and other restructuring charges of \$4.8 million. See Note 4, *Restructuring, Impairment and Other Charges*, to the Consolidated Financial Statements for further discussion.

Depreciation and amortization decreased \$12.8 million to \$191.4 million for the year ended December 31, 2017 versus the same period in 2016 due to lower capital spending in recent years compared to historical levels and certain International client relationship intangible assets becoming fully amortized.

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

Income from operations for the year ended December 31, 2017 was \$226.5 million, an increase of \$527.1 million compared to the year ended December 31, 2016, which included an approximate \$25.0 million unfavorable impact due to changes in foreign exchange rates.

| | Year Ended December 31, | | | | |
|---------------------------------|-----------------------------------|---------|-----------|----------|--|
| | 2017 | 2016 | \$ Change | % Change | |
| | (in millions, except percentages) | | | | |
| Interest expense-net | \$179.6 | \$198.7 | \$(19.1) | (9.6%) | |
| Investment and other income-net | (48.7) | (2.1) | (46.6) | nm | |
| Loss on debt extinguishment | 20.1 | _ | 20.1 | nm | |

Net interest expense decreased by \$19.1 million for the year ended December 31, 2017 versus the same period in 2016 primarily due to lower average borrowings during the year ended December 31, 2017.

Net investment and other income-net for the years ended December 31, 2017 and 2016 was \$48.7 million and \$2.1 million, respectively. For the year ended December 31, 2017, the Company recorded a non-cash net realized gain of \$94.0 million on the retained shares of Donnelley Financial exchanged for certain of the Company's senior notes outstanding and a gain of \$1.3 million resulting from the sale of certain of the Company's affordable housing investments, partially offset by a net realized loss of \$51.6 million resulting from the sale of the Company's retained shares of LSC.

Loss on debt extinguishments for the year ended December 31, 2017 was \$20.1 million which related to premiums paid in connection with the tenders, unamortized debt issuance costs and other expenses associated with the debt-for-equity exchange of senior notes, the repurchase of debentures and senior notes and the amendment and restatement of the credit agreement. See Note 11, *Debt*, to the Consolidated Financial Statements for further discussion.

| | Year Ended D | December 31, | | | |
|-------------------------------------|-----------------------------------|--------------|-----------|----------|--|
| | 2017 | 2016 | \$ Change | % Change | |
| | (in millions, except percentages) | | | | |
| Earnings (loss) before income taxes | \$ 75.5 | \$(497.2) | \$572.7 | nm | |
| Income tax expense (benefit) | 108.7 | (12.3) | 121.0 | nm | |
| Effective income tax rate | 144.0% | 2.5% | | | |

The effective income tax rate for the year ended December 31, 2017 was 144.0% compared to 2.5% in the same period in 2016. The income tax expense for the year ended December 31, 2017 reflects the impact associated with the enactment of the Tax Act which included a provisional estimate for the one-time transition tax on foreign earnings of \$103.5 million, as well as a provisional adjustment to the net deferred tax assets for the reduced corporate income tax rate of \$6.8 million. The income tax expense also reflects non-deductible goodwill impairment charges, the inability to recognize a tax benefit on certain losses and the impact of the non-taxable gain on the sale of the Donnelley Financial retained shares. The sale of the LSC retained shares generated a pre-tax capital loss of \$51.6 million. The related tax capital loss will be carried forward; however, it is more likely than not that the benefit of such deferred tax asset will not be fully realized and a valuation allowance was recorded. The tax rate in 2016 reflects the impact of the non-deductible goodwill impairment charges.

Income attributable to noncontrolling interests was \$1.2 million and \$1.3 million for the years ended December 31, 2017 and 2016, respectively.

Net loss from continuing operations, excluding the impact from non-controlling interests, attributable to RRD common stockholders for the year ended December 31, 2017 was \$34.4 million, or \$0.49 per diluted share, compared to \$486.2 million, or \$6.95 per diluted share, for the year ended December 31, 2016.

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 client needs and improve operating efficiency.

Variable Print

| | Year Ended D | ecember 31, |
|---|--------------------|-----------------|
| | 2017 | 2016 |
| | (in millions, exce | pt percentages) |
| Net sales | \$3,113.1 | \$3,145.4 |
| Income (loss) from operations | 189.0 | (349.5) |
| Operating margin | 6.1% | (11.1%) |
| Restructuring, impairment and other charges-net | 7.2 | 562.9 |

| | - 100 20000 - | or the Year cember 31, | | |
|------------------------------|---------------|---------------------------|----------------|----------|
| Reporting unit | 2017 | 2016 | \$ Change | % Change |
| | (i | n millions, exc | ept percentage | s) |
| Commercial and digital print | \$1,609.8 | \$1,654.9 | \$(45.1) | (2.7%) |
| Direct mail | 545.7 | 527.8 | 17.9 | 3.4% |
| Labels | 401.7 | 399.6 | 2.1 | 0.5% |
| Statement printing | 385.0 | 381.1 | 3.9 | 1.0% |
| Forms | 170.9 | 182.0 | (11.1) | (6.1%) |
| Total Variable Print | \$3,113.1 | \$3,145.4 | \$(32.3) | (1.0%) |

Net sales for the Variable Print segment for the year ended December 31, 2017 were \$3,113.1 million, a decrease of \$32.3 million, or 1.0%, compared to 2016. A discussion of net sales by reporting unit follows:

- Commercial and digital print: Sales decreased as a result of lower transactional commercial print volume and price pressures, partially offset by higher volume with a large client in our specialty cards business.
- Direct mail: Sales increased as a result of incremental sales from the 2016 acquisition of Precision Dialogue, partially offset by price pressures.
- Labels: Sales increased slightly as a result of higher pressure sensitive, prime and integrated labels volume, partially offset by price pressures.
- Statement printing: Sales increased as a result of higher volume from new and existing clients, partially offset by price pressures.
- Forms: Sales decreased due to lower volume primarily as a result of electronic substitution.

Variable Print segment income from operations increased \$538.5 million for the year ended December 31, 2017 primarily due to lower restructuring, impairment and other charges-net, incremental sales from the acquisition of Precision Dialogue and higher volume in statement printing and labels, partially offset by lower volume in commercial and digital print and forms, price pressures and higher variable incentive compensation. Operating margins increased from (11.1%) for the year ended December 31, 2016 to 6.1% for the year ended December 31, 2017.

Strategic Services

| | Year Ended December 31, | | |
|---|-----------------------------------|-----------|--|
| | 2017 | 2016 | |
| | (in millions, except percentages) | | |
| Net sales | \$1,765.7 | \$1,726.9 | |
| Income from operations | 3.4 | 26.8 | |
| Operating margin | 0.2% | 1.6% | |
| Restructuring, impairment and other charges-net | 25.2 | 2.1 | |

| | | Ended December 31, | | |
|--------------------------------|-----------------------------------|--------------------|-----------|----------|
| Reporting unit | 2017 | 2016 | \$ Change | % Change |
| | (in millions, except percentages) | | | es) |
| Logistics | \$1,231.7 | \$1,229.1 | \$ 2.6 | 0.2% |
| Sourcing | 383.7 | 347.2 | 36.5 | 10.5% |
| Digital and creative solutions | 150.3 | 150.6 | (0.3) | (0.2%) |
| Total Strategic Services | \$1,765.7 | \$1,726.9 | \$38.8 | 2.2% |

Net sales for the Strategic Services segment for the year ended December 31, 2017 were \$1,765.7 million, an increase of \$38.8 million, or 2.2%, compared to 2016. A discussion of net sales by reporting unit follows:

Logistics: Sales increased slightly due to higher volume in freight brokerage and courier services and an increase in fuel
surcharges revenue, partially offset by a decrease in postage pass-through sales in pre-sort and international mail services,
lower volume in print logistics and price pressures.

- Sourcing: Sales increased primarily due to higher volume resulting from the commercial agreements entered into as part of the Separation and higher commercial and forms volume, partially offset by lower labels volume.
- Digital and creative solutions: Sales decreased slightly primarily due to lower prepress and photo volume, partially offset by incremental revenue from the acquisition of Precision Dialogue.

Strategic Services segment income from operations decreased \$23.4 million for the year ended December 31, 2017 mainly due to the \$21.3 million impairment of goodwill in digital and creative solutions recorded in the third quarter of 2017. Operating margins decreased from 1.6% for the year ended December 31, 2016 to 0.2% for the year ended December 31, 2017.

International

| | Year Ended December 31, | | |
|---|-----------------------------------|-----------|--|
| | 2017 | 2016 | |
| | (in millions, except percentages) | | |
| Net sales | \$2,060.8 | \$1,960.7 | |
| Income from operations | 89.2 | 150.7 | |
| Operating margin | 4.3% | 7.7% | |
| Restructuring, impairment and other charges-net | 10.7 | 8.9 | |
| Gain on disposal of businesses | _ | (12.5) | |
| Spinoff-related transaction expenses | _ | 0.1 | |
| Pension settlement charges | 1.6 | _ | |

| | | or the Year cember 31, | | |
|------------------------------|-----------|---------------------------|----------------|----------|
| Reporting unit | 2017 | 2016 | \$ Change | % Change |
| | (i | in millions, exc | ept percentage | es) |
| Asia | \$ 831.1 | \$ 674.5 | \$156.6 | 23.2% |
| Global Turnkey Solutions | 473.2 | 497.9 | (24.7) | (5.0%) |
| Business process outsourcing | 385.3 | 418.0 | (32.7) | (7.8%) |
| Canada | 195.2 | 206.6 | (11.4) | (5.5%) |
| Latin America | 176.0 | 163.7 | 12.3 | 7.5% |
| Total International | \$2,060.8 | \$1,960.7 | \$100.1 | 5.1% |

Net sales in the International segment for the year ended December 31, 2017 were \$2,060.8 million, an increase of \$100.1 million, or 5.1%, compared to 2016, including a \$2.0 million, or 0.1%, increase due to changes in foreign exchange rates. A discussion of net sales by reporting unit follows:

- Asia: Sales increased due to higher volume primarily in packaging and books products, partially offset by price pressures and an unfavorable change in foreign exchange rates.
- Global Turnkey Solutions: Sales decreased primarily due to lower volume in books and packaging, partially offset by favorable changes in foreign exchange rates and favorable price changes.
- Business process outsourcing: Sales decreased due to lower volume, unfavorable changes in foreign exchanges rates and price pressures.
- Canada: Sales decreased due to lower volume in commercial print, statement printing, forms and labels, partially offset by favorable changes in foreign exchange rates.
- Latin America: Sales increased primarily due to favorable changes in foreign exchange rates across the region and higher volume.

International segment income from operations decreased \$61.5 million for the year ended December 31, 2017 primarily due to lower volume in Global Turnkey Solutions, Canada and business process outsourcing, the prior year \$12.5 million gain recognized on the sale of businesses, price pressures, higher start-up expenses associated with the new packaging business opportunity in Asia and higher variable incentive compensation, offset by increased volume in Asia and lower bad debt expense. Operating margins decreased from 7.7% for the year ended December 31, 2016 to 4.3% for the year ended December 31, 2017.

Corporate

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

| | Year Ended December 31, | |
|---|-------------------------|---------|
| | 2017 | 2016 |
| | (in millions) | |
| Operating expenses | \$55.1 | \$128.6 |
| Pension settlement charges | _ | 21.1 |
| Spinoff-related transaction expenses | 3.3 | 7.9 |
| Restructuring, impairment and other charges-net | 9.9 | 10.4 |
| OPEB curtailment gain | _ | (19.5) |
| Loss on disposal of businesses | _ | 0.6 |
| Acquisition-related expenses | _ | 2.7 |

Corporate operating expenses in the year ended December 31, 2017 were \$55.1 million, a decrease of \$73.5 million compared to the same period in 2016. The decrease was primarily driven by the prior year pension settlement charge, lower corporate and other overhead costs related to the pre-Separation combined entity, lower general consulting, legal and bad debt expenses, cost control initiatives and lower spinoff-related transaction expenses, partially offset by the prior year OPEB curtailment gain, lower pension and postretirement plan income and higher variable incentive compensation.

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

| | Income (Loss) from Operations | Operating Margin | Net Loss From Continuing Operations Attributable to RRD Common Stockholders | Net Loss Attributable to RRD Stockholders Per Diluted Share |
|--|--|---------------------|--|--|
| | (in mil | lions, except m | argin and per sha | re data) |
| For the year ended December 31, 2015 | \$ 237.3 | 3.4% | \$ (19.0) | \$(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 on disposal 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 adjustments | _ | _ | 0.4 | 0.01 |
| Operations, including the impact of foreign exchange | (16.4) | (0.3%) | (18.0) | (0.30) |
| For the year ended December 31, 2016 | <u>\$(300.6)</u> | <u>(4.4</u> %) | <u>\$(486.2)</u> | \$(6.95) |

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 in employee termination costs; \$3.5 million of lease termination and other restructuring costs; \$2.3 million of other charges; and a \$0.9 million net gain on the sale 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; \$11.9 million for the impairment of intangible assets, substantially all related to acquired client relationship intangible assets; \$9.2 million of lease termination and other restructuring costs; \$2.2 million of other charges related to multi-employer pension plan withdrawal obligations; and a \$1.0 million net gain on sale 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 Separation and Distribution.

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 contemplated or completed 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.

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 disposal 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 disposal of entities 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 adjustments: 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.

Consolidated

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:

| | Year Ended I | December 31, | | |
|---|-----------------------------------|--------------|-----------|----------|
| | 2016 | 2015 | \$ Change | % Change |
| | (in millions, except percentages) | | | |
| Products net sales | \$5,225.4 | \$5,255.5 | \$ (30.1) | (0.6%) |
| Services net sales | 1,607.6 | 1,625.2 | (17.6) | (1.1%) |
| Total net sales | 6,833.0 | 6,880.7 | (47.7) | (0.7%) |
| Products cost of sales (exclusive of depreciation and amortization) | 4,101.7 | 4,122.3 | (20.6) | (0.5%) |
| Services cost of sales (exclusive of depreciation and amortization) | 1,354.5 | 1,353.3 | 1.2 | 0.1% |
| Total cost of sales | 5,456.2 | 5,475.6 | (19.4) | (0.4%) |
| 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 | nm |
| Depreciation and amortization | 204.2 | 232.5 | (28.3) | (12.2%) |
| Other operating income | (11.9) | | (11.9) | 100.0% |
| (Loss) income from operations | \$ (300.6) | \$ 237.3 | \$(537.9) | nm |

Net sales of products for the year ended December 31, 2016 decreased \$30.1 million, or 0.6%, to \$5,225.4 million versus the same period in 2015, including a \$50.0 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 of changes in 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 \$20.6 million, or 0.5%, for the year ended December 31, 2016 versus the same period in 2015, 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 percentage of net sales, products cost of sales increased 0.1% to 78.5% 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 2015 primarily due to higher volume in the Strategic Services segment driven by an 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 versus 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 21.6% in 2015 to 21.5% 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 an 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 the 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 \$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 client relationships in the commercial and digital print reporting unit within the Variable Print segment, \$21.9 million for employee termination costs, \$3.5 million of lease termination and other restructuring costs, \$2.3 million of other charges and a net gain 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 former Latin America and former Europe reporting units, respectively, within the International segment, \$11.9 million for the impairment of intangible assets, \$9.2 million of lease termination and other restructuring costs, \$2.2 million of other charges related to multi-employer pension plan withdrawal obligations and a \$1.0 million net gain on the sale 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 client relationships, trade names, trademarks, licenses and agreements for the year 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 disposal 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 compared to the year ended December 31, 2015, which included a favorable impact due to changes in foreign exchange rates. The decrease was due to the higher restructuring, impairment and other charges-net, increased selling, general and administrative expenses and a decline in products and services gross margin, partially offset by lower depreciation and amortization expense.

| | Year Ended l | December 31, | | | |
|---|-----------------------------------|--------------|-----------|----------|--|
| | 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) | nm | |

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 disposal of the Venezuelan operating entity.

| | Year Ended D | ecember 31, | | |
|------------------------------|-----------------------------------|-------------|-----------|----------|
| | 2016 | 2015 | \$ Change | % Change |
| | (in millions, except percentages) | | | |
| Loss before income taxes | \$(497.2) | \$ (10.7) | \$(486.5) | nm |
| Income tax (benefit) expense | (12.3) | 21.0 | (33.3) | nm |
| 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 Venezuela currency devaluation, the impact of the non-deductible goodwill impairment charges and the loss on the disposal of the Company's Venezuelan operating entity.

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 Venezuela currency remeasurement, net of foreign exchange gains, resulted in losses attributable to noncontrolling interests of \$10.5 million.

The net loss from continuing operations, excluding the impact from non-controlling interests, attributable to RRD 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.

The 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 client needs and improve operating efficiency.

Variable Print

| | Year Ended December 31, | | |
|---|-----------------------------------|-----------|--|
| | 2016 | 2015 | |
| | (in millions, except percentages) | | |
| Net sales | \$3,145.4 | \$3,214.9 | |
| (Loss) income from operations | (349.5) | 208.2 | |
| Operating margin | (11.1%) | 6.5% | |
| Restructuring, impairment and other charges-net | 562.9 | 9.1 | |

| | Ended De | cember 31, | | |
|------------------------------|-----------|------------------|----------------|----------|
| Reporting unit | 2016 | 2015 | \$ Change | % Change |
| | (i | n millions, exce | ept percentage | s) |
| 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%) |

Not Sales for the Vear

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-net, 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-net. Additionally, operating margins were impacted by price pressures, partially offset by cost control and productivity initiatives.

Strategic Services

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

| | Net Sales fo Ended Dec | or the Year cember 31, | | |
|--------------------------------|-----------------------------------|---------------------------|----------------|----------|
| Reporting unit | 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 | <u>\$122.3</u> | 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 Separation 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 Separation and higher volumes in forms and commercial print, 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-net which favorably impacted operating margins by 0.2 percentage points.

International

| | Year Ended December 31, | | |
|---|-----------------------------------|-----------|--|
| | 2016 | 2015 | |
| | (in millions, except percentages) | | |
| Net sales | \$1,960.7 | \$2,061.2 | |
| Income from operations | 150.7 | 86.7 | |
| Operating margin | 7.7% | 4.2% | |
| Restructuring, impairment and other charges-net | 8.9 | 43.6 | |
| Gain on disposal of businesses | (12.5) | _ | |
| Spinoff-related transaction expenses | 0.1 | _ | |

| | Net Sales for the Year Ended December 31, | | | |
|------------------------------|--|-------------------|------------------|----------|
| Reporting unit | 2016 | 2015 | \$ Change | % Change |
| | (i | n millions, excep | ot percentages) | |
| Asia | \$ 674.5 | \$ 682.6 | \$ (8.1) | (1.2%) |
| 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 | \$1,960.7 | \$2,061.2 | <u>\$(100.5)</u> | (4.9%) |

Net sales in the International segment for the year ended December 31, 2016 were \$1,960.7 million, a decrease of \$100.5 million, or 4.9%, compared to the same period in 2015, including a \$66.4 million, or 3.2%, 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 exchanges rates and \$18.9 million due to the disposal 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 disposal 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-net, a net gain on the disposal 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 4.2% to 7.7%, of which 1.7 percentage points was due to lower restructuring, impairment and other charges-net and 0.6 percentage points due to the net gain on the disposal of entities in 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 mil | llions) | |
| Operating expenses | \$128.6 | \$97.1 | |
| Spinoff-related transaction expenses | 7.9 | _ | |
| Restructuring, impairment and other charges-net | 10.4 | 4.2 | |
| Acquisition-related expenses | 2.7 | 0.5 | |
| Loss on disposal of businesses | 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 versus the same period in 2015. The increase was primarily driven by the non-cash pension settlement charge, higher restructuring, impairment and other charges-net, spinoff-related transaction expenses and an increase in legal expenses, partially offset by the OPEB curtailment gain and lower variable compensation expense.

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 available capacity under the Company's \$800.0 million asset-based 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, capital expenditures necessary to support productivity improvement and growth, completion of restructuring programs, acquisitions, payment of interest and principal on the Company's long-term debt obligations, and distributions to stockholders that may be approved by the Board of Directors.

The following describes the Company's cash flows for the years ended December 31, 2017, 2016 and 2015. The Company's cash flows for all periods prior to the October 1, 2016 Distribution include the impact of LSC and Donnelley Financial. See 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.

2017 compared to 2016

Net cash provided by operating activities was \$217.9 million for the year ended December 31, 2017, compared to \$127.2 million for the year ended December 31, 2016. The increase was driven by lower interest, lower spinoff-related transaction payments in 2017 versus 2016 and lower tax payments, as well as other improvements in working capital in 2017 versus 2016.

2016 compared to 2015

Net cash provided by operating activities was \$127.2 million for the year ended December 31, 2016, compared to \$666.0 million for the year ended December 31, 2015. The decrease reflected the Separation on October 1, 2016, as well as higher spinoff-related transaction costs and legal expenses, partially offset by lower payments for incentive compensation and taxes.

Cash Flows From Investing Activities

2017 compared to 2016

Net cash provided by investing activities for the year ended December 31, 2017 was \$24.7 million compared to net cash used in investing activities of \$200.6 million for the year ended December 31, 2016. Capital expenditures were \$108.5 million during the year ended December 31, 2017, a decrease of \$63.6 million as compared to the same period of 2016 primarily driven by LSC and Donnelley Financial capital expenditures in the prior year period of \$49.0 million. For the year ended December 31, 2017, cash provided by investing activities included net proceeds of \$121.4 million from the sale of the Company's retained interest in LSC and approximately \$12.5 million cash received as a deposit for the expected sale of a facility. For the year ended December 31, 2016, the Company paid \$48.1 million to acquire Precision Dialogue. Additionally for the year ended December 31, 2016, cash used in investing activities included \$13.7 million of proceeds primarily from business dispositions in the International segment.

2016 compared to 2015

Net cash used in investing activities for the year ended December 31, 2016 was \$200.6 million compared to \$322.3 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-subsidiary LSC.

Cash Flows From Financing Activities

2017 compared to 2016

Net cash used in financing activities for the year ended December 31, 2017 was \$294.3 million compared to net cash provided by financing activities of \$19.9 million for the year ended December 31, 2016. During the year ended December 31, 2017, the Company had \$1,406.0 million and \$1,406.0 million of borrowings and payments, respectively, under the credit facilities. During the year ended December 31, 2017, the Company paid approximately \$201.6 million to repurchase certain senior notes and debentures outstanding with borrowings under the credit facilities. During the year ended December 31, 2016, the Company repurchased \$725.9 million of aggregate principal of senior notes 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, during the year ended December 31, 2016, cash on hand and the borrowings under the prior credit agreement were used to pay \$219.8 million and \$200.0 of senior notes that matured on August 15, 2016 and May 15, 2015, respectively.

Cash dividends paid to stockholders decreased \$133.8 million from \$173.0 million during the year ended December 31, 2016 to \$39.2 million during the year ended December 31, 2017. During the year ended December 31, 2017, the Company paid the final spinoff cash settlements totaling \$78.0 million to LSC and Donnelley Financial as required by the Separation and Distribution agreement.

2016 compared to 2015

Net cash provided by financing activities for the year ended December 31, 2016 was \$19.9 million compared to net cash used in financing activities of \$444.8 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 11, *Debt*, for further detail of the various debt transactions.

Dividends

Cash dividends paid to stockholders totaled \$39.2 million, \$173.0 million and \$212.6 million during the years ended December 31, 2017, 2016 and 2015, respectively. On January 17, 2018, the Board of Directors of the Company declared a quarterly cash dividend of \$0.14 per common share, payable on March 1, 2018 to stockholders of record on February 15, 2018.

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, 2017:

| | Payments Due In | | | | | | |
|---|-----------------|---------|----------------|--------------|---------|---------|------------|
| | Total | 2018 | 2019 | 2020 | 2021 | 2022 | Thereafter |
| | | | | (in millions | s) | | |
| $Debt_{(a)}$ | \$2,122.6 | \$ 10.8 | \$172.2 | \$238.4 | \$529.1 | \$356.0 | \$ 816.1 |
| Interest due on debt | 704.8 | 146.6 | 135.2 | 114.7 | 84.4 | 58.3 | 165.6 |
| Operating leases _(b) | 303.3 | 102.0 | 68.9 | 50.0 | 32.6 | 19.5 | 30.3 |
| Multi-employer pension plan withdrawal obligations | 83.2 | 6.6 | 6.6 | 6.6 | 6.6 | 6.6 | 50.2 |
| Outsourced services | 74.1 | 47.5 | 21.4 | 4.6 | 0.2 | 0.2 | 0.2 |
| Transition tax | 64.3 | 4.9 | 5.1 | 5.1 | 5.1 | 5.1 | 39.0 |
| Pension and other postretirement benefits plan contributions _(c) | 16.0 | 16.0 | _ | _ | _ | _ | _ |
| Deferred compensation _(d) | 14.1 | 7.4 | 4.9 | 0.3 | 0.6 | 0.1 | 0.8 |
| $Other_{(e)}$ | 37.5 | 35.3 | 1.1 | 0.2 | 0.1 | 0.1 | 0.7 |
| Total as of December 31, 2017 | \$3,419.9 | \$377.1 | <u>\$415.4</u> | \$419.9 | \$658.7 | \$445.9 | \$1,102.9 |

- (a) Excludes unamortized debt issuance costs of \$11.6 million and a discount of \$1.3 million which do not represent contractual commitments with a fixed amount or maturity date.
- (b) Includes executory costs such as taxes, maintenance and other operating expenses in connection with the leased properties.
- (c) Includes the low-end of the estimated range for 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.
- (d) Excludes deferred compensation plans that are funded with investments.
- (e) Represents contractual obligations for purchases of property, plant and equipment of \$25.9 million and employee restructuring-related severance payments of \$9.6 million. Excluded from the table are \$30.7 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 Company's international 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 \$273.4 million as of December 31, 2017, a decrease of \$44.1 million as compared to December 31, 2016.

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, 2017 included \$45.0 million in the U.S. and \$228.4 million at international locations. The Company has recognized deferred tax liabilities of \$4.7 million as of December 31, 2017 related to local taxes on certain foreign earnings that are not considered to be permanently reinvested. Certain other cash balances of foreign subsidiaries, if repatriated to the U.S., may be subject to additional tax which would depend on income tax laws and circumstances at the time of distribution. 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 at December 31, 2017 were \$27.3 million of short-term investments, which primarily consisted of short-term deposits and money market funds. These investments are held with institutions with sound credit ratings and are expected to be highly liquid.

In March 2017, the Company sold the 6,242,802 common shares it retained upon the spinoff of LSC for net proceeds of \$121.4 million. The proceeds of this sale were used to repay a portion of the outstanding borrowings under the Company's credit facility. In June 2017, the Company exchanged 6,143,208 of the 6,242,802 common shares of Donnelley Financial retained upon the spinoff for \$111.6 million of aggregate principal of certain outstanding senior notes. In August 2017, the Company disposed of its remaining retained shares in Donnelley Financial via a second debt-for-equity exchange, pursuant to which the Company exchanged 99,594 shares of Donnelley Financial's common stock for \$1.9 million of aggregate principal of certain outstanding senior notes. Such debt obligations were cancelled and discharged upon delivery to the Company. As of December 31, 2017, the Company no longer held any shares of LSC or Donnelley Financial common stock.

On September 29, 2017, the Company entered into the Credit Agreement, an asset-based revolving credit facility which amended and restated the Company's prior \$800.0 million senior secured revolving credit facility dated September 30, 2016. As a result of the amendment, the Company recognized a \$6.2 million loss related to unamortized debt issuance costs and other expenses within loss on debt extinguishment in the Consolidated Statements of Operations for the year ended December 31, 2017. The Credit Agreement provides for a senior secured asset-based revolving credit facility of up to \$800.0 million subject to a borrowing base. The amount available to be borrowed under the Credit Agreement is equal to the lesser of (a) \$800.0 million and (b) the aggregate amount of accounts receivable, inventory, machinery and equipment and fee-owned real estate of the Company and certain of its domestic subsidiaries (the "Guarantors") (collectively, the "Borrowing Base"), subject to certain eligibility criteria and advance rates. The aggregate amount of real estate, machinery and equipment that can be included in the Borrowing Base cannot exceed \$200.0 million.

The Company's obligations under the Credit Agreement are guaranteed by the Guarantors and are secured by a security interest in certain assets of the Company and its domestic subsidiaries, including accounts receivable, inventory, deposit accounts, securities accounts, investment property, machinery and equipment and, to the extent related to the foregoing, general intangibles, documents and instruments, as well as 65% of the equity interests of its first-tier foreign subsidiaries.

The Credit Agreement contains customary restrictive covenants, including a covenant which requires the Company to maintain a minimum fixed charge coverage ratio under certain circumstances. In addition, the Company's ability to undertake certain actions, including, among other things, prepay certain junior debt, incur additional unsecured indebtedness and make certain restricted payments depends on satisfaction of certain conditions, including, among other things, meeting minimum availability thresholds under the Credit Agreement.

Borrowings under the Credit Agreement bear interest at a rate dependent on the average quarterly availability under the Credit Agreement and is calculated according to a base rate or a Eurocurrency rate plus an applicable margin. The applicable margin for base rate loans ranges from 0.25% to 0.50% and the applicable margin for Eurocurrency loans ranges from 1.25% to 1.50%. In addition, a fee is payable quarterly on the unused portion of the amount available to be borrowed under the Credit Agreement. The fee accrues at a rate of either 0.25% or 0.375% depending upon the average usage of the facility.

The Credit Agreement is scheduled to mature on September 29, 2022, at which time all outstanding amounts under the Credit Agreement will be due and payable. Borrowings under the Credit Agreement may be used for working capital and general corporate purposes.

There were \$216.0 million of borrowings under the Credit Agreement as of December 31, 2017. Based on the Company's borrowing base as of December 31, 2017 and existing borrowings, the Company had approximately \$549.5 million borrowing capacity available under the Credit Agreement.

The current availability under the Credit Agreement as of December 31, 2017 is shown in the table below:

| | December 31, 2017 |
|--|-------------------|
| Availability | (in millions) |
| Credit Agreement | \$800.0 |
| Availability reduction due to available borrowing base | |
| | \$800.0 |
| Usage | |
| Borrowings under the Credit Agreement | 216.0 |
| Outstanding letters of credit | 34.5 |
| | \$250.5 |
| Current availability at December 31, 2017 | \$549.5 |
| Cash and cash equivalents | 273.4 |
| Total available liquidity $_{(a)}$ | \$822.9 |

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

As of December 31, 2017, the Company was in compliance with the debt covenants under the Credit Agreement and expects to remain in compliance based on management's estimates of operating and financial results for 2018 and the foreseeable future. As of December 31, 2017, 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 eight U.S. financial institutions.

As of December 31, 2017, the Company had \$149.1 million in other uncommitted credit facilities, primarily outside the U.S. (the "Other Facilities"). There were \$139.2 million in outstanding letters of credit, bank guarantees and bank acceptance drafts which reduced availability, of which \$34.5 million were issued under the Credit Agreement. Total borrowings under the Credit Agreement and the Other Facilities (the "Combined Facilities") were \$226.6 million and \$192.5 million as of December 31, 2017 and 2016, respectively.

The Company's liquidity may be affected by its credit ratings. The Company's Standard & Poor Rating Services ("S&P") and Moody's credit ratings as of December 31, 2017 are shown in the table below:

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

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. Additionally, during the year ended December 31, 2016, the Company disposed of immaterial entities within the International segment for net proceeds of \$13.7 million.

During the year ended December 31, 2015, the Company paid \$118.2 million, net of cash acquired, primarily all for the acquisition of Courier, of which the majority of their operations were spun-off with LSC in the Separation. The Company financed the cash portion of the Courier acquisition with a combination of cash on hand and borrowings under the credit facility.

Debt Issuances

On September 30, 2016, the Company's then wholly-owned subsidiary Donnelley Financial issued senior notes and arranged a senior secured term loan B facility with total aggregate principal 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 arranged 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 or exchanged for debt in connection with the Separation. After the Separation, RRD has no obligations as it relates to these senior notes, senior secured term loan B facilities or any other LSC or Donnelley Financial indebtedness.

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.

Critical Accounting Policies and 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 client. Because substantially all of the Company's products are customized, product returns are not significant; however, the Company accrues for the estimated amount of client credits at the time of sale. Revenue from services is recognized as services are performed. See 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 clients or may be purchased by the Company and sold to clients. No revenue is recognized for client-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 client-supplied paper and Company-supplied paper.

Goodwill and Other Long-Lived Assets

Our methodology for allocating the purchase price of acquisitions is based on established valuation techniques, and when appropriate, includes valuations performed by management or third-party appraisers. Based on our current organization structure, the Company has identified 13 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.

We perform our 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, indicating a possible impairment may exist. During the third quarter of 2017, the Company recognized a non-cash charge of \$21.3 million for the impairment of all goodwill in the digital and creative solutions reporting unit within the Strategic Services segment. This impairment charge was due to the notification by a major client that they would be transitioning their business away from the Company in the fourth quarter of 2017 as well as declines in sales with other existing clients. As a result of the impairment charge, there was no goodwill remaining within the digital and creative solutions reporting unit as of the October 31, 2017 annual impairment test.

As of October 31, 2017, six reporting units had goodwill. The commercial and digital print, forms, digital and creative solutions, sourcing, business process outsourcing, Latin America and Canada reporting units had no goodwill as of October 31, 2017. As of January 1, 2017, the Company early adopted Accounting Standards Update 2017-04 (See Note 19, *New Accounting Pronouncements*, to the Consolidated Financial Statements), which eliminated the two step approach from the current goodwill impairment test and allows impairment to be calculated based on the results of the first step. In the impairment test for goodwill, the estimated fair value of each reporting unit is compared to its carrying value, including goodwill. If the carrying value of a reporting unit exceeds the estimated fair value, an impairment loss is recognized equal to the excess, limited to the total amount of goodwill allocated to that reporting unit.

Quantitative Assessment for Impairment

For the reporting units with goodwill, the Company compares the estimated fair value of each reporting unit to its carrying value, including goodwill. If the carrying value of a reporting unit exceeds the estimated fair value then the goodwill is reduced by the excess of carrying value over fair value. As part of our impairment test for these reporting units, we engaged a third-party appraisal firm to assist in our determination of the estimated fair values. This determination included estimating the fair value of each reporting unit using both income and market-based 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. As of October 31, 2017, the estimated fair values for each of the Company's reporting units with goodwill exceeded their respective carrying values.

Goodwill Impairment Assumptions

Although the Company believes its estimates of fair value are reasonable, actual financial results could differ materially 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 material 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) the goodwill impairment test. All reporting units passed the goodwill impairment test performed by the Company during the fourth quarter of 2017 with fair values exceeding the carrying values by at least 20%. Relatively small changes in the Company's key assumptions would not have resulted in any reporting units failing the goodwill impairment test.

Generally, changes in estimates of expected future cash flows would have a similar effect on the estimated fair value of the reporting unit. For example, 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 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, 2017. The estimated discount rates for the two reporting units with operations primarily in foreign locations were 11.5% and 14.0% as of October 31, 2017. A 1.0% increase in estimated discount rates would have resulted in no reporting units failing the goodwill impairment test. 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 material effect 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, 2017, the Company recognized non-cash impairment charges of \$0.2 million related to the impairment of certain acquired trade name intangible assets in the commercial and digital print reporting unit within the Variable Print segment. In addition, the Company recognized \$0.9 million of impairment charges of other long-lived assets related to facility closures during the year ended December 31, 2017.

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 results 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, 2017 and 2016 were 3.4% and 3.8%, respectively. The discount rates for other postretirement benefits plans were 3.5% and 4.0% at December 31, 2017 and 2016, respectively.

The Company has elected to use the full yield curve approach in the estimation of the 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 starting in the first quarter of 2016 and has accounted for this change as a change in estimate and accordingly has accounted for it prospectively, 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.

A one-percentage point change in the discount rates at December 31, 2017 would have the following effects on the accumulated benefit obligation and projected benefit obligation:

Pension Plans

| | | 1.0% Increase (in mi | 1.0% Decrease |
|-------------|--------------------------------|----------------------------|------------------|
| | Accumulated benefit obligation | \$(132.9) (134.3) | \$164.8 166.5 |
| <u>OPEB</u> | Projected benefit obligation | (134.3) | 100.3 |
| | | 1.0% Increase | 1.0% Decrease |
| | | (in millions) | |
| | Accumulated benefit obligation | \$(32.4) | \$40.1 |

The majority of the Company'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 2017 was 6.75% 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 2018 remain unchanged at 6.75%.

A 0.25% change in the expected long-term rate of return on plan assets at December 31, 2017 would have the following effects on 2018 pension and other postretirement benefit plan (income)/expense:

| | 0.25% Increase | 0.25% Decrease |
|--------------------|-------------------|-------------------|
| | (in m | illions) |
| 2018 | | |
| U.S. pension plans | \$(1.3) | \$1.3 |
| OPEB | (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 allowances 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 recorded 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, 2017 and 2016, valuation allowances of \$238.3 million and \$154.1 million, respectively, were recorded in the Company's Consolidated Balance Sheets.

The Tax Act was signed into law on December 22, 2017 and represents the most significant change to U.S. tax law since 1986. Key changes of the Tax Act are not limited to, but include the following: reduces the U.S. federal statutory rate from 35% to 21%; creates a territorial tax system rather than a worldwide system, generally allowing companies to repatriate future foreign-sourced earnings without incurring additional U.S. taxes; subjects certain foreign earnings on which U.S. income tax is currently deferred to a one-time transition tax; provides for new anti-deferral provisions to tax certain foreign earnings and a new base erosion tax; limits the deduction for net interest expense incurred by U.S. Companies; and eliminates or reduces certain other deductions.

Also on December 22, 2017, the SEC issued Staff Accounting Bulletin 118 (SAB 118) which provides guidance for companies analyzing their accounting for the income tax effects of the Tax Act. SAB 118 provides that a company may report provisional amounts based on reasonable estimates. The provisional estimates are then subject to adjustment during a measurement period up to one year and should be accounted for as a prospective change.

During 2017, we recorded provisional estimates of the impact of the Tax Act within our income tax expense. To determine the amount of the transition tax, we were required to quantify, among other factors, the amount of post-1986 earnings and profits of applicable foreign subsidiaries, as well as the amount of non-U.S. tax paid on those earnings. We were able to make a reasonable estimate of the transition tax and impact to deferred taxes; however, we will continue to analyze our data and refine our estimated amounts accordingly. We will also continue to interpret any guidance or subsequent clarification of the tax law. As a result, we may make adjustments to the provisional amounts recorded, in accordance with the guidance outlined in SAB 118.

Deferred U.S. income taxes and foreign taxes have historically not been 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. We continue to analyze the global working capital and cash requirements and the potential tax liabilities attributable to repatriation, but we have yet to determine whether to change the prior assertion and repatriate earnings. We will record the tax effects of any change in the prior assertion in the period the analysis is complete and reasonable estimates are made.

In January 2018, the FASB released guidance on the accounting for tax on the global intangible low-taxed income ("GILTI") provisions in the Tax Act. The GILTI provisions impose a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. The guidance indicates that either accounting for deferred taxes related to GILTI inclusions or treating any taxes on GILTI inclusions as period cost are both acceptable methods subject to an accounting policy election. The Company has not yet completed its assessment and therefore has not yet elected an accounting policy.

See Note 10, *Income Taxes*, to the Consolidated Financial Statements for further discussion.

Management of Market Risk

The Company is exposed to interest rate risk on its variable debt and price risk on its fixed-rate debt. At December 31, 2017, the Company's variable-interest borrowings were \$226.6 million. Approximately 89% of the Company's outstanding debt was comprised of fixed-rate debt as of December 31, 2017.

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, 2017 and 2016 by approximately \$48.9 million and \$69.6 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, 2017 and 2016, the aggregate notional amount of outstanding foreign currency contracts was \$215.9 million and \$172.2 million, respectively (see Note 12, *Derivatives*, to the Consolidated Financial Statements). Net unrealized gains from these foreign currency contracts were \$2.2 million and \$0.2 million at December 31, 2017 and 2016, 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 8, *Commitments and Contingencies*, to the Consolidated Financial Statements.

Litigation and Contingent Liabilities

For a discussion of certain litigation involving the Company, see Note 8, *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 19, *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 12, *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 client base, dispersed over various geographic regions and industrial sectors. No single client comprised more than 10% of the Company's consolidated net sales in 2017, 2016 or 2015. 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 clients 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 clients.

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, 2017, 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, 2017 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, 2017 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, 2017. 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, 2017, 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, 2018

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and Board of Directors of R.R. Donnelley & Sons Company

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of R.R. Donnelley & Sons Company and subsidiaries (the "Company") as of December 31, 2017, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

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, 2017 of the Company and our report dated February 28, 2018 expressed an unqualified opinion on those financial statements.

Basis for Opinion

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 are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. 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.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed 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 its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ DELOITTE & TOUCHE LLP Chicago, Illinois February 28, 2018

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 17, 2018 (the "2018 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 which the Company makes available on its web site, <u>www.rrdonnelley.com</u>. 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.

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 2018 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 2018 Proxy Statement.

Equity Compensation Plan Information

Information as of December 31, 2017 concerning compensation plans under which RRD'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) | Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights _(b) | Number of Securities Remaining Available for Future Issuance under Equity Compensation Plans (Excluding Securities Reflected in Column (1)) (in thousands) |
|---|---|--|--|
| Equity compensation plans approved by security holders _(a) | 2,848.5 | \$33.37 | $3,075.2_{(c)}$ |

- (a) Includes 1,591,361 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 and the 2017 Performance Incentive Plan. The 2012 Performance Incentive Plan (the "2012 PIP"), which was frozen effective May 18, 2017, allowed 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 could have been granted under the 2012 PIP with respect to bonus awards, including performance awards or fixed awards in the form of restricted stock or other form, was 10,000,000 in the aggregate, or 3,333,333 adjusted for the stock split. The 2017 Performance Incentive Plan (the "2017 PIP") 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 under the 2017 PIP with respect to bonus awards, including performance awards or fixed awards in the form of restricted stock or other form, is 3,225,000 in the aggregate, of which 3,075,231 remained available for issuance as of December 31, 2017.

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 2018 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 2018 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.

(c) Exhibits

The exhibits listed on the following Exhibit Index are filed as part of this Annual Report on Form 10-K.

(b) 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.

INDEX TO EXHIBITS

- 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).
- 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) (P)
- 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).
- 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)*
- 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)*
- 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)*
- 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)*
- 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 Second Amended and Restated Credit Agreement, dated as of September 29, 2017, among R.R. Donnelley & Sons Company, the guarantors party thereto, the lenders party thereto and Bank of America, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.1 to the Company's Current Report on 8-K filed October 3, 2017).
- 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).*
- 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).*
- 10.32 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).*
- 10.33 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).*
- 10.34 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)*
- 10.35 Employment Offer Letter dated October 25, 2017 between R.R. Donnelley & Sons Company and Michael J. Sharp (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on October 30, 2017).
- 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 February 23, 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 |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase Document |

^{*} Management contract or compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on the 28th day of February 2018.

R.R. DONNELLEY & SONS COMPANY

By: /s/ Terry D. Peterson

Terry D. Peterson

Executive Vice President and Chief Financial Officer

(Principal Financial Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated, on the 28th day of February 2018.

Signature and Title

Signature and Title

| Signature and Title | Signature and Title |
|---|---------------------------------|
| | |
| /s/ Daniel L. Knotts | /s/ Timothy R. McLevish * |
| Daniel L. Knotts | Timothy R. Mclevish |
| President and Chief Executive Officer, Director | Director |
| (Principal Executive Officer) | |
| /s/ Terry D. Peterson | /s/ Jeffrey G. Katz * |
| Terry D. Peterson | Jeffrey G. Katz |
| Executive Vice President and Chief Financial Officer | Director |
| (Principal Financial Officer) | |
| /s/ Michael J. Sharp | /s/ Jamie Moldafsky * |
| Michael J. Sharp | Jaime Moldafsky |
| Senior Vice President and Chief Accounting Officer | Director |
| (Principal Accounting Officer) | |
| /s/ P. Cody Phipps * | /s/ John C. Pope * |
| P. Cody Phipps | John C. Pope |
| Director | Chairman of the Board, Director |
| /s/ Susan M. Gianinno * | /s/ Irene M. Esteves * |
| Susan M. Gianinno | Irene M. Esteves |
| Director | Director |
| By: /s/ Deborah L. Steiner | |
| Deborah L. Steiner | |
| As Attorney-in-Fact | |
| | |

^{*} By Deborah L. Steiner as Attorney-in-Fact pursuant to Powers of Attorney executed by the directors listed above, which Powers of Attorney have been filed with the Securities and Exchange Commission.



ITEM 15(a). INDEX TO FINANCIAL STATEMENTS

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|---|------|
| Consolidated Statements of Operations for each of the three years in the period ended December 31, 2017 | F-2 |
| Consolidated Statements of Comprehensive Income for each of the three years in the period ended December 31, 2017 | F-3 |
| Consolidated Balance Sheets as of December 31, 2017 and 2016 | F-4 |
| Consolidated Statements of Cash Flows for each of the three years in the period ended December 31, 2017 | F-5 |
| Consolidated Statements of Stockholders' Equity for each of the three years in the period ended December 31, 2017 | F-6 |
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| Unaudited Interim Financial Information | F-49 |

CONSOLIDATED STATEMENTS OF OPERATIONS

(in millions, except per share data)

| | Year Ended December 31, | | |
|--|-----------------------------------|--|-----------------------------------|
| | 2017 | 2016 | 2015 |
| Products net sales Services net sales | \$5,326.0 1,613.6 | \$5,225.4 1,607.6 | \$5,255.5 1,625.2 |
| Total net sales | 6,939.6 4,260.5 1,358.8 | 6,833.0 4,101.7 1,354.5 | 6,880.7 4,122.3 1,353.3 |
| Total cost of sales | 5,619.3 | 5,456.2 | 5,475.6 |
| Products gross profit | 1,065.5 254.8 | 1,123.7 253.1 | 1,133.2 271.9 |
| Total gross profit Selling, general and administrative expenses (exclusive of depreciation and amortization) Restructuring, impairment and other charges-net (Note 4) Depreciation and amortization Other operating income | 1,320.3 849.4 53.0 191.4 | 1,376.8 900.8 584.3 204.2 (11.9) | 1,405.1 872.6 62.7 232.5 |
| Income (loss) from operations | 226.5 | (300.6) | 237.3 |
| Interest expense-net (Note 11) Investment and other (income) expense-net Loss on debt extinguishment | 179.6 (48.7) 20.1 | 198.7 (2.1) | 204.1 43.9 |
| Earnings (loss) before income taxes | 75.5 | (497.2) | (10.7) |
| Income tax expense (benefit) (Note 10) | 108.7 | (12.3) | 21.0 |
| Net loss from continuing operations | (33.2) | (484.9) | (31.7) |
| (Loss) income from discontinued operations, net of tax (Note 2) | | (9.7) | 170.1 |
| Net (loss) earnings | (33.2) | (494.6) | 138.4 |
| Less: Income (loss) attributable to noncontrolling interests | 1.2 | 1.3 | (12.7) |
| Net (loss) earnings attributable to RRD common stockholders | \$ (34.4) | \$ (495.9) | \$ 151.1 |
| Basic net (loss) earnings per share attributable to RRD common stockholders (Note 13): | \$ (0.49) | \$ (6.95) | \$ (0.28) |
| Continuing operations | \$ (0.49) — (0.49) | \$ (6.95) (0.14) (7.09) | \$ (0.28) 2.48 2.20 |
| Diluted net (loss) earnings per share attributable to RRD common stockholders (Note 13): | | | |
| Continuing operations Discontinued operations Net (loss) earnings attributable to RRD stockholders Weighted average number of common shares outstanding | \$ (0.49) — (0.49) | \$ (6.95) (0.14) (7.09) | \$ (0.28) 2.48 2.20 |
| Basic | 70.2 | 70.0 | 68.5 |
| Diluted | 70.2 | 70.0 | 68.5 |

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (in millions)

| | Year Ended December | | ber 31, |
|---|---------------------|-------------------|---------|
| | 2017 | 2016 | 2015 |
| Net (loss) earnings | \$ (33.2) | \$(494.6) | \$138.4 |
| Other comprehensive (loss) income, net of tax (Note 14): | | | |
| Translation adjustments | 57.1 | (38.3) | (55.7) |
| Adjustment for net periodic pension and other postretirement benefits plan cost | 14.9 | 11.2 | 34.8 |
| Adjustment for of available-for-sale securities | (119.3) | 119.3 | _ |
| Change in fair value of derivatives | | | 0.1 |
| Other comprehensive (loss) income | (47.3) | 92.2 | (20.8) |
| Comprehensive (loss) income | (80.5) | (402.4) | 117.6 |
| Less: comprehensive income (loss) attributable to noncontrolling interests | 1.9 | 0.8 | (13.9) |
| Comprehensive (loss) income attributable to RRD common stockholders | \$ (82.4) | <u>\$(403.2</u>) | \$131.5 |

CONSOLIDATED BALANCE SHEETS

(in millions, except per share data)

| | Decem | ber 31, |
|---|------------|------------|
| | 2017 | 2016 |
| ASSETS | | |
| Cash and cash equivalents | \$ 273.4 | \$ 317.5 |
| Receivables, less allowances for doubtful accounts of \$32.4 in 2017 (2016—\$35.9) (Note 1) | 1,417.6 | 1,331.3 |
| Inventories (Note 1) | 416.8 | 386.8 |
| Prepaid expenses and other current assets | 109.1 | 136.7 |
| Investment in LSC and Donnelley Financial (Note 2) | | 328.7 |
| Total current assets | 2,216.9 | 2,501.0 |
| Property, plant and equipment-net (Note 1) | 615.1 | 650.3 |
| Goodwill (Note 5) | 588.5 | 602.0 |
| Other intangible assets-net (Note 5) | 143.3 | 171.9 |
| Deferred income taxes (Note 10) | 81.7 | 108.9 |
| Other noncurrent assets | 259.0 | 234.7 |
| Total assets | \$ 3,904.5 | \$ 4,268.8 |
| LIABILITIES | | |
| Accounts payable | \$ 1,094.7 | \$ 985.3 |
| Accrued liabilities (Note 7) | 447.5 | 541.7 |
| Short-term and current portion of long-term debt (Note 11) | 10.8 | 8.2 |
| Total current liabilities | 1,553.0 | 1,535.2 |
| Long-term debt (Note 11) | 2,098.9 | 2,379.2 |
| Pension liabilities (Note 9) | 102.7 | 119.4 |
| Other postretirement benefits plan liabilities (Note 9) | 113.2 | 134.1 |
| Long-term income tax liability (Note 10) | 59.4 | _ |
| Other noncurrent liabilities | 180.2 | 193.1 |
| Total liabilities | 4,107.4 | 4,361.0 |
| Commitments and Contingencies (Note 8) | | |
| EQUITY | | |
| RRD stockholders' equity | | |
| Preferred stock, \$1.00 par value | | |
| Authorized: 2.0 shares; Issued: None | _ | _ |
| Common stock, \$0.01 par value | | |
| Authorized: 165.0 shares; | | |
| Issued: 89.0 shares in 2017 and 2016 | 0.9 | 0.9 |
| Additional paid-in-capital | 3,444.0 | 3,468.5 |
| Accumulated deficit | (2,225.7) | (2,155.4) |
| Accumulated other comprehensive loss | (103.7) | (55.7) |
| Treasury stock, at cost, 18.9 shares in 2017 (2016—19.1 shares) | (1,333.1) | (1,364.0) |
| Total RRD stockholders' equity | \$ (217.6) | \$ (105.7) |
| Noncontrolling interests | 14.7 | 13.5 |
| Total equity | (202.9) | (92.2) |
| Total liabilities and equity | \$ 3,904.5 | \$ 4,268.8 |

CONSOLIDATED STATEMENTS OF CASH FLOWS (in millions)

| | Year Ended December 31 | | |
|---|------------------------|-------------------|---------------------|
| | 2017 | 2016 | 2015 |
| OPERATING ACTIVITIES | | | |
| Net (loss) earnings | \$ (33.2) | \$ (494.6) | \$ 138.4 |
| Adjustments to reconcile net (loss) earnings to net cash provided by operating activities: Impairment charges-net | 22.4 | 558.3 | 36.5 |
| Depreciation and amortization | 191.4 | 363.2 | 454.0 |
| Provision for doubtful accounts receivable | 3.2 | 22.7 | 15.4 |
| Share-based compensation | 8.4 | 12.9 | 17.3 |
| Deferred income taxes Changes in uncertain tax positions | 21.2 (2.8) | (57.6) | (36.1) |
| (Gain) loss on investments and other assets-net | (2.8) | (11.4) | 14.3 |
| Realized gain on disposition of available-for-sale securities-net | (42.4) | _ | _ |
| Loss related to Venezuela currency remeasurement-net | _ | _ | 30.3 |
| Loss on debt extinguishments | 20.1 (14.7) | 96.1 (59.8) | (44.5) |
| Net loss on pension and other postretirement benefits plan settlements and curtailments | 1.6 | 79.3 | (44.3) |
| Other | 19.7 | 19.0 | 22.1 |
| Changes in operating assets and liabilities—net of dispositions and acquisitions: | | | |
| Accounts receivable-net Inventories | (57.3) (20.1) | (223.0) (40.3) | (14.2) 16.5 |
| Prepaid expenses and other current assets | 3.7 | 2.7 | 26.3 |
| Accounts payable | 71.2 | (20.6) | 57.1 |
| Income taxes payable and receivable | 87.4 | (53.7) | 46.9 |
| Accrued liabilities and other | (42.7) | (39.9) | (90.0) |
| Pension and other postretirement benefits plan contributions | (16.4) | (22.5) | (25.6) |
| Net cash provided by operating activities | 217.9 | 127.2 | 666.0 |
| INVESTING ACTIVITIES | (100.5) | (170.1) | (207.6) |
| Capital expenditures Acquisitions of businesses, net of cash acquired | (108.5) | (172.1) (48.1) | (207.6) (118.2) |
| Disposition of businesses | _ | 13.7 | 0.6 |
| Proceeds from sales of investments and other assets | 140.4 | 3.8 | 27.1 |
| (Payments)/proceeds related to company-owned life insurance | (7.2) | 5.6 | (5.7) |
| Other investing activities | | (3.5) | (18.5) |
| Net cash provided by (used in) investing activities | 24.7 | (200.6) | (322.3) |
| FINANCING ACTIVITIES | | 1.161.0 | |
| Proceeds from issuance of long-term debt Net change in other short-term debt | 3.7 | 1,164.0 (17.5) | 11.9 |
| Payments of current maturities and long-term debt | (201.6) | (1,013.2) | (272.7) |
| Proceeds from credit facility borrowings | 1,437.0 | 850.0 | _ |
| Payments on credit facility borrowings | (1,406.0) | (665.0) | _ |
| Debt issuance costs Dividends paid | (5.9) (39.2) | (37.5) (173.0) | (212.6) |
| (Payments) proceeds to settle forward contracts | (0.9) | (173.0) | 33.3 |
| Net transfer of cash, cash equivalents and restricted cash to LSC and Donnelley Financial | (78.0) | (85.9) | _ |
| Payments of withholding taxes on share-based compensation | (2.2) | (7.6) | (8.3) |
| Other financing activities | (1.2) | 5.6 | 3.6 |
| Net cash (used in) provided by financing activities | (294.3) | 19.9 | (444.8) |
| Effect of exchange rate on cash, cash equivalents and restricted cash | 17.3 | (16.5) | (39.1) |
| Net decrease in cash, cash equivalents and restricted cash Cash, cash equivalents and restricted cash at beginning of year | (34.4) 335.9 | (70.0) 405.9 | (140.2) 546.1 |
| Cash, cash equivalents and restricted cash at end of period | | | \$ 405.9 |
| | \$ 301.5 | \$ 335.9 | φ + υυ.۶ |
| Supplemental non-cash disclosure: Debt-for-equity exchange | \$ 132.9 | s — | s — |
| Assumption of warehousing equipment related to client contract | ψ 134.9 | 8.8 | ψ — — |
| Debt-for-debt exchange, including debt issuance costs of \$5.5 million | _ | 300.0 | _ |
| Issuance of 2.7 million shares of RRD stock for acquisitions of businesses | _ | _ | 155.2 |
| Settlement of accounts receivable for acquisition of a business | _ | _ | 8.6 |

R.R. DONNELLEY & SONS COMPANY AND SUBSIDIARIES ("RRD") CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (in millions)

| | | nmon tock | Additional Paid-in- | | ury Stock | Accumulated | Accumulated Other Comprehensive | Total RRD's | Noncontrollin | g Total |
|--|--------|--------------|------------------------|--------|-------------|--------------------|---------------------------------------|--|-----------------------|---|
| | Shares | Amount | Capital | Shares | Amount | Deficit | Loss | Equity | Interests | Equity |
| Balance at January 1, 2015 | 86.3 | \$ 107.9 | \$3,257.3 | (19.7) | \$(1,438.7) | \$ (559.1) | \$(773.6) | \$ 593.8 | \$ 26.6 | \$ 620.4 |
| Net earnings Other comprehensive loss Share-based compensation Issuances of common stock Issuances of treasury stock Issuance of share-based awards, net of | 2.7 | 3.3 | 17.3 150.9 (1.2) | _ | 2.2 | 151.1 | (19.6) | 151.1 (19.6) 17.3 154.2 1.0 | (12.7) (1.2) | 138.4 (20.8) 17.3 154.2 1.0 |
| withholdings and other Cash dividends paid Noncontrolling interests in acquired business Noncontrolling interests in disposed business Distributions to noncontrolling interests | | | (37.5) | 0.3 | 35.0 | (212.6) | | (2.5) (212.6) ———————————————————————————————————— | 4.6 (2.4) (1.0) | (2.5) (212.6) 4.6 (2.4) (1.0) |
| Balance at December 31, 2015 | 89.0 | \$ 111.2 | \$3,386.8 | (19.4) | \$(1,401.5) | \$ (620.6) | \$(793.2) | \$ 682.7 | \$ 13.9 | \$ 696.6 |
| Net (loss) earnings Other comprehensive income (loss) Share-based compensation Par value amendment Issuance of share-based awards, net of | | (110.3) | 12.9 110.3 | | | (495.9) | 92.7 | (495.9) 92.7 12.9 | 1.3 (0.5) | (494.6) 92.2 12.9 |
| withholdings and other Cash dividends paid Distribution of LSC and Donnelley Financial Distributions to noncontrolling interests | | | (41.5) | 0.3 | 37.5 | (173.0) (865.9) | 644.8 | (4.0) (173.0) (221.1) | (1.2) | (4.0) (173.0) (221.1) (1.2) |
| Balance at December 31, 2016 | 89.0 | \$ 0.9 | \$3,468.5 | (19.1) | \$(1,364.0) | \$(2,155.4) | \$ (55.7) | \$(105.7) | \$ 13.5 | \$ (92.2) |
| Net (loss) earnings Other comprehensive (loss) income Share-based compensation Issuance of share-based awards, net of | | | 8.4 | | | (34.4) | (48.0) | (34.4) (48.0) 8.4 | 1.2 0.7 | (33.2) (47.3) 8.4 |
| withholdings and other Cash dividends paid Spinoff adjustments Distributions to noncontrolling interests | | | (32.9) | 0.2 | 30.9 | (39.2) | | (2.0) (39.2) 3.3 | (0.7) | (2.0) (39.2) 3.3 (0.7) |
| Balance at December 31, 2017 | 89.0 | \$ 0.9 | \$3,444.0 | (18.9) | \$(1,333.1) | \$(2,225.7) | \$(103.7) | \$(217.6) | \$ 14.7 | \$(202.9) |

(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 "RRD") 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 and 2015 are included in the Consolidated Financial Statements from the dates of acquisition.

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 80.75% of the outstanding common stock of each Donnelley Financial and LSC to the Company's stockholders of record on September 23, 2016 who received one share of Donnelley Financial and LSC for every eight shares of RRD common stock held as of the record date (the "Distribution"). The Company retained 19.25% of the outstanding common stock of each Donnelley Financial and LSC. The historical financial results of Donnelley Financial and LSC prior to the Separation, are presented as discontinued operations on the Consolidated Statements of Operations and, as such, have been excluded from both continuing operations and segment results for all periods presented. Sales from RRD to Donnelley Financial and LSC previously eliminated in consolidation have been recast and are now shown as external sales of RRD within the financial results of continuing operations. Unless indicated otherwise, the information in the Notes to Consolidated Financial Statements relates to the Company's continuing operations. Prior periods have been recast to reflect the Company's current segment reporting structure. See Note 2, *Discontinued Operations*, for more information on the Separation.

Reverse Stock Split

Immediately following the Distribution on October 1, 2016, the Company affected a one for three reverse stock split for RRD 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 was 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.

Revision of Net Sales and Cost of Sales

During the third quarter of 2017, the Company identified an error in the accounting for certain contracts with an inventory buy-back option within the Asia reporting unit, which is in the International segment. As a result, the error, which was determined by management to be immaterial to the previously issued financial statements, has been corrected herein from the amounts previously reported. There was no impact to net earnings (loss) or net earnings (loss) per share, or the Consolidated Statements of Comprehensive Income (Loss) or Stockholders' Equity. The following table presents the impact of the revision on net sales and cost of sales:

| | As Reported | Adjustments | As Revised |
|------------------------------|-------------|-------------|------------|
| Year ended December 31, 2015 | | | |
| Products net sales | \$5,312.1 | \$56.6 | \$5,255.5 |
| Total net sales | 6,937.3 | 56.6 | 6,880.7 |
| Products cost of sales | 4,178.9 | 56.6 | 4,122.3 |
| Total cost of sales | 5,532.2 | 56.6 | 5,475.6 |
| Year ended December 31, 2016 | | | |
| Products net sales | \$5,288.1 | \$62.7 | \$5,225.4 |
| Total net sales | 6,895.7 | 62.7 | 6,833.0 |
| Products cost of sales | 4,164.4 | 62.7 | 4,101.7 |
| Total cost of sales | 5,518.9 | 62.7 | 5,456.2 |

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

The following table presents the impact of the related balance sheet revision on the December 31, 2016 Consolidated Balance Sheet:

| | As Reported | Adjustments | As Revised |
|---|-------------|-------------|------------|
| Receivables, less allowance for doubtful accounts | \$1,354.4 | \$(23.1) | \$1,331.3 |
| Inventories | 379.6 | 7.2 | 386.8 |
| Accounts payable | 1,001.2 | (15.9) | 985.3 |

The Consolidated Statement of Cash Flows has also been revised to reflect the impact of the above balance sheet revision.

Nature of Operations —RRD 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 clients to engage audiences, reduce costs and drive revenues. RRD's innovative content management offering, production platform, logistics services, supply chain management, outsourcing capabilities and customized consultative expertise assist its clients in the delivery of integrated messages across multiple media to highly targeted audiences at optimal times for clients 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.

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 (loss). 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 currency 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, cash equivalents, restricted cash, 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 client. Contracts generally specify F.O.B. shipping point terms. Under agreements with certain clients, 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 client agreement and product revenue is recognized when manufacturing is complete, title and risk of ownership transfer to the client, 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 client credits at the time of sale.

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

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 client.

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 clients or may be purchased by the Company and sold to clients. No revenue is recognized for client-supplied paper, but revenues for Company-supplied paper are recognized on a gross basis.

The Company records taxes collected from clients and remitted to governmental authorities on a net basis and records the sale of by-products as a reduction of cost of sales.

Cash, Cash Equivalents and Restricted Cash

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.

Restricted cash —Amounts included in restricted cash primarily relate to letters of credit and bank acceptance drafts.

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

| | December 31, | |
|--|--------------|---------|
| | 2017 | 2016 |
| Cash and cash equivalents | \$273.4 | \$317.5 |
| Restricted cash—current _(a) | 28.0 | 18.1 |
| Restricted cash—noncurrent _(b) | 0.1 | 0.3 |
| Total cash, cash equivalents and restricted cash | \$301.5 | \$335.9 |
| | | |

December 21

- (a) Included within prepaid expenses and other current assets within the Consolidated Balance Sheets.
- (b) Included within other noncurrent assets within the Consolidated Balance Sheets.

Receivables —Receivables are stated net of allowances for doubtful accounts and primarily include trade receivables, notes receivable and miscellaneous receivables from suppliers. No single client comprised more than 10% of the Company's consolidated net sales in 2017, 2016 or 2015. Specific client provisions are made when a review of significant outstanding amounts, utilizing information about client 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.

Transactions affecting the allowance for doubtful accounts receivable during the years ended December 31, 2017, 2016 and 2015 were as follows:

| | 2017 | 2016 | 2015 |
|-------------------------------|--------|--------|---------|
| Balance, beginning of year | \$35.9 | \$26.0 | \$ 27.0 |
| Provisions charged to expense | 3.2 | 12.1 | 17.8 |
| Write-offs and other | (6.7) | (2.2) | (18.8) |
| Balance, end of year | \$32.4 | \$35.9 | \$ 26.0 |

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

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 37.7% and 43.8% of the inventories at December 31, 2017 and 2016, 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.

The components of the Company's inventories, net of excess and obsolescence reserves for raw materials and finished goods, at December 31, 2017 and 2016 were as follows:

| | 2017 | 2016 |
|--|---------|---------|
| Raw materials and manufacturing supplies | \$161.1 | \$141.0 |
| Work in process | 75.0 | 84.4 |
| Finished goods | 198.2 | 179.4 |
| LIFO reserve | (17.5) | (18.0) |
| Total | | \$386.8 |

The Company recognized a LIFO benefit of \$0.5 million, \$1.1 million and \$0.1 million, respectively, during the years ended December 31, 2017, 2016 and 2015.

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, which 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.

The components of the Company's property, plant and equipment at December 31, 2017 and 2016 were as follows:

| | 2017 | 2016 |
|--------------------------|-----------|-----------|
| Land | \$ 56.1 | \$ 56.0 |
| Buildings | 417.3 | 403.0 |
| Machinery and equipment | 1,885.2 | 1,805.4 |
| | 2,358.6 | 2,264.4 |
| Accumulated depreciation | (1,743.5) | (1,614.1) |
| Total | \$ 615.1 | \$ 650.3 |

During the years ended December 31, 2017, 2016 and 2015, depreciation expense was \$139.8 million, \$152.9 million, and \$171.4 million, respectively.

During the fourth quarter of 2017, we entered into an agreement to sell a building and transfer the related land use rights to a third party for a facility in the International segment. During the period, we received a deposit in accordance with the terms of the agreement of approximately \$12.5 million, which is recorded in other noncurrent liabilities on the December 31, 2017 Consolidated Balance Sheet. The terms of the agreement require the buyer to make additional deposits to us through the close date, which is expected to occur in the second half of 2019. As of December 31, 2017, we continue to classify the carrying cost of the building within property, plant and equipment and record depreciation. The carrying cost of the land use rights are classified in other noncurrent assets.

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.

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

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. See Note 4, *Restructuring, Impairment and Other Charges* and Note 5, *Goodwill and Other Intangible Assets*, 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, 2017, 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 \$23.0 million, \$17.6 million and \$14.9 million for the years ended December 31, 2017, 2016 and 2015, 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. 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.

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 currency 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 currency contracts on a net basis when possible. Foreign currency 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 12, *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 15, Stock and Incentive Programs for Employees and Directors, for further discussion.

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.

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

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 9, 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 were not considered to be permanently reinvested. No deferred tax liabilities were recognized for foreign earnings that were 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 10, *Income Taxes*, for further discussion.

Note 2. Discontinued Operations

On October 1, 2016, RRD 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 accounted for these investments as available-for-sale equity securities. In March 2017, the Company sold the 6.2 million shares of LSC common stock it retained upon spinoff for net proceeds of \$121.4 million, resulting in a realized loss of \$51.6 million, which was recorded within investment and other income-net in the Consolidated Statements of Operations for the year ended December 31, 2017. In June 2017, the Company completed a non-cash debt-for-equity exchange in which RRD exchanged 6,143,208 of its retained shares of Donnelley Financial common stock for the extinguishment of \$111.6 million in aggregate principal amount of RRD indebtedness, resulting in a realized net gain of \$92.4 million, which was recorded within investment and other income-net in the Consolidated Statements of Operations for the year ended December 31, 2017. In August 2017, the Company disposed of its remaining 99,594 shares of Donnelley Financial common stock in exchange for the extinguishment of \$1.9 million in aggregate principal amount of RRD indebtedness, resulting in a realized net gain of \$1.6 million. See Note 11, *Debt*, for further discussion of these debt-for-equity transactions. As of December 31, 2017, the Company no longer held any shares of LSC or Donnelley Financial.

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.

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

Sales from RRD to Donnelley Financial and LSC previously eliminated in consolidation have been recast and are shown as external sales within the financial results of continuing operations. The net sales were \$150.4 million and \$153.4 million for the years ended December 31, 2016 and 2015. 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 |
| Net sales | \$3,303.4 | \$4,472.9 |
| Cost of sales | 2,534.7 | 3,414.2 |
| Operating expenses _(a) | 615.9 | 708.7 |
| Interest and other (income) expense, $net_{(b)}$ | 151.4 | 71.6 |
| Earnings before income taxes | 1.4 | 278.4 |
| Income tax expense | 11.1 | 108.3 |
| Net (loss) earnings from discontinued operations | \$ (9.7) | \$ 170.1 |

- (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 retired in connection with the Separation totaling \$55.9 million and \$73.3 million for the years ended December 31, 2016 and 2015. 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.

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

| | Year Ended December 31, | |
|--|-------------------------|---------|
| | 2016 | 2015 |
| Depreciation and amortization | \$159.0 | \$221.5 |
| Pension settlement charges | 77.7 | |
| Impairment charges | 1.5 | 7.1 |
| Loss on debt extinguishments | 96.1 | _ |
| Assumption of warehousing equipment related to client contract | 8.8 | _ |
| Purchase of property, plant and equipment | (49.0) | (74.0) |

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 Agreements"). 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 Agreements generally provides for a term of services starting at the Separation date and continuing for a period of up to 24 months following the Separation. The Company recognized \$7.7 million and \$3.3 million for the years ended December 31, 2017 and 2016, respectively, as a reduction of costs within selling, general and administrative expenses 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 the following transactions with LSC and Donnelley Financial during the years ended December 31, 2017 and 2016.

| | Year ended December 31, | |
|--|-------------------------|--------|
| | 2017 | 2016 |
| Net sales to LSC and Donnelley Financial | \$279.5 | \$98.0 |
| Purchases from LSC and Donnelley Financial | 159.4 | 79.0 |

The Company also recognized \$126.1 million and \$17.8 million of net cash inflow from Donnelley Financial and LSC within operating activities in the Consolidated Statements of Cash Flows during the years ended December 31, 2017 and 2016, respectively.

(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 our clients measure communications effectiveness and audience engagement. During the year ended December 31, 2016, Precision Dialogue contributed \$22.4 million in net sales and earnings before income taxes of \$1.8 million.

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 fair value of the net assets acquired was recorded as goodwill. 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 | 59.2 |
| Less: debt assumed | 11.1 |
| Net cash paid | \$ 48.1 |

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 |
|------------------------|------------|----------------------------|------------------------|---------------|
| Client 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% |
| | | | Obsolescence factor | 0.0% - 40.0% |
| Non-compete agreements | . 1.7 | With or without method | Discount rate | 16.0% |

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.

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

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 of acquisition over the fair value of the net assets acquired was recorded as goodwill. The tax deductible goodwill related to these acquisitions was \$9.8 million.

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 investment and other (income) expense-net 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. The operations of the Venezuela business were included in the International segment.

Note 4. Restructuring, Impairment and Other Charges

For the year ended December 31, 2017, the Company recorded the following restructuring, impairment and other charges-net:

| | Employee Terminations | Other Restructuring Charges | Total Restructuring Charges | Impairment | Other Charges | Total |
|--------------------|--------------------------|-----------------------------------|-----------------------------------|------------|------------------|--------|
| Variable Print | \$ 4.2 | \$1.1 | \$ 5.3 | _ | \$1.9 | \$ 7.2 |
| Strategic Services | 2.6 | 0.3 | 2.9 | 21.9 | 0.4 | 25.2 |
| International | 8.0 | 2.6 | 10.6 | 0.1 | _ | 10.7 |
| Corporate | 8.7 | 0.8 | 9.5 | 0.4 | | 9.9 |
| Total | \$23.5 | \$4.8 | \$28.3 | \$22.4 | \$2.3 | \$53.0 |

Restructuring and Impairment Charges

For the year ended December 31, 2017, the Company recorded net restructuring charges of \$23.5 million for employee termination costs. These charges primarily related to the reorganization of selling, general, and administrative functions primarily within the Corporate, International, and Variable Print segments, the termination of the Company's relationship in a joint venture within the International segment and a facility closure in the Strategic Services segment. Additionally, the Company incurred lease termination and other restructuring charges of \$4.8 million for the year ended December 31, 2017.

Additionally in the year ended December 31, 2017, the Company recorded net impairment charges of \$22.4 million, primarily related to the \$21.3 million impairment of the goodwill for the digital and creative solutions ("DCS") reporting unit, which is included within the Strategic Services segment. The goodwill impairment charge in the DCS reporting unit was due to a major client beginning to transition their business away from DCS during the fourth quarter of 2017, as well as declines in sales with other existing clients which resulted in lower expectations of future revenues, profitability and cash flows. As of December 31, 2017, the DCS reporting unit had no remaining goodwill. The goodwill impairment charges were determined using Level 3 inputs, including comparable marketplace fair value data and a discontinued cash flow analysis. The remaining impairment charges recorded for the year ended December 31, 2017, included a \$0.2 million impairment charge related to the impairment of intangible assets in the commercial and digital print reporting unit within the Variable Print segment and \$0.9 million of impairment charges of other long-lived assets related to facility closures, partially offset by gains on the sale of previously impaired assets.

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

Other Charges

For the year ended December 31, 2017, 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 \$5.1 million and \$31.7 million, respectively, as of December 31, 2017. See Note 9, *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.

For the year ended December 31, 2016, the Company recorded the following restructuring, impairment and other charges-net:

| | 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.

In addition, in the year ended December 31, 2016, the Company recorded net impairment charges of \$556.6, primarily related to the \$416.2 million and \$111.6 million 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 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 units 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. The remaining charges for the year ended December 31, 2016, included a \$29.7 million impairment charge for certain acquired client relationship intangible assets in the commercial and digital print reporting unit within the Variable Print segment and \$0.9 million of net gains on the sale of previously impaired assets. The impairment of the client relationship intangible assets resulted from lower expectations of future revenue to be derived from those relationships and 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 9, *Retirement Plans*, for further discussion of multi-employer pension plans.

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

For the year ended December 31, 2015, the Company recorded the following restructuring, impairment and other charges-net:

| | Employee Terminations | Restructuring Charges | 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.

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 were 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.

For the year ended December 31, 2015, the Company also recorded non-cash impairment 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 client 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 client relationship intangible assets resulted from lower expectations of future revenue to be derived from those relationships and was determined using Level 3 inputs and estimated based on cash flow analyses, which included management's assumptions related to future revenues and profitability. The remaining impairment charges for the year ended December 31, 2015, included net gains of \$1.0 million 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

Other Charges

For the year ended December 31, 2015, the Company recorded \$2.2 million of charges for multi-employer pension plan withdrawal obligations unrelated to facility closures.

Restructuring Reserve

The restructuring reserve as of December 31, 2017 and 2016, and changes during the year ended December 31, 2017, were as follows:

| | December 31, 2016 | Restructuring Charges | Exchange and Other | Cash Paid | December 31, 2017 |
|--|----------------------|--------------------------|-----------------------|--------------|----------------------|
| Employee terminations | \$ 7.6 | \$23.5 | \$0.1 | \$(21.6) | \$ 9.6 |
| Multi-employer pension plan withdrawal obligations | 11.8 | 0.7 | _ | (1.5) | 11.0 |
| Lease terminations and other | 1.6 | 4.1 | 1.0 | (3.8) | 2.9 |
| Total | \$21.0 | \$28.3 | \$1.1 | \$(26.9) | \$23.5 |

The current portion of restructuring reserves of \$10.7 million at December 31, 2017 was included in accrued liabilities, while the long-term portion of \$12.8 million, primarily related to multi-employer pension plan withdrawal obligations related to facility closures, employee terminations in litigation within the International segment and lease termination costs, was included in other noncurrent liabilities at December 31, 2017.

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

The Company anticipates that payments associated with the employee terminations reflected in the above table will be substantially completed by December 2018, excluding employee terminations in litigation within the International segment.

Payments on all of the Company's multi-employer pension plan withdrawal obligations are scheduled to be substantially completed by 2034. Changes based on uncertainties in these estimated withdrawal obligations could affect the ultimate charges related to multi-employer pension plan withdrawals. See Note 9, *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 2020. 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, 2016 and 2015, and changes during the year ended December 31, 2016, were as follows:

| | December 31, 2015 | Restructuring Charges | 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 | \$21.1 | \$25.4 | \$(3.7) | \$(21.8) | \$21.0 |

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 complete or partial withdrawal obligations related to facility closures, employee terminations in litigation within the International segment and lease termination costs, was included in other noncurrent liabilities at December 31, 2016.

Payments associated with the employee terminations reflected in the above table were substantially completed by December 2017, excluding employee terminations in litigation within the International segment.

Note 5. Goodwill and Other Intangible Assets

The changes in the carrying amount of goodwill for the years ended December 31, 2017 and 2016 were as follows:

| | Variable Print | Strategic Services | International | Total |
|--|-------------------|-----------------------|---------------|------------|
| Net book value as of January 1, 2016 | | | | |
| 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 | \$ 771.6 | \$ 195.2 | \$ 118.9 | \$ 1,085.7 |
| 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 | \$ 272.5 | \$ 216.5 | \$ 113.0 | \$ 602.0 |
| Foreign exchange and other adjustments | _ | _ | 7.8 | 7.8 |
| Impairment charges | _ | (21.3) | | (21.3) |
| Net book value as of December 31, 2017 | | | | |
| Goodwill | 1,823.9 | 365.2 | 1,090.2 | 3,279.3 |
| Accumulated impairment losses | (1,551.4) | (170.0) | (969.4) | (2,690.8) |
| Total | \$ 272.5 | \$ 195.2 | \$ 120.8 | \$ 588.5 |

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

During the year ended December 31, 2017, the Company recorded non-cash charges of \$21.3 million to reflect the impairment of goodwill in the digital and creative solutions reporting unit. 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. See Note 4, *Restructuring, Impairment and Other Charges*, for further discussion regarding these impairment charges.

The components of other intangible assets at December 31, 2017 and 2016 were as follows:

| | December 31, 2017 | | | December 31, 2016 | | |
|-------------------------------------|-----------------------------|-----------------------------|-------------------|-----------------------------|-----------------------------|-------------------|
| | Gross Carrying Amount | Accumulated Amortization | Net Book Value | Gross Carrying Amount | Accumulated Amortization | Net Book Value |
| Client relationships | \$534.1 | \$(412.4) | \$121.7 | \$517.9 | \$(370.7) | \$147.2 |
| Patents | 2.0 | (2.0) | _ | 2.0 | (2.0) | _ |
| Trademarks, licenses and agreements | 26.2 | (25.2) | 1.0 | 26.2 | (24.4) | 1.8 |
| Trade names | 36.8 | (16.2) | 20.6 | 36.8 | (13.9) | 22.9 |
| Total other intangible assets | \$599.1 | \$(455.8) | \$143.3 | \$582.9 | \$(411.0) | \$171.9 |

During the year ended December 31, 2017, the Company recorded non-cash charges of \$0.2 million primarily for the impairment of acquired trade name intangible assets in the commercial and digital print reporting unit within the Variable Print segment. During the year ended December 31, 2016, the Company recorded non-cash charges of \$29.7 million primarily for the impairment of certain acquired client relationship intangible assets in the commercial and digital print reporting unit within 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. See Note 6, *Fair Value Measurement*, for further discussion.

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

| | December 31, 2016 | | |
|---------------------------|-------------------|---|--|
| | Amount | Weighted Average Amortization Period | |
| Client relationships | \$11.0 | 10.5 | |
| Trade names (amortizable) | 1.4 | 4.7 | |
| Non-compete agreements | 1.7 | 3.3 | |
| Total additions | \$14.1 | | |

Amortization expense for other intangible assets was \$28.6 million, \$33.7 million and \$46.2 million for the years ended December 31, 2017, 2016 and 2015, respectively.

The following table outlines the estimated annual amortization expense related to other intangible assets as of December 31, 2017:

| | Amount |
|---------------------|---------|
| 2018 | \$ 27.8 |
| 2019 | 24.1 |
| 2020 | 20.3 |
| 2021 | 20.0 |
| 2022 | 19.3 |
| 2023 and thereafter | 31.8 |
| Total | \$143.3 |

Note 6. Fair Value Measurement

Certain assets and liabilities are required to be recorded at fair value on a recurring basis. The following tables summarize the basis used to measure financial assets and liabilities that are carried at fair value on a recurring basis in the consolidated balance sheets.

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

| | | Basis of fair value measurement |
|-------------------------------|----------------------------|---|
| | As of December 31, 2017 | Significant other observable inputs (Level 2) |
| Assets | ¢ 22 | ¢ 22 |
| Foreign currency contracts | \$ 2.2 | \$ 2.2 |
| | | Basis of fair value measurement |
| | As of December 31, 2016 | Significant other observable inputs (Level 2) |
| Assets | | |
| Foreign currency contracts | \$ 1.7 | \$ 1.7 |
| Available-for-sale securities | 328.7 | 328.7 |
| Total assets | \$330.4 | \$330.4 |
| Liabilities | | |
| Foreign currency contracts | 1.5 | 1.5 |
| Total liabilities | \$ 1.5 | \$ 1.5 |

As of December 31, 2017, the Company no longer held investments in LSC or Donnelley Financial common stock. As of December 31, 2016, the Company's investment in LSC and Donnelley Financial common stock were categorized as Level 2 securities as these shares were not registered and were valued based upon the closing stock price on the balance sheet date as they represented an identical equity instrument registered under the Securities Act of 1933, as amended.

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.

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, 2017, 2016 and 2015 were as follows:

| | | Ended er 31, 2017 | As of December 31, 2017 |
|---|----------------------|--|----------------------------|
| | Impairment Charge | Fair Value Measurement (Level 3) | Net Book Value |
| Long-lived assets held for sale or disposal | \$ 1.3 | \$ 0.7 | \$ — |
| Goodwill Other intangible assets | 21.3 0.2 | _ | _ |
| Total | \$ 22.8 | \$ 0.7 | <u>\$ —</u> |
| | | Ended er 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 Other intangible assets | 527.8 29.7 | 15.2 4.6 | 15.2 4.3 |
| Total | \$558.1 | \$19.8 | <u>\$19.5</u> |
| | | Ended er 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 | - \$ <u>-</u> | \$ — |
| Long-lived assets held for sale or disposal | 1.5 18.0 | 2.8 | _ |
| Other intangible assets | 11.9 | _ | _ |
| Total | \$ 31.7 | \$ 2.8 | <u> </u> |

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

There were no estimated costs to sell related to long-lived assets held for sale that were remeasured during the years ended December 31, 2017, 2016 and 2015.

During the year ended December 31, 2017, the goodwill related to the digital and creative solutions reporting unit was written down to its implied fair value of zero. 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, 2017, the Company recorded a non-cash charge of \$0.2 million primarily for the impairment of certain acquired trade name intangible assets in the commercial and digital print reporting unit within the Variable Print segment. After recording the impairment charges, the remaining value of trade name intangible assets in the commercial and digital print reporting unit was \$9.3 million as of December 31, 2017. 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 client 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 client 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 client 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 client relationship assets. 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 and 2015:

| | Fair Value | Valuation Technique | Unobservable Input | Range |
|---------------------------|-------------|---------------------|------------------------------|---------------|
| 2016 Client relationships | \$4.6 | Excess earnings | Attrition rate Discount rate | 5.0% 13.0% |
| 2015 Client relationships | \$ <i>—</i> | Excess Earnings | Discount rate | 2.7% |

Note 7. Accrued Liabilities

The components of the Company's accrued liabilities at December 31, 2017 and 2016 were as follows:

| | 2017 | 2016 |
|---|---------|---------|
| Employee-related liabilities | \$173.0 | \$175.3 |
| Deferred revenue | 112.4 | 106.6 |
| Restructuring liabilities | 10.7 | 6.0 |
| Cash due to Donnelley Financial and LSC per Separation and Distribution | | |
| Agreement | _ | 78.0 |
| Other | 151.4 | 175.8 |
| Total accrued liabilities | \$447.5 | \$541.7 |

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

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, withdrawal obligations associated with multi-employer pension plans, other client-related liabilities, interest expense accruals and income and other tax liabilities.

Note 8. Commitments and Contingencies

As of December 31, 2017, the Company had commitments of approximately \$25.9 million for the purchase of property, plant and equipment related to incomplete projects. The Company also has contractual commitments of approximately \$74.1 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.

Future minimum rental commitments under operating leases are as follows:

| Year Ended December 31 | Amount |
|------------------------|---------|
| 2018 | \$ 86.2 |
| 2019 | 57.4 |
| 2020 | 42.8 |
| 2021 | |
| 2022 | |
| 2023 and thereafter | 31.0 |
| | \$263.9 |

The Company has operating lease commitments, including those for vacated facilities, totaling \$263.9 million extending through various periods to 2028. Future rental commitments for leases have not been reduced by minimum non-cancelable sublease rentals aggregating approximately \$20.3 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 \$118.3 million, \$117.6 million and \$120.8 million for the years ended December 31, 2017, 2016 and 2015, respectively. Rent expense for vacated facilities was recognized as restructuring, impairment and other charges-net. 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 believes that its recorded reserves, recorded in accrued liabilities and other noncurrent liabilities, 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 clients 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.

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

Note 9. 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.

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 accordance with the Separation and Distribution Agreement, the Company recorded the final pension asset valuation adjustment during 2017 resulting in a pre-tax decrease of \$5.8 million (\$3.6 million after-tax) to the Company's pension liability.

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 in 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 (income) 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 elected to use a full yield curve approach in the estimation of these interest components of net pension and other postretirement benefits plan expense (income) 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 \$8.6 million to its pension plans and \$7.8 million to its other postretirement benefits plans during the year ended December 31, 2017. The Company expects to make cash contributions of approximately \$16.0 million to its pension and other postretirement benefits plans in 2018.

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.

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

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 recorded within cost of sales and \$3.3 million recorded 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.

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 Benefi | | |
|--|------------------|---------|----------|-----------------------------|----------|----------|
| | 2017 | 2016 | 2015 | 2017 | 2016 | 2015 |
| Service cost | \$ 0.7 | \$ 1.0 | \$ 1.7 | \$ 1.3 | \$ 3.8 | \$ 4.7 |
| Interest cost | 31.6 | 105.7 | 170.4 | 11.1 | 11.7 | 15.9 |
| Expected return on plan assets | (50.3) | (177.5) | (234.6) | (13.5) | (13.8) | (13.1) |
| Amortization of prior service credit | _ | _ | _ | (2.8) | (12.7) | (26.9) |
| Amortization of actuarial (gain) loss | 7.3 | 26.1 | 40.5 | (0.1) | 0.1 | _ |
| Settlements and curtailments | 1.6 | 98.4 | | | (19.5) | _ |
| Attributable to DFS and LSC | | (43.3) | 16.8 | | | |
| Net periodic benefit (income) expense related to continuing | | | | | | |
| operations | \$ (9.1) | \$ 10.4 | \$ (5.2) | \$ (4.0) | \$(30.4) | \$(19.4) |
| Weighted average assumption used to calculate net periodic benefit | | | | | | |
| expense: | | | | | | |
| Discount rate | 3.8% | 4.3% | 3.9% | 4.0% | 4.2% | 3.9% |
| Expected return on plan assets | 5.9% | 6.8% | 7.0% | 6.8% | 7.3% | 7.3% |

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

| | Pension Benefits | | Other Postretirement Bene | |
|---|-------------------------|------------|---------------------------|------------------|
| | 2017 | 2016 | 2017 | 2016 |
| Benefit obligation at beginning of year | \$ 974.7 | \$ 3,932.3 | \$ 345.0 | \$ 373.8 |
| Service cost | 0.7 | 1.0 | 1.3 | 3.8 |
| Interest cost | 31.6 | 105.7 | 11.1 | 11.7 |
| Plan participants' contributions | | _ | 9.0 | 9.4 |
| Medicare reimbursements | _ | _ | 5.0 | 5.4 |
| Actuarial loss | 53.9 | 349.5 | 3.0 | 5.9 |
| Plan amendments and other | _ | _ | _ | (33.8) |
| Settlements | (5.9) | (304.4) | | |
| Foreign currency translation | 34.4 | (40.5) | 2.8 | 1.3 |
| Benefits paid | (44.6) | (129.7) | (34.8) | (32.5) |
| Separation of Donnelley Financial and LSC | | (2,915.6) | _ | _ |
| Divestitures | | (23.6) | | |
| Benefit obligation at end of year | \$1,044.8 | \$ 974.7 | \$ 342.4 | \$ 345.0 |
| Fair value of plan assets at beginning of year | \$ 875.4 | \$ 3,424.1 | \$ 210.3 | \$ 205.5 |
| Actual return on assets | 106.0 | 424.1 | 31.3 | 14.8 |
| Settlements | (6.3) | (304.4) | | |
| Employer contributions | 8.6 | 12.8 | 7.8 | 7.7 |
| Medicare reimbursements | _ | _ | 5.0 | 5.4 |
| Plan participants' contributions | | _ | 9.0 | 9.4 |
| Separation of Donnelley Financial and LSC | 5.8 | (2,489.1) | _ | _ |
| Divestitures | | (16.8) | _ | _ |
| Foreign currency translation | 34.4 | (45.6) | _ | _ |
| Benefits paid | (44.6) | (129.7) | (34.8) | (32.5) |
| Fair value of plan assets at end of year | \$ 979.3 | \$ 875.4 | \$ 228.6 | \$ 210.3 |
| Total net pension and OPEB liability recognized as of | | | | |
| December 31 | \$ (65.5) | \$ (99.3) | <u>\$(113.8)</u> | <u>\$(134.7)</u> |

The accumulated benefit obligation for all defined benefit pension plans was \$1,032.0 million and \$961.1 million at December 31, 2017 and 2016, respectively.

Amounts recognized in the Consolidated Balance Sheets as of December 31, 2017 and 2016 were as follows:

| | Pension Benefits | | Other Postretin | rement Benefits | | |
|--|-----------------------------|-----------------------------|-------------------------|-------------------------|------|------|
| | 2017 2016 | | 2017 2016 | | 2017 | 2016 |
| Prepaid pension cost (included in other noncurrent assets) | \$ 39.9 (2.7) (102.7) | \$ 22.8 (2.7) (119.4) | \$ — (0.6) — (113.2) | \$ — (0.6) — (134.1) | | |
| Net liabilities recognized in the Consolidated Balance Sheets— Continuing Operations | \$ (65.5) | \$ (99.3) | \$(113.8) | <u>\$(134.7)</u> | | |

The amounts included in accumulated other comprehensive loss in the Consolidated Balance Sheets, excluding tax effects, at December 31, 2017 and 2016 were as follows:

| | Pension Benefits | | Other Postretirement Benef | |
|---|-------------------------|-----------|----------------------------|--------|
| | 2017 | 2016 | 2017 | 2016 |
| Accumulated other comprehensive (loss) income | | | | |
| Net actuarial (loss) gain | \$(286.7) | \$(297.4) | \$33.6 | \$19.2 |
| Net prior service credit | | | 30.4 | 32.9 |
| Total | \$(286.7) | \$(297.4) | \$64.0 | \$52.1 |

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

The pre-tax amounts recognized in other comprehensive loss in 2017 as components of net periodic benefit costs were as follows:

| | Pension Benefits | Other Postretirement Benefits |
|------------------------------------|---------------------|-------------------------------------|
| Amortization of: | | |
| Net actuarial (gain) loss | \$ 7.3 | \$(0.1) |
| Net prior service credit | _ | (2.8) |
| Amounts arising during the period: | | |
| Net actuarial gain | 1.8 | 14.8 |
| Settlements | 1.6 | _ |
| Total | \$10.7 | \$11.9 |

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 2018 are shown below:

| | Pension Benefits | Other Postretirement Benefits |
|--------------------------|---------------------|-------------------------------------|
| Amortization of: | | |
| Net actuarial loss | \$8.0 | \$ — |
| Net prior service credit | | (2.8) |
| Total | \$8.0 | <u>\$(2.8)</u> |

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

| | Pension Benefits | | Other Posti Bene | |
|---------------|------------------|------|---------------------|------|
| | 2017 | 2016 | 2017 | 2016 |
| Discount rate | 3.4% | 3.8% | 3.5% | 4.0% |
| Current | | | | |
| Pre-Age 65 | _ | _ | 6.3% | 6.1% |
| Post-Age 65 | _ | _ | 6.3% | 6.1% |
| Ultimate | _ | _ | 4.5% | 5.0% |

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, 2017 and 2016:

| | Pension Benefit | |
|------------------------------|-----------------|---------|
| | 2017 | 2016 |
| Projected benefit obligation | \$797.4 | \$744.3 |
| Fair value of plan assets | 692.0 | 622.2 |

The following table provides a summary of pension plans with accumulated benefit obligations in excess of plan assets as of December 31, 2017 and 2016:

| | Pension Benefits | |
|--------------------------------|------------------|---------|
| | 2017 | 2016 |
| Accumulated benefit obligation | \$784.6 | \$730.7 |
| Fair value of plan assets | 692.0 | 622.2 |

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

The current health care cost trend rate gradually declines through 2027 (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:

| | 200 /0 | Decrease |
|--|--------|----------|
| Other postretirement benefits obligation | \$7.7 | \$(7.5) |
| Total other postretirement benefits service and interest cost components | 0.6 | (0.6) |

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, 2017 and 2016, Medicare Part D subsidies received by the Company were negligible.

During the year ended December 31, 2017, the Company received approximately \$5.0 million in EGWP subsidies.

Benefit payments are expected to be paid as follows:

| | Pension Benefits | Other Postretirement Benefits-Gross | Estimated Subsidy Reimbursements |
|-----------|---------------------|---|-------------------------------------|
| 2018 | \$ 46.8 | \$ 25.7 | 1.3 |
| 2019 | 47.2 | 25.4 | 1.3 |
| 2020 | 48.6 | 25.1 | 1.2 |
| 2021 | 50.3 | 24.8 | 1.1 |
| 2022 | 51.2 | 24.5 | 1.1 |
| 2023-2027 | 268.2 | 117.3 | 5.1 |

Plan Assets

The Company's U.S. pension plans are frozen and the Company utilizes 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, 2017, 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, 2017 and 2016. 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.

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

Fixed income— The values of certain fixed income securities were based on quoted prices in active markets. As such, these assets are classified as Level 1. The remaining 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.

For Level 2 and Level 3 plan assets, as applicable, 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.

The fair values of the Company's pension plan assets at December 31, 2017 and 2016, by asset category were as follows:

| | Dec | ember 31, 2 | 2017 | Dec | ember 31, 2 | 2016 |
|-----------------------------------|---------|-------------|---------|---------|-------------|---------|
| Asset Category | Total | Level 1 | Level 2 | Total | Level 1 | Level 2 |
| Cash and cash equivalents | \$ 14.3 | \$ 11.5 | \$ 2.8 | \$ 17.5 | \$ 12.9 | \$ 4.6 |
| Equity | 125.0 | 124.9 | 0.1 | 144.6 | 144.5 | 0.1 |
| Fixed income | 246.7 | 0.7 | 246.0 | 222.7 | 0.7 | 222.0 |
| Derivatives and other | 2.1 | _ | 2.1 | 2.3 | _ | 2.3 |
| Subtotal | \$388.1 | \$137.1 | \$251.0 | \$387.1 | \$158.1 | \$229.0 |
| Plan assets measured at NAV | | | | | | |
| Equity funds | \$279.7 | | | \$245.5 | | |
| Fixed income | 268.7 | | | 193.4 | | |
| Derivatives and other | 6.1 | | | 16.6 | | |
| Real estate | 36.7 | | | 32.8 | | |
| Total plan assets measured at NAV | \$591.2 | | | \$488.3 | | |
| Total | \$979.3 | | | \$875.4 | | |
| | | | | | | |

The fair values of the Company's other postretirement benefits plan assets at December 31, 2017 and 2016, by asset category were as follows:

| | December | 31, 2017 | Dece | mber 31, | 2016 |
|-----------------------------------|----------|----------|---------|----------|---------|
| Asset Category | Total | Level 2 | Total | Level 1 | Level 2 |
| Cash and cash equivalents | \$ 30.7 | \$30.7 | \$ 21.3 | \$ — | \$21.3 |
| Other | | | 1.4 | 1.4 | |
| Subtotal | \$ 30.7 | \$30.7 | \$ 22.7 | \$1.4 | \$21.3 |
| Investments measured at NAV | | | | | |
| Equity funds | | | \$149.8 | | |
| Fixed income funds | 31.6 | | 37.8 | | |
| Total investments measured at NAV | \$197.9 | | \$187.6 | | |
| Total | \$228.6 | | \$210.3 | | |

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

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 during the years ended December 31, 2017, 2016 or 2015.

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 years ended December 31, 2017 and 2016, the Company recorded \$2.3 million, respectively, for multi-employer pension plan 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 unrelated to facility closures.

Note 10. 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, 2017, 2016 and 2015:

| | 2017 | 2016 | 2015 |
|---------|----------|-----------|----------|
| U.S | \$(12.1) | \$(617.9) | \$(36.3) |
| Foreign | 87.6 | 120.7 | 25.6 |
| Total | \$ 75.5 | \$(497.2) | \$(10.7) |

The components of income tax expense (benefit) from continuing operations for the years ended December 31, 2017, 2016 and 2015 were as follows:

| | 2017 | 2016 | 2015 |
|----------|---------|----------|---------|
| Federal: | | | |
| Current | \$ 60.9 | \$ (7.3) | \$ 8.5 |
| Deferred | 31.0 | (51.7) | (11.9) |
| State: | | | |
| Current | 0.2 | (6.0) | (8.3) |
| Deferred | (6.0) | 12.5 | (4.6) |
| Foreign: | | | |
| Current | 26.4 | 34.4 | 19.7 |
| Deferred | (3.8) | 5.8 | 17.6 |
| Total | \$108.7 | \$(12.3) | \$ 21.0 |

The Tax Act was signed into law on December 22, 2017 and represents the most significant change to U.S. tax law since 1986. Key changes of the Tax Act are not limited to, but include the following: reduces the U.S. federal statutory rate from 35% to 21%; creates a territorial tax system rather than a worldwide system, generally allowing companies to repatriate future foreign-sourced earnings without incurring additional U.S. taxes; subjects certain foreign earnings on which U.S. income tax is currently deferred to a one-time transition tax; provides for new anti-deferral provisions to tax certain foreign earnings and a new base erosion tax; limits the deduction for net interest expense incurred by U.S. Companies; and eliminates or reduces certain other deductions.

Also on December 22, 2017, the SEC issued Staff Accounting Bulletin 118 (SAB 118) which provides guidance for companies analyzing their accounting for the income tax effects of the Tax Act. SAB 118 provides that a company may report provisional amounts based on reasonable estimates. The provisional estimates are then subject to adjustment during a measurement period up to one year and should be accounted for as a prospective change.

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

During 2017, we recorded provisional estimates of the impact of the Tax Act within our income tax expense. To determine the amount of the transition tax, we were required to quantify, among other factors, the amount of post-1986 earnings and profits of applicable foreign subsidiaries, as well as the amount of non-U.S. tax paid on those earnings. We were able to make a reasonable estimate of the transition tax and impact to deferred taxes; however, we will continue to analyze our data and refine our estimated amounts accordingly. We will also continue to interpret any guidance or subsequent clarification of the tax law. As a result, we may make adjustments to the provisional amounts recorded, in accordance with the guidance outlined in SAB 118.

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

| | 2017 | 2016 | 2015 |
|--|--------|--------|----------|
| Federal statutory tax rate | 35.0% | 35.0% | 35.0% |
| Change in valuation allowances | 2.8 | (7.1) | (225.5) |
| Venezuelan devaluation and sale | _ | _ | (122.8) |
| State and local income taxes, net of U.S. federal income tax benefit | (2.9) | _ | 36.0 |
| Impairment charges | 6.6 | (32.3) | (57.8) |
| Foreign tax | 4.2 | (1.2) | (19.8) |
| Adjustment of uncertain tax positions and interest | (3.2) | 0.5 | 45.9 |
| Reorganization | _ | 3.9 | _ |
| Foreign tax rate differential | (21.2) | 3.0 | 169.7 |
| Impact of the Tax Act | 146.2 | _ | _ |
| Tax impact of net gain on sale of Donnelley Financial and LSC shares | (21.6) | _ | _ |
| Other | (1.9) | 0.7 | (57.0) |
| Effective income tax rate | 144.0% | 2.5% | (196.3%) |

Included in 2017 is the impact associated with the enactment of the Tax Act which included a provisional estimate for the one-time transition tax on foreign earnings of \$103.5 million, of which \$64.3 million is payable over eight years, net of current year tax benefit on U.S. operations, as well as a provisional adjustment to net deferred tax assets for the reduced corporate income tax rate of \$6.8 million. The income tax expense also reflects non-deductible goodwill impairment charges, the inability to recognize a tax benefit on certain losses and the impact of the non-taxable gain on the sale of the Donnelley Financial retained shares. The sale of the LSC retained shares generated a pre-tax capital loss of \$51.6. The related tax capital loss will be carried forward; however, it is more likely than not that the benefit of such deferred tax asset will not be fully realized and a valuation allowance was recorded.

Included in 2016 is the impact of the non-deductible goodwill impairment charges and \$9.5 million of a 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.

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

Deferred income taxes

The significant deferred tax assets and liabilities at December 31, 2017 and 2016 were as follows:

| | 2017 | 2016 |
|--|-----------|-----------------|
| Deferred tax assets: | | |
| Pension and other postretirement benefits plan liabilities | \$ 58.8 | \$ 100.1 |
| Net operating losses and other tax carryforwards | 255.1 | 164.9 |
| Accrued liabilities | 51.5 | 86.1 |
| Foreign depreciation | 19.4 | 14.6 |
| Other | 16.5 | 25.1 |
| Total deferred tax assets | 401.3 | 390.8 |
| Valuation allowances | (238.3) | (154.1) |
| Net deferred tax assets | \$ 163.0 | \$ 236.7 |
| Deferred tax liabilities: | | |
| Accelerated depreciation | \$ (45.8) | \$ (68.2) |
| Other intangible assets | (20.0) | (36.0) |
| Inventories | (7.3) | (7.6) |
| Other | (14.0) | (23.1) |
| Total deferred tax liabilities | (87.1) | (134.9) |
| Net deferred tax assets | \$ 75.9 | <u>\$ 101.8</u> |

Transactions affecting the valuation allowances on deferred tax assets during the years ended December 31, 2017, 2016 and 2015 were as follows:

| | 2017 | 2016 | 2015 |
|----------------------------|---------|---------|---------|
| Balance, beginning of year | \$154.1 | \$130.8 | \$144.3 |
| Current year expense-net | 84.5 | 35.2 | 11.8 |
| Write-offs | (6.8) | (1.0) | (15.0) |
| Foreign exchange and other | 6.5 | (10.9) | (10.3) |
| Balance, end of year | 238.3 | \$154.1 | \$130.8 |

As of December 31, 2017, the Company had domestic and foreign net operating loss and other tax carryforwards of approximately \$141.1 million and \$114.0 million (\$63.3 million and \$101.6 million, respectively, at December 31, 2016), of which \$119.6 million expires between 2018 and 2027. 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 \$4.7 million and \$6.7 million as of December 31, 2017 and December 31, 2016, 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 \$837.3 million as of December 31, 2017. Upon repatriation of these earnings to the U.S. in the form of dividends or otherwise, the tax cost would depend on income tax laws and circumstances at the time of distribution. The Tax Act included a one-time transition tax on foreign earnings and generally allows companies to repatriate future foreign-sourced earnings without incurring U.S. taxes in future years. The Company continues to analyze the global working capital and cash requirements and the potential tax liabilities attributable to repatriation, but the Company has yet to determine whether to change the prior assertion and repatriate earnings. The Company will record the tax effects of any change in the prior assertion in the period the analysis is complete and reasonable estimates are made.

Cash payments for income taxes were \$46.1 million, \$108.2 million and \$129.1 million during the years ended December 31, 2017, 2016 and 2015, respectively. Cash refunds for income taxes were \$43.3 million, \$7.2 million and \$14.8 million during the years ended December 31, 2017, 2016 and 2015, respectively.

(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. The Company adopted ASU No. 2016-09 "Compensation—Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting" on January 1, 2017. Under this 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 within additional paid-in-capital. The impact to the Company's Consolidated Financial Statements for the year ended December 31, 2017 was \$0.5 million. Prior to January 1, 2017, 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 vests and the grant date fair market value, directly increased or reduced RRD stockholders' equity. For the years ended December 31, 2016 and 2015, the tax expense recognized as a reduction of RRD's stockholders' equity was \$2.3 million and \$3.2 million, respectively.

See Note 14, *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, 2017, 2016 and 2015 were as follows:

| | 2017 | 2016 | 2015 |
|---|--------|--------|--------|
| Balance at beginning of year | \$41.9 | \$51.0 | \$58.5 |
| Additions for tax positions of the current year | 0.2 | 0.6 | 1.1 |
| Reductions for tax positions of prior years | (9.0) | (1.5) | (5.4) |
| Settlements during the year | (0.1) | (1.8) | (0.3) |
| Lapses of applicable statutes of limitations | (2.1) | (6.4) | (2.9) |
| Balance at end of year | \$30.9 | \$41.9 | \$51.0 |

As of December 31, 2017, 2016 and 2015, the Company had \$30.9 million, \$41.9 million and \$51.0 million, respectively, of unrecognized tax benefits. Unrecognized tax benefits of \$24.3 million as of December 31, 2017, 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, 2017, it is reasonably possible that the total amount of unrecognized tax benefits will decrease within twelve months by as much as \$2.5 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 expense (benefits) related to tax uncertainties recognized in the Consolidated Statements of Operations were \$0.2 million, \$(0.5) million and \$(0.1) million for the years ended December 31, 2017, 2016 and 2015, respectively. There were no benefits from the reversal of accrued penalties for the years ended December 31, 2017, 2016 and 2015. Accrued interest of \$4.2 million and \$4.0 million related to income tax uncertainties were reported as a component of other noncurrent liabilities in the Consolidated Balance Sheets at December 31, 2017 and 2016, respectively. There were no accrued penalties related to income tax uncertainties for the years ended December 31, 2017 and 2016.

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

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

Note 11. Debt

The Company's debt at December 31, 2017 and 2016 consisted of the following:

| | 2017 | 2016 |
|---|-----------|-----------|
| Borrowings under the credit facilities | \$ 216.0 | \$ 185.0 |
| 11.25% senior notes due February 1, 2019 _(a) | 172.2 | 172.2 |
| 7.625% senior notes due June 15, 2020 | 238.4 | 350.0 |
| 7.875% senior notes due March 15, 2021 | 447.2 | 448.8 |
| 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 | 290.6 | 350.0 |
| 6.00% senior notes due April 1, 2024 | 298.3 | 400.0 |
| 6.625% debentures due April 15, 2029 | 157.9 | 199.5 |
| 8.820% debentures due April 15, 2031 | 69.0 | 69.0 |
| $Other_{(b)}$ | 10.8 | 8.5 |
| Unamortized debt issuance costs | (11.6) | (16.5) |
| Total debt | 2,109.7 | 2,387.4 |
| Less: current portion | (10.8) | (8.2) |
| Long-term debt | \$2,098.9 | \$2,379.2 |

- (a) As of December 31, 2017 and 2016, the interest rate on the 11.25% senior notes due February 1, 2019 was 13.25%, the maximum amount of these rates as a result of credit ratings downgrades.
- (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 \$18.8 million and \$4.3 million at December 31, 2017 and 2016, respectively.

On September 29, 2017, the Company entered into an asset-based revolving credit facility (the "Credit Agreement") which amended and restated the Company's prior \$800.0 million senior secured revolving credit facility dated September 30, 2016. As a result of the amendment, the Company recognized a \$6.2 million loss related to unamortized debt issuance costs and other expenses within loss on debt extinguishment in the Consolidated Statements of Operations for the year ended December 31, 2017. The Credit Agreement provides for a senior secured asset-based revolving credit facility of up to \$800.0 million subject to a borrowing base. The amount available to be borrowed under the Credit Agreement is equal to the lesser of (a) \$800.0 million and (b) the aggregate amount of accounts receivable, inventory, machinery and equipment and fee-owned real estate of the Company and certain of its domestic subsidiaries (the "Guarantors") (collectively, the "Borrowing Base"), subject to certain eligibility criteria and advance rates. The aggregate amount of real estate, machinery and equipment that can be included in the Borrowing Base cannot exceed \$200.0 million.

The Company's obligations under the Credit Agreement are guaranteed by the Guarantors and are secured by a security interest in certain assets of the Company and its domestic subsidiaries, including accounts receivable, inventory, deposit accounts, securities accounts, investment property, machinery and equipment and, to the extent related to the foregoing, general intangibles, documents and instruments, as well as 65% of the equity interests of their first-tier foreign subsidiaries.

The Credit Agreement contains customary restrictive covenants, including a covenant which requires the Company to maintain a minimum fixed charge coverage ratio under certain circumstances. In addition, the Company's ability to undertake certain actions, including, among other things, prepay certain junior debt, incur additional unsecured indebtedness and make certain restricted payments depends on satisfaction of certain conditions, including, among other things, meeting minimum availability thresholds under the Credit Agreement. 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.

Borrowings under the Credit Agreement bear interest at a rate dependent on the average quarterly availability under the Credit Agreement and will be calculated according to a base rate or a Eurocurrency rate plus an applicable margin. The applicable margin for base rate loans ranges from 0.25% to 0.50% and the applicable margin for Eurocurrency loans ranges from 1.25% to 1.50%. In addition, a fee is payable quarterly on the unused portion of the amount available to be borrowed under the Credit Agreement. The fee accrues at a rate of either 0.25% or 0.375% depending upon the average usage of the facility.

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

The Credit Agreement is scheduled to mature on September 29, 2022, at which time all outstanding amounts under the Credit Agreement will be due and payable. Borrowings under the Credit Agreement may be used for working capital and general corporate purposes.

Based on the Company's borrowing base as of December 31, 2017 and existing borrowings, the Company had approximately \$549.5 million borrowing capacity available under the Credit Agreement.

The weighted average interest rate on borrowings under the Company's current and prior credit facilities was 3.5%, 2.5% and 2.0% for the years ended December 31, 2017, 2016 and 2015, respectively.

On June 7, 2017, the Company repurchased \$41.7 million of the 6.625% debentures due April 15, 2029, \$59.4 million of the 6.50% senior notes due November 15, 2023 and \$101.7 million of the 6.00% senior notes due April 1, 2024 using borrowings under the prior credit agreement. The repurchases resulted in a net gain of \$0.8 million which was recognized within loss on debt extinguishment in the Consolidated Statements of Operations for the year ended December 31, 2017 related to the difference between the fair value of the debt repurchased and the principal outstanding, partially offset by the premiums paid, unamortized debt issuance costs and other expenses.

On May 22, 2017, 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 7.625% senior notes due June 15, 2020 and 7.875% senior notes due March 15, 2021. On June 7, 2017, the Third Party Purchasers purchased \$111.6 million in aggregate principal amount of the 7.625% senior notes due June 15, 2020 (the "Third Party Purchase Notes"). On June 21, 2017, the Company exchanged 6,143,208 of its retained shares of Donnelley Financial for the Third Party Purchase Notes. The Company cancelled the Third Party Purchase Notes on June 21, 2017. As a result, the Company recognized a \$14.4 million loss on debt extinguishment in the Consolidated Statements of Operations during the year ended December 31, 2017 related to premiums paid, unamortized debt issuance costs and other expenses. In addition, the Company recognized a net realized gain of \$92.4 million resulting from the disposition of these retained shares of Donnelley Financial common stock within investment and other income-net in the Consolidated Statements of Operations during the year ended December 31, 2017.

On August 4, 2017, the Company disposed of its remaining 99,594 shares of Donnelley Financial common stock in exchange for \$1.9 million in aggregate principal of the Company's 7.875% senior notes due March 15, 2021 which were cancelled. As a result, the Company recognized a \$0.3 million loss on debt extinguishments in the Consolidated Statements of Operations during the year ended December 31, 2017, related to premiums paid, unamortized debt issuance costs and other expenses. In addition, the Company recognized a net realized gain of \$1.6 million resulting from the disposition of these retained shares of Donnelley Financial common stock within investment and other income-net in the Consolidated Statements of Operations during the year ended December 31, 2017.

As of December 31, 2017, the Company had \$149.1 million in other uncommitted credit facilities, primarily outside the U.S. (the "Other Facilities"). There were \$139.2 million in outstanding letters of credit, bank guarantees and bank acceptance drafts which reduced availability, of which \$34.5 million were issued under the Credit Agreement. Total borrowings under the Credit Agreement and the Other Facilities (the "Combined Facilities") were \$226.6 million and \$192.5 million as of December 31, 2017 and 2016, respectively.

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

At December 31, 2017, the future maturities of debt, including capitalized leases, were as follows:

| | All | Hount |
|---------------------|-------------|-------|
| 2018 | \$ | 10.8 |
| 2019 | | 172.2 |
| 2020 | | 238.4 |
| 2021 | | 529.1 |
| 2022 | | 356.0 |
| 2023 and thereafter | _ | 816.1 |
| $Total_{(a)}$ | <u>\$2,</u> | 122.6 |

⁽a) Excludes unamortized debt issuance costs of \$11.6 million and \$1.3 million of bond discount which do not represent contractual commitments with a fixed amount or maturity date.

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

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 principal 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 or exchanged for debt in connection with the Separation. After the Separation, RRD has no obligations as it relates to these senior notes, senior secured term loan B facilities or any other LSC or Donnelley Financial indebtedness.

Additionally on September 30, 2016, the Company entered into an amended and restated credit agreement providing for \$800.0 million in credit facilities, representing a reduction from the prior credit agreement which provided for \$1.5 billion in credit facilities. 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 from discontinued operations, net of tax, in the Consolidated Statements of Operations for the period ended December 31, 2016.

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 within loss from discontinued operations, net of tax, in the period ending December 31, 2016 related to premiums and other related transaction costs.

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:

| | 2017 | 2016 | 2015 |
|---|---------|---------|---------|
| Interest incurred | \$185.0 | \$206.1 | \$211.6 |
| Less: interest income | (2.8) | (4.6) | (3.7) |
| Less: interest capitalized as property, plant and equipment | (2.6) | (2.8) | (3.8) |
| Interest expense, net | \$179.6 | \$198.7 | \$204.1 |

Interest paid, net of interest capitalized, was \$177.6 million, \$280.1 million and \$274.7 million for the years ended December 31, 2017, 2016 and 2015, respectively.

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

Note 12. 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 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 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 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, 2017 and 2016 was \$215.9 million and \$172.2 million, respectively. The fair values of foreign currency contracts were determined to be Level 2 under the fair value hierarchy and are valued using market exchange rates.

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, 2016, in connection with the tender of the Company's 8.25% senior notes due March 15, 2019, the Company terminated \$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, 2017 and 2016, the Company had no outstanding interest rate swap agreements.

The Company's foreign currency contracts 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 currency contracts on a net basis when possible. Foreign currency contracts that can be settled on a net basis are presented net 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 weakened.

As of December 31, 2017 and 2016, the fair value of the Company's foreign currency contracts, which were the only derivatives not designated as hedges, along with the accounts in the Consolidated Balance Sheets in which the fair value amounts were included, were as follows:

| | 2017 | 2016 |
|---|-------|-------|
| Derivatives not designated as hedges | | |
| Prepaid expenses and other current assets | \$2.2 | \$1.7 |
| Accrued liabilities | _ | 1.5 |

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

The pre-tax gains related to derivatives not designated as hedges recognized in the Consolidated Statements of Operations for the years ended December 31, 2017, 2016 and 2015 were as follows:

| | Consolidated Statements of Operations | 2017 | 2016 | 2015 |
|--------------------------------------|--|---------|---------|----------|
| Derivatives not designated as hedges | | | | |
| Foreign currency contracts | Selling, general and administrative expenses | \$(1.7) | \$(5.7) | \$(28.2) |

Classification of (Cain) Loss Decomined in the

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, 2017, 2016 and 2015 were as follows:

| | Classification of (Gain) Loss Recognized in the Consolidated Statements of Operations | 2017 | 2016 | 2015 |
|--|--|------------|-----------------|---------|
| Fair value hedges Interest rate swaps Hedged items | Investment and other expense—net Investment and other expense—net | \$ <u></u> | \$ 0.4 (0.8) | |
| Total (gain) loss recognized as ineffectiveness in the Consolidated Statements of Operations | Investment and other expense—net | <u>\$</u> | \$(0.4) | \$(0.4) |

The Company also recognized a net reduction to interest expense \$1.0 million and \$2.0 million for the years ended December 31, 2016 and 2015, 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 13. Earnings per Share

Basic earnings per share is calculated by dividing net earnings attributable to RRD common stockholders by the weighted average number of common shares outstanding for the period. In computing diluted earnings per share, basic earnings per share is adjusted for the assumed issuance of all potentially dilutive share-based awards, including stock options, restricted stock units and performance share units. Performance share units are excluded if the performance targets upon which the issuance of the shares is contingent have not been achieved and the respective performance period has not been completed as of the end of the current period. Additionally, stock options are considered anti-dilutive when the exercise price exceeds the average market value of 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, 2017, 2016 and 2015, 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 year ended December 31, 2015, the Company issued approximately 2.7 million shares of common stock in conjunction with acquisitions.

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

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, 2017, 2016 and 2015 were as follows:

| | 2017 | 2016 | 2015 |
|--|----------|-----------|-----------|
| Basic net (loss) earnings per share attributable to RRD common stockholders: | | | |
| Continuing operations | | \$ (6.95) | \$ (0.28) |
| Discontinued operations | | (0.14) | 2.48 |
| Net (loss) earnings attributable to RRD stockholders | \$(0.49) | \$ (7.09) | \$ 2.20 |
| Continuing operations | \$(0.49) | \$ (6.95) | \$ (0.28) |
| Discontinued operations | | (0.14) | 2.48 |
| Net (loss) earnings attributable to RRD stockholders | \$(0.49) | \$ (7.09) | \$ 2.20 |
| Net loss attributable to RRD common stockholders—continuing operations | \$(34.4) | \$(486.2) | \$(19.0) |
| (Loss) income from discontinued operations, net of tax (Note 2) | | | 170.1 |
| Net (loss) earnings attributable to RRD common stockholders | \$(34.4) | \$(495.9) | \$151.1 |
| Weighted average number of common shares outstanding | 70.2 | 70.0 | 68.5 |
| Dilutive options and awards | _ | _ | _ |
| Diluted weighted average number of common shares outstanding | 70.2 | 70.0 | 68.5 |
| Weighted average number of anti-dilutive share-based awards: | | | |
| Stock options | 1.0 | 0.9 | 0.8 |
| Performance share units | _ | _ | 0.2 |
| Restricted stock units | 0.8 | 0.3 | 0.2 |
| Total | 1.8 | 1.2 | 1.2 |
| Dividends declared per common share | \$ 0.56 | \$ 2.48 | \$ 3.12 |

Note 14. Other Comprehensive (Loss) Income

The components of other comprehensive (loss) income and income tax expense allocated to each component for the years ended December 31, 2017, 2016 and 2015 were as follows:

| | | 2017 | | | 2016 | | | 2015 | |
|---|-------------------------|--------------------------|-------------------------|-------------------------|--------------------------|-------------------------|-------------------------|--------------------------|-------------------------|
| | Before Tax Amount | Income Tax Expense | Net of Tax Amount | Before Tax Amount | Income Tax Expense | Net of Tax Amount | Before Tax Amount | Income Tax Expense | Net of Tax Amount |
| Translation adjustments | \$ 57.1 | \$ — | \$ 57.1 | \$ (38.3) | \$ — | \$ (38.3) | \$(55.7) | \$ — | \$(55.7) |
| Adjustment for net periodic pension and other | | | | | | | | | |
| postretirement benefits plan cost | 22.4 | 7.5 | 14.9 | 20.2 | 9.0 | 11.2 | 60.2 | 25.4 | 34.8 |
| Adjustment for available-for-sale securities | (122.3) | (3.0) | (119.3) | 122.3 | 3.0 | 119.3 | _ | _ | _ |
| Change in fair value of derivatives | | | | | | | 0.1 | | 0.1 |
| Other comprehensive (loss) income | \$ (42.8) | \$ 4.5 | \$ (47.3) | \$104.2 | \$12.0 | \$ 92.2 | \$ 4.6 | \$25.4 | \$(20.8) |

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

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, 2017, 2016 and 2015:

| | 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, 2015 | \$(0.1) | \$ — | \$(762.3) | \$(11.2) | \$(773.6) |
| Other comprehensive income (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> | \$(65.7) | <u>\$(793.2)</u> |
| Other comprehensive income (loss) before reclassifications Amounts reclassified from accumulated other comprehensive | _ | 119.3 | (42.7) | (37.1) | 39.5 |
| 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> | \$ 119.3 | <u>\$(159.5)</u> | <u>\$(15.5)</u> | \$ (55.7) |
| Other comprehensive income (loss) before reclassifications Amounts reclassified from accumulated other comprehensive | _ | (48.5) | 10.6 | 53.6 | 15.7 |
| loss | | (70.8) | 4.3 | 2.8 | (63.7) |
| Net change in accumulated other comprehensive loss | | (119.3) | 14.9 | 56.4 | (48.0) |
| Balance at December 31, 2017 | <u>\$ </u> | <u> </u> | <u>\$(144.6)</u> | \$ 40.9 | <u>\$(103.7)</u> |

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

Reclassifications from accumulated other comprehensive loss for the year ended December 31, 2017, 2016 and 2015 were as follows:

| | 2017 | 2016 | 2015 | Classification in the Consolidated Statements of Operations |
|--|-----------------|-------------------|---|---|
| Translation Adjustments: Net realized loss | \$ 2.8 | <u> </u> | <u> </u> | (a) |
| Reclassifications before tax | 2.8 | | | |
| Reclassifications, net of tax | \$ 2.8 | <u>\$</u> | <u>\$</u> | |
| Amortization of pension and other postretirement benefits plan cost: Net actuarial loss Net prior service credit | \$ 7.2 (2.8) | \$ 26.2 (12.7) | \$ 40.5 (26.9) | (b) (b) |
| Curtailments and settlements | 1.6 | 78.9 | 0.2 | (b) |
| Reclassifications before tax Income tax expense | 6.0 | 92.4 39.7 | 13.8 4.9 | |
| Reclassifications, net of tax | \$ 4.3 | \$ 52.7 | \$ 8.9 | |
| Available-for-sale securities: Net realized gain on equity securities | <u>\$(52.8)</u> | <u>\$</u> | <u>\$ </u> | (c) |
| Reclassifications before tax | (52.8) 18.0 | | | |
| Reclassifications, net of tax | <u>\$(70.8)</u> | <u>\$</u> | <u>\$</u> | |
| Total reclassifications, net of tax | <u>\$(63.7)</u> | \$ 52.7 | \$ 8.9 | |

- (a) Included within selling, general and administrative expenses in the Consolidated Statements of Operations.
- (b) 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 9, *Retirement Plans*).
- (c) Included within investment and other income-net in the Consolidated Statements of Operations

Note 15. 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 compensation expenses for 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. In 2017, the Company recognized forfeitures as they occurred as a reduction of compensation expense as part of the adoption of ASU 2016-09. Prior to adoption, the Company estimated 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 were estimated at the time of grant and revised, if necessary, in subsequent periods, if actual forfeitures differ from those estimates.

Share-Based Compensation Expense

The total share-based compensation expense for continuing operations was \$8.4 million, \$7.4 million and \$10.1 million for the years ended December 31, 2017, 2016 and 2015, respectively. The resulting income tax benefit was \$3.2 million, \$2.9 million and \$3.9 million for the years ended December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017, \$14.0 million of unrecognized compensation expense related to share-based compensation plans is expected to be recognized over a weighted-average period of 2.0 years. In 2017, the Company presented excess tax benefits as an operating activity on the Consolidated Statement of Cash Flows rather than as financing activity as part of the adoption of ASU 2016-09. Prior to adoption, excess tax benefits, shown as financing cash inflows in the Consolidated Statements of Cash Flows, were \$2.6 million and \$3.2 million for the years ended December 31, 2016 and 2015, respectively.

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

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 2017 Performance Incentive Plan (the "2017 PIP") was approved by stockholders to provide incentives to key employees of the Company and its subsidiaries. Awards under the 2017 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 3.2 million shares of common stock reserved and authorized for issuance under the 2017 PIP. At December 31, 2017, there were 3.1 million shares of common stock authorized and available for grant under the 2017 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 2017 PIP and previous plans is ten years.

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, 12,148 and 86,372 restricted stock units classified as liability awards were outstanding at December 31, 2017, 2016 and 2015, 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 2017 and 2015 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.

Stock Options

There were no options granted during the years ended December 31, 2017 and 2016.

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

Stock option awards as of December 31, 2017 and 2016, and changes during the year ended December 31, 2017 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, 2016 | 1,551 | \$37.19 | 2.2 | \$1.7 |
| Cancelled/forfeited/expired | (294) | 58.19 | | |
| Outstanding at December 31, 2017 | 1,257 | 32.28 | 1.6 | _ |
| Vested and exercisable at December 31, 2017 | 1,257 | \$32.28 | 1.6 | \$ <i>—</i> |

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, 2017 and 2016, 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, 2017 and 2016. There were no options exercised for the year ended December 31, 2017. Total intrinsic value of options exercised for the years ended December 31, 2016 and 2015 was \$0.3 million and \$0.8 million, respectively.

There was no unrecognized compensation expense related to stock options as of December 31, 2017.

Cash proceeds received from the option exercises for the years ended December 31, 2016 and 2015 were \$1.1 million and \$1.8 million, respectively.

Restricted Stock Units

Nonvested restricted stock unit awards as of December 31, 2017 and 2016, and changes during the year ended December 31, 2017 were as follows:

| | Shares (thousands) | Average Grant Date Fair Value |
|--------------------------------|--------------------|----------------------------------|
| Nonvested at December 31, 2016 | 833 | \$17.23 |
| Granted | 720 | 15.04 |
| Vested | (312) | 14.87 |
| Forfeited | (159) | 17.37 |
| Nonvested at December 31, 2017 | 1,082 | \$16.43 |

Weighted

As of December 31, 2017, there was \$12.0 million of unrecognized share-based compensation which will be recognized over a weighted-average period of 1.9 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.

Performance Share Units

Nonvested performance share unit awards as of December 31, 2017 and 2016, and changes during the year ended December 31, 2017, were as follows:

| | Shares (thousands) | Weighted Average Grant Date Fair Value |
|--------------------------------|--------------------|--|
| Nonvested at December 31, 2016 | 37 | \$16.73 |
| Granted | 304 | 16.30 |
| Forfeited | (20) | 16.37 |
| Nonvested at December 31, 2017 | 321 | \$16.34 |

As of December 31, 2017, there was \$2.0 million of unrecognized compensation expense related to performance share unit awards, which is expected to be recognized over a weighted-average period of 2.1 years.

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

Note 16. Segment Information

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 44.9% of the Company's consolidated net sales in 2017.

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 25.4% of the Company's consolidated net sales in 2017.

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 commercial and digital print, direct mail, packaging, forms, labels, manuals, statement printing, logistics services and digital and creative solutions. Additionally, this segment includes the Company's business process outsourcing 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 29.7% of the Company's consolidated net sales in 2017.

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 international cash resources to meet local liquidity needs.

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

Information by Segment

The Company utilizes 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.

| | Total Sales | Intersegment Sales | Net Sales | Income (Loss) from Operations | Assets of Operations | Depreciation and Amortization | Capital Expenditures |
|------------------------------|------------------|-----------------------|--------------|--|----------------------|-------------------------------------|-------------------------|
| Year ended December 31, 2017 | | | | | | | |
| Variable Print | \$3,129.1 | \$ (16.0) | \$3,113.1 | \$ 189.0 | \$1,514.0 | \$114.7 | \$ 31.7 |
| Strategic Services | 1,936.5 | (170.8) | 1,765.7 | 3.4 | 577.7 | 18.0 | 7.3 |
| International | 2,104.0 | (43.2) | 2,060.8 | 89.2 | 1,614.8 | 54.6 | 45.9 |
| Total operating segments | 7,169.6 | (230.0) | 6,939.6 | 281.6 | 3,706.5 | 187.3 | 84.9 |
| Corporate | | | | (55.1) | 198.0 | 4.1 | 23.6 |
| Total operations | \$7,169.6 | \$(230.0) | \$6,939.6 | \$ 226.5 | \$3,904.5 | \$191.4 | \$108.5 |
| 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 | 2,003.3 | (42.6) | 1,960.7 | 150.7 | 1,398.3 | 61.0 | 32.8 |
| Total operating segments | 7,042.2 | (209.2) | 6,833.0 | (172.0) | 3,621.6 | 201.9 | 102.4 |
| Corporate | | | | (128.6) | 647.2 | 2.3 | 20.7 |
| Total operations | \$7,042.2 | \$(209.2) | \$6,833.0 | \$(300.6) | \$4,268.8 | \$204.2 | \$123.1 |
| 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 | 2,101.8 | (40.6) | 2,061.2 | 86.7 | 1,424.1 | 75.7 | 45.4 |
| Total operating segments | 7,077.9 | (197.2) | 6,880.7 | 334.4 | 4,050.1 | 229.3 | 116.7 |
| Corporate | | | | (97.1) | 226.2 | 3.2 | 16.9 |
| Total operations | <u>\$7,077.9</u> | <u>\$(197.2)</u> | \$6,880.7 | \$ 237.3 | \$4,276.3 | <u>\$232.5</u> | <u>\$133.6</u> |

Corporate assets primarily consisted of the following items at December 31, 2017, 2016 and 2015:

| | 2017 | 2016 | 2015 |
|--|-----------|---------|-----------|
| Cash and cash equivalents | \$ (37.5) | \$ 19.3 | \$ (45.9) |
| Deferred income tax assets, net of valuation allowances | 36.7 | 67.5 | 41.8 |
| Software, net | 41.6 | 43.0 | 48.5 |
| Deferred compensation plan and Company owned life insurance assets | 88.6 | 75.3 | 77.4 |
| Investment in LSC and Donnelley Financial | _ | 328.7 | |
| Property, plant and equipment, net | 29.6 | 30.2 | 41.6 |
| Other | 39.0 | 83.2 | 62.8 |
| Total Corporate assets | \$198.0 | \$647.2 | \$226.2 |

Restructuring, impairment and other charges-net by segment for the years ended December 31, 2017, 2016 and 2015 are described in Note 4, *Restructuring, Impairments and Other Charges*.

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

Note 17. Geographic Area and Products and Services Information

The following table presents net sales by geographic region for the years ended December 31, 2017, 2016 and 2015. Net sales by geographic region are based upon the sales location. Certain prior year amounts were restated to conform to the Company's current geographic regions.

| | 2017 | 2016 | 2015 |
|------------------------|-----------|-----------|-----------|
| U.S | \$5,233.0 | \$5,250.3 | \$5,182.3 |
| Asia | 857.3 | 703.5 | 731.1 |
| Europe | 455.0 | 482.8 | 559.9 |
| Other | | 396.4 | 407.4 |
| Consolidated net sales | \$6,939.6 | \$6,833.0 | \$6,880.7 |

The following table presents long-lived assets by geographic region at December 31, 2017, 2016 and 2015. Long-lived assets include net property, plant and equipment, noncurrent deferred tax assets and other noncurrent assets. Certain prior year amounts were restated to conform to the Company's current geographic regions.

| | 2017 | 2016 | 2015 |
|--------------------------------|---------|---------|-----------|
| U.S | \$642.0 | \$720.1 | \$ 732.3 |
| Asia | 127.6 | 102.6 | 111.5 |
| Europe | 81.0 | 65.3 | 68.0 |
| Other | 105.2 | 105.9 | 107.0 |
| Consolidated long-lived assets | \$955.8 | \$993.9 | \$1,018.8 |

The following table summarizes net sales by the Company's products and services categories for the years ended December 31, 2017, 2016 and 2015:

| Products and services | 2017 Net Sales | 2016 Net Sales | 2015 Net Sales |
|--|-------------------|-------------------|-------------------|
| Commercial, digital print and related products | \$2,586.8 | \$2,539.1 | \$2,446.3 |
| Statements | 556.4 | 561.3 | 595.3 |
| Direct mail | 546.3 | 537.4 | 530.2 |
| Labels | 470.4 | 472.1 | 505.3 |
| Packaging and related products | 566.7 | 464.6 | 482.5 |
| Forms | 284.5 | 329.2 | 350.0 |
| Global Turnkey Solutions | 314.9 | 321.7 | 345.9 |
| Total products | \$5,326.0 | \$5,225.4 | \$5,255.5 |
| Logistics services | 1,244.7 | 1,242.5 | 1,227.7 |
| Business process outsourcing | 216.3 | 223.7 | 241.9 |
| Digital and creative solutions | 152.6 | 141.4 | 155.6 |
| Total services | 1,613.6 | 1,607.6 | 1,625.2 |
| Total net sales | \$6,939.6 | \$6,833.0 | \$6,880.7 |

Note 18. 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.

Beginning in January 2010, the three-year cumulative inflation for Venezuela using the blended Consumer Price Index and National Consumer Price Index 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.

In February 2015, the Venezuelan government discontinued the Supplementary System for the Administration of Foreign Currency 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.

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

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 19. New Accounting Pronouncements

In February 2018, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2018-02 "Income Statement—Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income," which permits the reclassification of tax effects stranded in accumulated other comprehensive income to retained earnings as a result of the Tax Act. The standard also requires entities to disclose whether or not they elected to reclassify the tax effects related to the Tax Act as well as their policy for releasing income tax effects from accumulated other comprehensive income. The standard allows the option of applying either a retrospective adoption, meaning the standard is applied to all periods in which the effect of the Tax Act is recognized, or applying the amendments in the period of adoption, meaning an adjustment is made to shareholder's equity as of the beginning of the reporting period. ASU 2018-02 will be effective in the first quarter of 2019; however early adoption is permitted for interim and annual periods, including the reporting period in which the Tax Act was enacted. The Company is currently evaluating the impact of ASU 2018-02 on the Consolidated Financial Statements.

In January 2018, the FASB released guidance on the accounting for tax on the global intangible low-taxed income ("GILTI") provisions in the Tax Act. The GILTI provisions impose a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. The guidance indicates that either accounting for deferred taxes related to GILTI inclusions or treating any taxes on GILTI inclusions as period cost are both acceptable methods subject to an accounting policy election. The Company has not yet completed its assessment and therefore has not yet elected an accounting policy.

In March 2017, FASB issued ASU No. 2017-07 "Compensation—Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost," which changes the presentation of net periodic pension and postretirement benefit cost (net benefit cost) within the Statement of Operations. Under the current guidance, net benefit cost is reported as an employee cost within income from operations. The amendment requires the bifurcation of net benefit cost, with the service cost component to be presented with other employee compensation costs in income from operations while the other components will be reported separately outside of income from operations. ASU No. 2017-07 will be effective in the first quarter of 2018 and is required to be retrospectively adopted. Had this guidance been adopted as of January 1, 2017, income from operations within the Consolidated Statements of Operations for the year ended December 31, 2017 would have been lower by \$15.1 million and other non-operating income would have increased \$15.1 million.

In January 2017, the FASB issued 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 Company has elected to early adopt this guidance and has applied this guidance to all impairment analyses performed after January 1, 2017.

In November 2016, the FASB issued ASU No. 2016-18 "Statement of Cash Flows (Topic 230): Restricted Cash." This update requires that restricted cash and cash equivalents be included as components of total cash and cash equivalents as presented on the statement of cash flows. ASU No. 2016-18 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017 and a retrospective transition method is required. Early adoption is permitted, including adoption in an interim period. The Company elected to early adopt this guidance in the fourth quarter of 2017. Prior to adoption, the Company presented changes in restricted cash and cash equivalents in the investing section of its Consolidated Statement of Cash Flows. The adoption resulted in a decrease of \$4.3 million and \$0.5 million, for the years ended December 31, 2016 and 2015, respectively, in net cash used in investing activities; a decrease of \$1.5 million, for the year ended December 31, 2016, in net cash provided by financing activities; and an increase of \$0.7 million and \$2.4 million, for the years ended December 31, 2016 and 2015, respectively, in the effect of exchange rates on cash, cash equivalents and restricted cash within the Consolidated Statement of Cash Flows. There was no impact to financial results.

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

In August 2016, the FASB issued ASU No. 2016-15 "Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments." This update addresses whether to present certain specific cash flow items as operating, investing or financing activities. The amendments in this update are effective for public entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017 and are required to be retroactively adopted. Early adoption is permitted, including adoption in an interim period. The Company elected to early adopt this guidance in the fourth quarter of 2017. The adoption resulted in an increase of \$2.0 million and \$14.0 million, for the years ended December 31, 2016 and 2015, respectively, in net cash provided by operating activities; a decrease of \$5.6 million and an increase of \$5.7 million, for the years ended December 31, 2016 and 2015, respectively, in net cash used in investing activities; and a decrease of \$7.6 million and an increase of \$8.3 million, for the years ended December 31, 2016 and 2015, respectively, in net cash provided by financing activities and net cash used in financing activities within the Consolidated Statement of Cash Flows. There was no impact to financial results.

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 within 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. This guidance is to be applied using a modified retrospective transition method, with a cumulative adjustment to retained earnings. The Company adopted this guidance as of January 1, 2017. The adoption had an immaterial impact on the Company's consolidated financial statements.

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 currently 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 the results of management's evaluation, the most impactful aspects of the guidance relate to the timing of recognition for the revenue from inventory billed but not yet shipped. Currently, the Company defers revenue for inventory billed but not yet shipped while under the new revenue standard, the Company will generally be able to recognize revenue for certain completed inventory billed but not yet shipped at the customer's direction. In addition, the adoption of this standard will change the timing of revenue recognition for most of our logistics business from at delivery to over the transit period as our performance obligation is completed. Due to the short transit period of our logistics performance obligations, we do not expect to have a material impact on the results of operations, financial condition or cash flows once implemented. The Company has evaluated and designed the necessary changes to its business processes, systems and controls to support recognition and disclosure under the new standard. The Company adopted the standard on January 1, 2018 and applied the modified retrospective approach. The Company expects to recognize an approximate \$14 million cumulative effect of applying the new revenue standard as a credit adjustment to the 2018 opening balance of accumulated deficit.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of R.R. Donnelley & Sons Company

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of R.R. Donnelley & Sons Company and subsidiaries (the "Company") as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, 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) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2017, 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, 2018 expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ DELOITTE & TOUCHE LLP Chicago, Illinois February 28, 2018

We have served as the Company's auditor since 2002.

UNAUDITED INTERIM FINANCIAL INFORMATION (In millions, except per-share data)

| | Year Ended December 31, | | | | |
|--|-------------------------|-------------------|------------------|-------------------|-----------|
| | First Quarter | Second Quarter | Third Quarter | Fourth Quarter | Full Year |
| 2017 | | | | | |
| Net sales | \$1,658.9 | \$1,620.0 | \$1,734.9 | \$1,925.8 | \$6,939.6 |
| Gross profit | 327.8 | 303.1 | 324.4 | 365.0 | 1,320.3 |
| Income from operations | 47.4 | 38.6 | 35.9 | 104.6 | 226.5 |
| Net (loss) earnings | (49.8) | 76.7 | (7.8) | (52.3) | (33.2) |
| Less: income attributable to noncontrolling interests | 0.3 | 0.2 | 0.2 | 0.5 | 1.2 |
| Net (loss) earnings attributable to RRD common stockholders | (50.1) | 76.5 | (8.0) | (52.8) | (34.4) |
| Basic net (loss) earnings per share attributable to RRD common stockholders: | | | | | |
| Net (loss) earnings attributable to RRD stockholders | (0.71) | 1.09 | (0.11) | (0.75) | (0.49) |
| Diluted net (loss) earnings per share attributable to RRD common stockholders: | | | | | |
| Net (loss) earnings attributable to RRD stockholders | (0.71) | 1.09 | (0.11) | (0.75) | (0.49) |
| Closing stock price high | \$ 18.28 | \$ 14.20 | \$ 12.74 | \$ 10.66 | \$ 18.28 |
| Closing stock price low | \$ 11.35 | \$ 11.21 | \$ 8.66 | \$ 7.32 | \$ 7.32 |
| Closing stock price at quarter-end | \$ 12.11 | \$ 12.54 | \$ 10.30 | \$ 9.30 | \$ 9.30 |
| 2016 | | | | | |
| Net sales | \$1,632.5 | \$1,616.0 | \$1,725.6 | \$1,858.9 | \$6,833.0 |
| 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 RRD common stockholders | 39.8 | (14.5) | (7.1) | (514.1) | (495.9) |
| Basic net earnings (loss) per share attributable to RRD 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 RRD stockholders | 0.57 | (0.21) | (0.10) | (7.34) | (7.09) |
| Diluted net earnings (loss) per share attributable to RRD 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 RRD 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 |

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, 2017 | | | | |
|---|---|---|--|--------------------------------|---|
| | First Quarter | Second Quarter | Third Quarter | Fourth Quarter | Full Year |
| Restructuring, impairment and other charges—net | \$ 9.1 | \$ 3.8 | \$33.8 | 6.3 | \$ 53.0 |
| Spinoff-related transaction expenses | 2.1 | 1.2 | _ | _ | 3.3 |
| Net loss (gain) on investments | 50.3 | (92.4) | (1.6) | _ | (43.7) |
| Pension settlement charges | _ | _ | _ | 1.6 | 1.6 |
| Loss on debt extinguishments | | 13.6 | 6.5 | | 20.1 |
| Total charges before taxes | \$61.5 | \$(73.8) | \$38.7 | \$ 7.9 | \$ 34.3 |
| Tax expense related to the enactment of the Tax Act | _ | _ | _ | 110.3 | 110.3 |
| Deferred income tax benefit | | | | (3.0) | (3.0) |
| Total charges, net of taxes | \$60.2 | \$(80.6) | \$29.1 | \$109.8 | \$118.5 |
| | | Year ende | d Decembe | r 31 2016 | |
| | | i cai chac | u Decembe | 1 31, 2010 | |
| | First Quarter | Second Quarter | Third Quarter | Fourth Quarter | Full Year |
| Restructuring, impairment and other charges—net | | Second | Third | Fourth | |
| Restructuring, impairment and other charges—net Acquisition-related expenses | Quarter | Second Quarter | Third Quarter | Fourth Quarter | Year |
| Acquisition-related expenses | Quarter \$ 5.3 | Second Quarter \$ 8.2 | Third Quarter \$ 10.8 | Fourth Quarter | Year \$584.3 |
| Acquisition-related expenses Spinoff-related transaction expenses Gain from the sale of certain of the Company's affordable housing investments | Quarter \$ 5.3 | Second Quarter \$ 8.2 1.4 | Third Quarter \$ 10.8 | Fourth Quarter \$560.0 — 8.0 — | Year \$584.3 2.7 8.0 (0.1) |
| Acquisition-related expenses Spinoff-related transaction expenses Gain from the sale of certain of the Company's affordable housing investments Loss from the impairment of an equity investment | Quarter \$ 5.3 0.6 | Second Quarter \$ 8.2 1.4 — (0.1) | Third Quarter \$ 10.8 0.7 — — | Fourth Quarter \$560.0 | Year \$584.3 2.7 8.0 (0.1) 1.4 |
| Acquisition-related expenses Spinoff-related transaction expenses Gain from the sale of certain of the Company's affordable housing investments Loss from the impairment of an equity investment Pension settlement charges | Quarter \$ 5.3 0.6 | Second Quarter \$ 8.2 1.4 | Third Quarter \$ 10.8 0.7 0.3 | Fourth Quarter \$560.0 | Year \$584.3 2.7 8.0 (0.1) 1.4 21.1 |
| Acquisition-related expenses Spinoff-related transaction expenses Gain from the sale of certain of the Company's affordable housing investments Loss from the impairment of an equity investment Pension settlement charges OPEB curtailment gain | \$ 5.3 0.6 ——————————————————————————————————— | Second Quarter \$ 8.2 1.4 (0.1) 20.4 | Third Quarter \$ 10.8 0.7 0.3 (19.7) | Fourth Quarter \$560.0 | \$584.3 2.7 8.0 (0.1) 1.4 21.1 (19.5) |
| Acquisition-related expenses Spinoff-related transaction expenses Gain from the sale of certain of the Company's affordable housing investments Loss from the impairment of an equity investment Pension settlement charges | Quarter \$ 5.3 0.6 | Second Quarter \$ 8.2 1.4 (0.1) 20.4 — | Third Quarter \$ 10.8 0.7 0.3 (19.7) 0.3 | Fourth Quarter \$560.0 | Year \$584.3 2.7 8.0 (0.1) 1.4 21.1 (19.5) (11.9) |
| Acquisition-related expenses Spinoff-related transaction expenses Gain from the sale of certain of the Company's affordable housing investments Loss from the impairment of an equity investment Pension settlement charges OPEB curtailment gain | \$ 5.3 0.6 ——————————————————————————————————— | Second Quarter \$ 8.2 1.4 (0.1) 20.4 | Third Quarter \$ 10.8 0.7 0.3 (19.7) | Fourth Quarter \$560.0 | \$584.3 2.7 8.0 (0.1) 1.4 21.1 (19.5) |
| Acquisition-related expenses Spinoff-related transaction expenses Gain from the sale of certain of the Company's affordable housing investments Loss from the impairment of an equity investment Pension settlement charges OPEB curtailment gain Net gain on disposals of businesses | Quarter \$ 5.3 0.6 — — — — — (12.3) | Second Quarter \$ 8.2 1.4 (0.1) 20.4 — | Third Quarter \$ 10.8 0.7 0.3 (19.7) 0.3 | Fourth Quarter \$560.0 | Year \$584.3 2.7 8.0 (0.1) 1.4 21.1 (19.5) (11.9) |

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, 2018

/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, 2018

/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, 2017 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, 2018 | /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, 2017 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, 2018 | /s/ Terry D. Peterson |
|-------------------|--|
| | Terry D. Peterson Executive Vice President and Chief Financial Officer |







R.R. Donnelley & Sons Company

Reconciliation of a GAAP to Non-GAAP Net (Loss) Earnings Attributable to Common Stockholders Per Diluted Share
For the Twelve Months Ended December 31, 2017 and 2016
(UNAUDITED)

| | ve Months Ended per 31, 2017 | For the Twelve Months Ended December 31, 2016 | | |
|---|---------------------------------|---|--------|--|
| GAAP basis measure | \$ (0.49) | \$ | (6.95) | |
| Non-GAAP adjustments: | | | | |
| Restructuring, impairment and other charges - net | 0.57 | | 7.68 | |
| Acquisition-related expenses | _ | | 0.03 | |
| OPEB curtailment gains | _ | | (0.17) | |
| Loss on debt extinguishments | 0.18 | | _ | |
| Net gain on investments | (0.64) | | 0.02 | |
| Net gain on disposal of businesses | _ | | (0.16) | |
| Tax expense related to the enactment of the Tax Cuts and Jobs Act | 1.57 | | _ | |
| Other | 0.01 | | 0.24 | |
| Total Non-GAAP adjustments | 1.69 | | 7.64 | |
| Non-GAAP measure | \$ 1.20 | \$ | 0.69 | |

Reconciliation of Reported to Organic Consolidated Net Sales
For the Twelve Months Ended December 31, 2017
(UNAUDITED)

| | Consolidated |
|--|--------------|
| Reported net sales change | 1.6% |
| Less: | |
| Impact of acquisitions | 0.7% |
| Year-over-year impact of dispositions | (0.1%) |
| Year-over-year impact of new sales under the Commercial Agreements | 1.0% |
| Net organic sales change | 0.0% |

CORPORATE INFORMATION

CORPORATE HEADQUARTERS



RRD 35 West Wacker Drive, 36th Floor Chicago, Illinois 60601 312.326.8000 www.rrd.com

ANNUAL MEETING OF STOCKHOLDERS

Information about the RRD Annual Meeting of Stockholders is in our proxy statement, which is available online at www.rrd.com.

STOCK EXCHANGE LISTING

NYSE Stock Market Symbol: RRD

INVESTOR RELATIONS

Stockholders, securities analysts, portfolio managers and representatives of financial institutions seeking information about the company should contact Investor Relations at the company's address by calling 800.742.4455 or e-mailing investor.info@rrd.com.

ORDERING ADDITIONAL ANNUAL REPORTS

RRD's 2017 Annual Report may be obtained without charge by completing and submitting the form at our website, by writing to Investor Relations at the company's address or by calling 800.742.4455 during business hours.

FORMS 10-K & 10-Q

A copy of our Annual Report on Form 10-K for fiscal 2017 is included with this document and available at our website. Additional copies of our Annual Report on Form 10-K or interim financial reports filed with the SEC may be obtained by contacting our Investor Relations Department at 800.742.4455.

GLOBAL SOCIAL RESPONSIBILITY

RRD recognizes that businesses impact customers, employees, stockholders, communities and the environment. We work to go beyond legal obligations as we take steps to further improve the quality of life for employees and their families as well as for the local communities in which we live and work.

Please visit the RR Donnelley Global Corporate Social Responsibility Report at www.rrd.com to learn about our company's efforts relating to:



- Sustainability
- Diversity and Inclusion
- Environmental, Health and Safety
- Ethics and Compliance
- External Affairs / Community Relations

STOCK TRANSFER AGENT AND REGISTRAR

Stockholder correspondence should be mailed to:



Computershare P.O. Box 505000 Louisville, KY 40233-5000

Overnight correspondence should be sent to: Computershare 462 South 4th Street, Suite 1600 Louisville, KY 40202 Stockholder website:



www.computershare.com/investor Stockholder online inquiries: https://www.computershare.com/ContactUs

Telephone:



Inside the United States: 800.446.2617
Outside the United States:

781.575.2879

TDD/TTY for hearing impaired: 800.952.9245. Operators are available 8:00 a.m. to 5:00 p.m., Central Time, Monday-Friday. An interactive automated system is available around the clock every day.

REINVESTMENT AND DIRECT DEPOSIT OF DIVIDENDS

RRD stockholders have the opportunity to increase their holdings through a Dividend Reinvestment and Direct Stock Purchase Plan, which permits either dividend reinvestment, voluntary cash investments or both. Also, RRD stockholders may elect to have their dividends directly deposited electronically in a checking or savings account. Stockholders may request additional information about the Dividend Reinvestment and Direct Stock Purchase Plan and direct deposit of dividends by writing or calling the Stock Transfer Agent.

INFORMATION CONTACTS

Computershare Automated Telephone Response Center may be reached 24 hours a day at 800.446.2617. Operators are available from 8:00 a.m. to 8:00 p.m., Eastern Time, in accordance with the New York Stock Exchange calendar, and 9:00 a.m. to 5:00 p.m. Eastern Time on Saturday, and will perform the following functions over the telephone when a shareholder identifies his or her account by providing a taxpayer identification number, registration of the securities and the address of record:

- information regarding stock transfer requirements
- · address changes
- replacement of dividend checks
- duplicate 1099 forms and W-9 tax certification forms
- transcripts of stockholder accounts
- duplicate reinvestment statements
- requests for dividend reinvestment brochures and enrollment forms
- information regarding the direct deposit of dividends

Requests for information on topics not covered here should be sent in writing, with reference to the company, to the address noted for the Stock Transfer Agent and Registrar.

SAFE HARBOR STATEMENT

This document includes forward-looking statements. We have based these forward-looking statements on our current expectations and projections about our future results. When we use words such as "anticipates," "believes," "expects," "estimates," "intends," "plans," and similar expressions, we do so to identify forward-looking statements. Our actual results may differ materially from those anticipated in these forward-looking statements, which involve assumptions, risks and uncertainties.

As of December 31, 2017, the Company had approximately 42,713 employees.

As of March 16, 2018, there were approximately 4,097 stockholders of record of our common stock.





99% of Fortune 100 96% of Fortune 500 89% of Fortune 1000 43,000 Employees Worldwide 328 Locations

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