UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
Form 10-K

(Mark One)

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the Fiscal Year Ended December 31, 2018

or

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

Commission File No. 1-38300

CANNAE HOLDINGS, INC.
(Exact name of registrant as specified in its charter)

Delaware	**82-1273460**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
1701 Village Center Circle **Las Vegas, Nevada 89134**	**(702) 323-7330**
(Address of principal executive offices, including zip code)	*(Registrant's telephone number, including area code)*

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

Title of Each Class	Name of Each Exchange on Which Registered
Cannae Common Stock, $0.0001 par value	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☑ No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K, or any amendment to this Form 10-K. o

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

Large accelerated filer ☑	Accelerated filer o	
Non-accelerated filer o	Smaller reporting company o	Emerging growth company o

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

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

The aggregate market value of the shares of Cannae Common Stock held by non-affiliates of the registrant as of June 30, 2018, was $1,246,373,513 based on the closing price of $18.55 as reported by the New York Stock Exchange.

As of February 28, 2019 there were 72,223,692 shares of Cannae common stock outstanding.

The information in Part III hereof for the fiscal year ended December 31, 2018, will be filed within 120 days after the close of the fiscal year that is the subject of this Report.

CANNAE HOLDINGS, INC.
FORM 10-K
TABLE OF CONTENTS

PART I

Item 1. *Business*

Introductory Note

The following describes the business of Cannae Holdings, Inc. and its subsidiaries. Except where otherwise noted, all references to “we,” “us,” “our,” "Cannae", "Cannae Holdings", "the Company," or “CNNE” are to Cannae Holdings, Inc. and its subsidiaries, taken together.

Company Background

On November 17, 2017, Fidelity National Financial, Inc. (“FNF”) redeemed each outstanding share of its FNF Ventures ("FNFV") Group common stock, par value $0.0001, for one share of common stock, par value $0.0001, of a newly formed entity, Cannae Holdings, Inc., with cash in lieu of fractional shares (the "Split-Off"). In conjunction with the Split-Off, FNF contributed to us its majority and minority equity investment stakes in a number of entities, including American Blue Ribbon Holdings, LLC ("ABRH"), Ceridian Holding, LLC, T-System Holdings, LLC ("T-System"), and various other controlled portfolio companies and other minority equity investments. On November 20, 2017, Cannae common stock began “regular-way” trading on The New York Stock Exchange under the “CNNE” stock symbol.

On April 26, 2018, our minority-owned subsidiary Ceridian HCM Holding, Inc. ("Ceridian"), the parent of Ceridian Holding, LLC, completed its initial public offering (the "Ceridian IPO"). Following the Ceridian IPO, Ceridian's shares trade on the New York Stock Exchange ("NYSE") and the Toronto Stock Exchange ("TSX") under the ticker symbol “CDAY.” We retained the majority of our investment in Ceridian following its IPO. As of December 31, 2018, we own 23.5% of the outstanding common stock of Ceridian.

On February 8, 2019, Cannae and an investment consortium (the “Consortium”) including CC Capital Partners LLC and Thomas H. Lee Partners along with other investors completed the previously announced acquisition of The Dun & Bradstreet Corporation, a Delaware corporation ("Dun & Bradstreet")(the "DNB Acquisition"). Of our previously disclosed $900.0 million commitment to purchase common equity of the parent of Dun & Bradstreet, we retained and funded a $505.6 million investment, representing 24.5% of the outstanding common equity, and syndicated the remainder to other investors.

Refer to discussion under Recent Developments in Item 7 of Part II of this Annual Report on Form 10-K (this "Annual Report") for further information on the Ceridian IPO and DNB Acquisition and related transactions.

Description of Business

We are a holding company engaged in actively managing and operating a group of companies and investments with a net asset value of approximately $1.1 billion as of December 31, 2018. Our business consists of managing and operating majority-owned subsidiaries, as well as making additional majority and minority equity portfolio investments in businesses, in order to achieve superior financial performance and maximize the value of these assets. Our primary investments as of December 31, 2018 include our ownership interest in Ceridian; majority equity ownership stakes in ABRH, 99 Restaurants Holdings, LLC ("99 Restaurants") and T-System and various other controlled portfolio companies and minority equity and debt investments.

As of December 31, 2018, we had the following reportable segments:

Restaurant Group. This segment consists of the operations of ABRH and 99 Restaurants, in which we have 65.4% and 88.5% ownership interests, respectively. ABRH and its affiliates are the owners and operators of the O'Charley's, Village Inn and Bakers Square food service and restaurant concepts, as well as the Legendary Baking bakery operation. 99 Restaurants and its affiliates are the owners and operators of the Ninety Nine Restaurants & Pub restaurant concept. ABRH and 99 Restaurants collectively operate more than 550 company and franchise family and casual dining restaurants and bakery operations in 40 states and Guam.

On November 6, 2018, we completed an internal restructuring of the Restaurant Group whereby 99 Restaurants was separated from ABRH. Refer to discussion under Recent Developments in Item 7 of Part II of this Annual Report for further information.

Ceridian. This segment consists of our 23.5% ownership interest in Ceridian. Ceridian is a global human capital management (“HCM”) software company. Dayforce, Ceridian's flagship cloud HCM platform, provides human resources (“HR”), payroll, benefits, workforce management, and talent management functionality. In addition to Dayforce, Ceridian sells Powerpay, a cloud HR and payroll solution for the Canadian small business market, through both direct sales and established partner channels. Ceridian also continues to support customers using its Bureau solutions, which Ceridian generally stopped actively selling to new customers in 2012, following the acquisition of Dayforce. Ceridian invests in maintenance and necessary updates to support its Bureau customers and continues to migrate them to Dayforce. We account for our investment in Ceridian under the equity method of accounting and therefore its results of operations do not consolidate into ours.

T-System. This segment consists of the operations of our 97%-owned subsidiary, T-System, acquired on October 16, 2017. T-System is a provider of clinical documentation and coding solutions to hospital-based and free-standing emergency departments and urgent care facilities. T-System organizes itself into two businesses. The Clinical Documentation business offers software solutions providing clinical staff with full workflow operations that drive documentation completeness and revenue optimization to more than 240 customers at more than 450 customer sites. Additionally, the patented T-Sheet is the industry standard for emergency department documentation, with more than 200 customers at more than 475 customer sites. The Coding Software & Outsourced Solutions business provides a full-service outsourced coding solution as well as a cloud-based software-as-a-service solution for self-service coding. These offerings help more than 75 customers at over 400 sites optimize their revenue cycle workflow and customer revenue reimbursement through improved coding accuracy and compliance and coder productivity compared to in-house coding.

Corporate and Other. This segment consists of our share in the operations of controlled and uncontrolled portfolio companies including our 24.8% equity interest in Triple Tree Holdings, LLC ("Triple Tree"), our wholly-owned subsidiary Cannae Timber Resources LLC ("CTR"), our interest in the debt of Colt Holding LLC ("Colt Defense"), and other various majority and minority equity investments. Triple Tree is an independent, research-driven investment banking firm focused on mergers and acquisitions, financial restructuring, and principal investing services for innovative, high-growth businesses in the healthcare industry. CTR and its subsidiaries currently operate and invest in golf and real estate properties and develop, manage and operate residential and recreational properties, including a 1,800-acre ranch-style luxury resort and residential community in Oregon and an 18-hole championship golf facility in Idaho. Colt Defense researches, develops, manufactures and sells firearms for military and personal defense and recreational purposes in the U.S. and internationally. As of December 31, 2018, we own debt of Colt Defense with a market value of $17.8 million.

Strategy

We actively manage a group of companies and investments with a net asset value of approximately $1.1 billion as of December 31, 2018. Our strategy for the Company is to continue our activities with respect to such business investments to achieve superior financial performance, maximize and ultimately monetize the value of those assets and to continue to pursue similar investments in businesses and to grow and achieve superior financial performance with respect to such newly acquired businesses.

Restaurant Group. Our restaurant operations are focused in the family dining and casual dining segments of the restaurant industry. The Restaurant Group's strategy is to achieve long-term profit growth and drive increases in same store sales and guest counts. We have a highly experienced management team that is focused on enhancing the guest experience at our restaurants and building team member engagement. We also utilize a shared service platform that takes advantage of the combined back-office synergies of our restaurant operating companies. We expect to continue to maintain a strong balance sheet for our Restaurant Group to provide stability in all operating environments.

Ceridian. Ceridian's business has transformed from a legacy service-bureau model into a cloud-based provider model, and in the second half of 2016, Cloud revenue surpassed Bureau revenue for the first time. Ceridian's flagship cloud offering, Dayforce, is a cloud solution that meets HCM needs with one employee record and one user experience throughout the application. As evidenced by its more than 60% compound annual growth rate since 2012, we believe that the Dayforce cloud offering, built on a single database, enjoys a competitive advantage in the marketplace. We believe Ceridian's Dayforce offering is a market leader as shown by both extensive recognition and industry awards. Nucleus Research named Dayforce as the leader in both HCM technology and Workforce Management, based on functionality and usability. In addition, Gartner Peer Insights placed Ceridian's Dayforce offering in the leader quadrant in global payroll services, and Ventana Research found Dayforce as the leader in both usability and capability in its Value Index. During 2016, Ceridian won several awards for Dayforce, including a TekTonic Award from HRO Today Magazine, a Gold American Business Award for best new product, and a Ventana Research Technology Innovation Award, among others.

T-System. T-System is engaged in providing clinical, financial, operational, and regulatory solutions for hospital emergency room ("ER") departments, free-standing emergency departments ("ED"), and urgent care healthcare facilities. T-System offers documentation solutions, including EV, an emergency department information system; EV for physicians, a solution with ER-specific clinical content and workflow for emergency physicians; T Sheets Digital, a documentation solution for urgent care; and T Sheets, which provides patient care through medical records/documentation and optimized reimbursement. We also provide charge capture and coding solutions that combine intelligent coding technology with services to improve quality and compliance, and result in accurate coding and financial outcomes for various types of facilities ranging from critical access hospitals to children's hospitals; and Advanced Coding System, which facilitates accurate coding for simple encounters and multiple patient complaints, and ensures optimal reimbursement for care provided. In the past several years, there has been an increased push for interoperability across systems to address the fact that patient records will contain information from more than one health care IT system. We believe that we are positioned to take the steps to create interoperability between T-System solutions and other large IT systems.

Acquisitions, Dispositions, Minority Owned Operating Affiliates and Financings. Acquisitions have been an important part of our growth strategy. Dispositions have been an important aspect of our strategy of returning value to shareholders. On an ongoing basis, with assistance from our advisors, we actively evaluate possible transactions, such as acquisitions and dispositions of business units and operating assets and business combination transactions.

In the future, we may seek to sell certain investments or other assets to increase our liquidity. Further, our management has stated that we may make acquisitions in lines of business that are not directly tied to, or synergistic with, our current operating segments. In the past we have obtained majority and minority investments in entities and securities where we see the potential to achieve above market returns. Fundamentally our goal is to acquire quality companies that are well-positioned in their respective industries, run by best-in-class management teams in industries that have attractive organic and acquired growth opportunities. We leverage our operational expertise and track record of growing industry leading companies and our active interaction with management of acquired companies, directly or through our board of directors, to ultimately provide value for our shareholders.

There can be no assurance that any suitable opportunities will arise or that any particular transaction will be completed. We have made a number of acquisitions and dispositions over the past several years to strengthen and expand our service offerings and customer base in our various businesses, to expand into other businesses or where we otherwise saw value, and to monetize investments in assets and businesses.

Through the date of this Annual Report, we have made significant progress both monetizing currently held investments and deploying capital toward new investments. Refer to discussion under Recent Developments in Item 7 of Part II of this Annual Report for further information.

Intellectual Property

Restaurant Group. We regard our service marks, including "O'Charley's", "Ninety Nine", "Village Inn", "Legendary Baking", and "Bakers Square", and other service marks and trademarks as having significant value and as being important factors in the marketing of our restaurants. We have also obtained trademarks for several of our menu items and for various advertising slogans. We are aware of names and marks similar to our service marks and trademarks used by other persons in certain geographic areas where we have restaurants. However, we believe such uses will not adversely affect us. Our policy is to pursue registration of our marks whenever possible and to oppose vigorously any infringement of our marks.

We license the use of our registered trademarks and service marks to franchisees and third parties through franchise arrangements and licenses. The franchise and license arrangements restrict franchisees' and licensees' activities with respect to the use of our trademarks and service marks, and impose quality control standards in connection with goods and services offered in connection with the trademarks and service marks.

Ceridian. Ceridian and its subsidiaries own or have the rights to various trademarks, trade names and service marks, including the following: Ceridian®, Dayforce® and various logos used in association with these terms.

T-System.T-System's intellectual property includes the following: T Sheets™, T-System EV™, and T-System EV4P™. T Sheets is one of the most widely used and accepted documentation systems in emergency medicine. T Sheets is built with the most comprehensive and up-to-date clinical content and serves as the clinical documentation backbone of T-System's industry leading software solutions. T-System EV™ and EV4P™ are category-leading best-of-breed software solutions used by the episodic care market.

Seasonality

Restaurant Group. Average weekly sales per restaurant are typically higher in the first and fourth quarters than in other quarters, and the Restaurant Group typically generates a disproportionate share of its earnings from operations in the first and fourth quarters. Holidays, severe weather and other disruptive conditions may impact sales volumes seasonally in some operating regions. Our revenues in future periods will continue to be subject to these and other factors that are beyond our control and, as a result, are likely to fluctuate.

Ceridian. Ceridian has in the past and expects in the future to experience seasonal fluctuations in its revenues and new customer contracts with the fourth quarter historically being its strongest quarter for new customer contracts, renewals, and customer go-lives. Although the growth of Ceridian's cloud solutions and the ratable nature of its fees makes this seasonality less apparent in its overall results of operations, we expect Ceridian's revenue to fluctuate quarterly and to be higher in the fourth and first quarters of each year. Fourth quarter revenue is driven by year-end processing fees and Dayforce customer go-lives; and first quarter revenue is driven by revenue earned for printing of year-end tax packages.

T-System. The Clinical Documentation segment of T-System's business is impacted by seasonal volume increases in the first and fourth quarters compared to other quarters. The increase in charts coded is generated by seasonal flu volumes that impact the visits to health care facilities.

Inventory

Restaurant Group. In the restaurant group's Legendary Baking business, sales of baked goods are greatest during the holiday season in the fourth quarter. As a result of inventory requirements to meet this demand, inventory is built up over the course of the first nine months of the year.

Competition

Restaurant Group. The restaurant industry is highly competitive and is often affected by changes in consumer tastes and discretionary spending patterns; changes in general economic conditions; public safety conditions or concerns; demographic trends; weather conditions; the cost of food products, labor, energy and other operating costs; and governmental regulations. Higher labor costs due to state and local minimum wage increases and shopping pattern shifts to e-commerce and “ready to eat” grocery and convenience stores have had a negative impact on restaurant performance, particularly in the casual and family dining restaurants in which the Company operates.

The restaurant industry is also characterized by high capital investments for new restaurants and relatively high fixed or semi-variable restaurant operating expenses. Because of the high fixed and semi-variable expenses, changes in sales in existing restaurants are generally expected to significantly affect restaurant profitability because many restaurant costs and expenses are not expected to change at the same rate as sales. Restaurant profitability can also be negatively affected by inflationary and regulatory increases in operating costs and other factors. The most significant commodities that may affect our cost of food and beverage are beef, seafood, poultry, and dairy, which accounted for approximately half of our overall cost of food and beverage in the past. Generally, temporary increases in these costs are not passed on to guests; however, in the past, we have adjusted menu prices to compensate for increased costs of a more permanent nature. Our revenues in future periods will continue to be subject to these and other factors that are beyond our control and, as a result, are likely to fluctuate.

Ceridian. The market for HCM products is highly competitive. Ceridian's products compete primarily on the basis of technology, delivered functionality and performance, price, and service. Its competitors include (i) large service bureaus, primarily Automatic Data Processing Inc.; (ii) companies, such as Oracle, Kronos, Lawson, Ultimate Software and Workday that offer human resource management and payroll software products for use on mainframes, client/server environments and/or Web servers; and (iii) smaller service providers, such as Paychex.

T-System. The market for healthcare solutions is subject to intense competition and subject to rapid technological change. T-System offers solutions and services to support the clinical, financial, and operational needs for hospital ER departments, free-standing EDs, and urgent care and family practice healthcare facilities. Our competitors include companies such as Allscripts Healthcare Solutions, Cerner Corporation, Medhost, and Epic Systems.

Due to the pace of change within the market, we expect that major software information system companies, start-up companies, and other companies would produce new software solutions or services that would compete with evolving industry standards and requirements.

Competitive Strengths

Proven management team. Our executive management team has a proven track record of investment identification and management. Our executive management's breadth of knowledge of capital markets allows us to identify companies and strategic assets with attractive value propositions, to structure investments to maximize their value, and to return the value created to shareholders.

Information Security

We and our unconsolidated affiliates are highly dependent on information technology networks and systems to securely process, transmit and store electronic information. Attacks on information technology systems continue to grow in frequency, complexity and sophistication. Such attacks have become a point of focus for individuals, businesses and governmental entities. These attacks can create system disruptions, shutdowns or unauthorized disclosure of confidential information, including non-public personal information, consumer data and proprietary business information.

We and our unconsolidated affiliates remain focused on making strategic investments in information security to protect the clients and information systems of our operating subsidiaries and unconsolidated affiliates. This includes both capital expenditures and operating expenses on hardware, software, personnel and consulting services. As the primary products and services of our operating subsidiaries and unconsolidated affiliates evolve, we apply a comprehensive approach to the mitigation of identified security risks. We have established risk management policies, including those related to information security and cybersecurity, designed to monitor and mitigate information security related risks.

Employees

As of February 1, 2019, Cannae and our consolidated subsidiaries had 26,413 full-time equivalent employees, which includes 25,920 in our Restaurant Group, 280 at T-System and 213 in the various businesses comprising our Corporate and other segment.

None of our employees are unionized or represented by any collective agency. We believe that our relations with employees are generally good.

Statement Regarding Forward-Looking Information

The statements contained in this Form 10-K or in our other documents or in oral presentations or other statements made by our management that are not purely historical are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including statements regarding our expectations, hopes, intentions, or strategies regarding the future. These statements relate to, among other things, future financial and operating results of the Company. In many cases, you can identify forward-looking statements by terminology such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “predict,” “potential,” or “continue,” or the negative of these terms and other comparable terminology. Actual results could differ materially from those anticipated in these statements as a result of a number of factors, including, but not limited to the following:

- changes in general economic, business, and political conditions, including changes in the financial markets;
- compliance with extensive government regulation of our operating subsidiaries and adverse changes in applicable laws or regulations or in their application by regulators;
- loss of key personnel that could negatively affect our financial results and impair our operating abilities;
- our potential inability to find suitable acquisition candidates, as well as the risks associated with acquisitions in lines of business that will not necessarily be limited to our traditional areas of focus, or difficulties integrating acquisitions;
- other risks detailed in "Risk Factors" below and elsewhere in this document and in our other filings with the SEC.

We are not under any obligation (and expressly disclaim any such obligation) to update or alter our forward-looking statements, whether as a result of new information, future events or otherwise. You should carefully consider the possibility that actual results may differ materially from our forward-looking statements.

Additional Information

The Company’s Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to reports filed pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), are filed with the SEC. The Company is subject to the informational requirements of the Exchange Act and files or furnishes reports, proxy statements and other information with the SEC. The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at www.sec.gov.

Our website address is www.cannaeholdings.com. We make available free of charge on or through our website our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports filed or furnished pursuant to the Exchange Act as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. However, the information found on our website is not part of this or any other report.

Item 1A. ***Risk Factors***

Factors Relating to the Company's Corporate History and Structure

We are a holding company and will depend on distributions from our subsidiaries for cash.

We are a holding company whose primary assets are the securities of our portfolio companies. Our ability to pay interest on our outstanding debt, if any, and our other obligations and to pay dividends, if any, is dependent on the ability of our subsidiaries to pay dividends or make other distributions or payments to us (such ability of our subsidiaries also being subject to certain restrictions under their respective credit agreements and other debt instruments, as applicable). If our portfolio companies are not able to pay dividends to us, we may not be able to meet our obligations or pay dividends on our common stock. The ability of the Cannae Holdings portfolio companies to pay dividends or to make other payments or advances to us depends on their individual operating results and any statutory, regulatory or contractual restrictions to which they may be or may become subject.

We have a limited operating history as a separate company upon which you can evaluate our performance.

We have a limited operating history as a public company. Accordingly, there can be no assurance that our business will be successful on a long-term basis. We may not be able to grow our businesses as planned and may not be profitable.

We may become subject to the Investment Company Act of 1940.

We do not believe that we are subject to regulation under the Investment Company Act of 1940, as amended (the "40 Act"). We were formed for the purpose of effecting the Split-Off and for controlling, operating or holding, as applicable, the FNFV Group's business and investments, including the portfolio companies. We engage primarily in the business of managing and operating our controlled subsidiaries. Our officers and any employees who provide services to us pursuant to the terms of our corporate services agreement with FNF devote their activities to the businesses of these portfolio companies. Our interest in the portfolio companies comprises substantially all of our assets and substantially all of our income, if any, is derived from restaurant revenue from our Restaurant Group, the revenue of T-System, and dividends and other distributions made on our interests in portfolio companies. Based on these factors, we believe that we are not an investment company under the 40 Act, including under Section 3(b)(1) of the 40 Act. If, at any time, we become primarily engaged in the business of investing, reinvesting or trading in securities, we could become subject to regulation under the 40 Act. Following any such change in our business and after giving effect to any applicable grace periods, we may be required to register as an investment company, which could result in significant registration and compliance costs, could require changes to our corporate governance structure and financial reporting, and could restrict our activities going forward. In addition, if we were to become inadvertently subject to the 40 Act, any violation of the 40 Act could subject us to material adverse consequences, including potentially significant regulatory penalties and the possibility that certain of our contracts would be deemed unenforceable.

Factors Relating to the Restaurant Businesses

General macroeconomic factors, including unemployment, energy prices and interest rates, and certain economic and business factors specific to the restaurant and bakery industries that are largely out of our restaurant businesses' control may materially and adversely affect consumer behavior and have a material adverse effect on our business, financial condition and results of operations.

General economic conditions may materially and adversely affect the financial condition and results of operations of our restaurant businesses, which we also refer to as our Restaurant Group companies. Recessionary economic cycles, a protracted economic slowdown, a worsening economy, increased unemployment, increased energy prices, rising interest rates, a downgrade of the United States ("U.S.") government's long-term credit rating, financial market volatility and unpredictability or other national, regional and local regulatory and economic conditions or other industry-wide cost pressures could affect consumer behavior and spending for restaurant dining occasions and result in increased pressure with respect to our Restaurant Group companies' pricing, guest count levels and commodity costs, which could lead to a decline in our Restaurant Group companies' sales and earnings. Job losses, foreclosures, bankruptcies and falling home prices could cause customers to make fewer discretionary purchases, and any significant decrease in our Restaurant Group companies' guest counts or profit will negatively impact their financial performance. In addition, if gasoline, natural gas, electricity and other energy costs increase, or credit card, home mortgage and other borrowing costs increase with rising interest rates, our Restaurant Group companies' customers may have lower disposable income and reduce the frequency with which they dine at restaurants, may spend less during each visit at our Restaurant Group companies' restaurants or may choose more inexpensive restaurants. These factors could also cause the Restaurant Group companies to, among other things, reduce the number and frequency of new restaurant openings, close restaurants or delay the reimaging of the Restaurant Group companies' existing restaurant locations.

Furthermore, we cannot predict the effects that actual or threatened armed conflicts, terrorist attacks, efforts to combat terrorism, including military action against any foreign state or local group located in a foreign state, heightened security requirements on local, regional, national or international economies or a failure to protect information systems for critical infrastructure, such as the electrical grid and telecommunications systems, could have on the Restaurant Group companies' operations, the economy or consumer confidence generally. Any of these events could affect consumer spending patterns or result in increased costs for the Restaurant Group companies due to security measures.

The business results of our Restaurant Group companies depend on a number of industry-specific factors as well, many of which are beyond the Restaurant Group companies' control. The full service dining sector of the restaurant industry is affected by seasonal fluctuation of sales volumes, consumer confidence, consumer spending patterns and consumer preferences, including changes in consumer tastes and dietary habits, and the level of consumer acceptance of our restaurant brands. The performance of individual restaurants may also be materially and adversely affected by factors applicable to those restaurants, such as demographic trends, severe weather, traffic patterns and the type, number and location of competing restaurants.

Unfavorable changes in the above factors or in other business and economic conditions affecting our Restaurant Group companies' customers or industry could increase costs, reduce guest counts in some or all restaurants or impose practical limits on pricing, any of which could lower profit margins and have a material adverse effect on our business, financial condition and results of operations.

The Restaurant Group companies could face significant competition for customers, real estate and employees and competitive pressure to adapt to changes in conditions driving customer demand. The Restaurant Group companies' inability to compete effectively may affect guest counts, sales and profit margins, which could have a material adverse effect on our business, financial condition and results of operations.

The restaurant industry is intensely competitive with a substantial number of restaurant operators that compete directly and indirectly with the Restaurant Group companies with respect to price, service, ambiance, brand, customer service, dining experience, location, food quality and variety and value perception of menu items and there are other well established competitors with substantially greater financial and other resources than the Restaurant Group companies. Some of our Restaurant Group companies' competitors advertise on national television, which may provide customers with greater awareness and name recognition than our Restaurant Group companies can achieve through their advertising efforts. There is also active competition for management personnel and attractive suitable real estate sites. Consumer tastes and perceptions, nutritional and dietary trends, guest count patterns and the type, number and location of competing restaurants often affect the restaurant business, and our Restaurant Group companies' competitors may react more efficiently and effectively to those conditions. For instance, prevailing health or dietary preferences or perceptions of our Restaurant Group companies' products may cause consumers to avoid certain menu items or products our Restaurant Group companies offer in favor of foods that are perceived as more healthy, and such choices by consumers could have a material adverse effect on our business, financial condition and results of operations. Further, our Restaurant Group companies face growing competition from the supermarket industry, with the improvement of their "convenient meals" in the deli and prepared food sections, from quick service and fast casual restaurants and online food delivery services as a result of food and beverage offerings by those food providers. As our Restaurant Group companies' competitors expand operations in markets where our restaurant businesses operate or expect to operate, we expect competition to intensify. If our Restaurant Group companies are unable to continue to compete effectively, their guest counts, sales and profit margins could decline, which could have a material adverse effect on our business, financial condition and results of operations.

Historically, customer spending patterns for the Restaurant Group companies' restaurants are generally highest in the fourth quarter of the year and lowest in the third quarter of the year. Sales activity during the holidays may affect seasonal sales volumes in some of the markets in which our restaurant businesses operate. The quarterly results of our Restaurant Group companies have been and will continue to be affected by the timing of new restaurant openings and their associated costs (which are often materially greater during the first several months of operation than thereafter), restaurant closures and exit-related costs, labor availability and costs for hourly and management personnel, profitability of restaurants, especially in new markets, trends in comparable restaurant sales, changes in borrowings and interest rates, changes in consumer preferences and competitive conditions, fluctuations in food and commodity prices, fluctuations in costs attributable to public company compliance and impairments of goodwill, intangible assets and property, fixtures and equipment. As a result of these and other factors, the Restaurant Group companies' financial results for any quarter may not be indicative of the results that may be achieved for a full fiscal year.

If our restaurant businesses are unable to effectively grow revenue and profitability at certain of their locations, our Restaurant Group companies may be required to record impairment charges to their restaurant assets, the carrying value of their goodwill or other intangible assets, which could have a material adverse effect on our financial condition and results of operations.

Our Restaurant Group companies assess the potential impairment of their long-lived assets whenever events or changes in circumstances indicate that the carrying value of the assets or asset group may not be recoverable. Factors considered include, but are not limited to, significant underperformance relative to historical or projected future operating results, significant changes in the manner in which an asset is being used, an expectation that an asset will be disposed of significantly before the end of its previously estimated useful life and significant negative industry or economic trends. Our Restaurant Group companies annually review and compare the carrying value of intangible assets, including goodwill, to the fair value. We cannot accurately predict the amount and timing of any recorded impairment to our Restaurant Group companies' assets. Should the value of goodwill or other intangible or long-lived assets become impaired, there could be a material adverse effect on our financial condition and results of operations.

Increased commodity, energy and other costs could decrease our Restaurant Group companies' profit margins or cause the Restaurant Group companies to limit or otherwise modify their menus, which could have a material adverse effect on our business, financial condition and results of operations.

The cost, availability and quality of ingredients restaurant operations use to prepare their food is subject to a range of factors, many of which are beyond their control. A significant component of our restaurant businesses' costs will be related to food commodities, including beef, pork, chicken, seafood, poultry, dairy products, oils, produce, fruit, flour and other related costs such as energy and transportation over which we may have little control, which can be subject to significant price fluctuations due to seasonal shifts, climate conditions, industry demand, changes in international commodity markets and other factors. If there is a substantial increase in prices for these commodities, our Restaurant Group companies' results of operations may be negatively affected. In addition, the Restaurant Group companies' restaurants are dependent upon frequent deliveries of perishable food products that meet certain specifications. Shortages or interruptions in the supply of perishable food products caused by unanticipated demand, problems in production or distribution, disease or food-borne illnesses, inclement weather or other conditions could adversely affect the availability, quality, and cost of ingredients, which would likely lower revenues, damage the Restaurant Group companies' reputation or otherwise harm our business.

The Restaurant Group companies are also subject to the general risks of inflation. The performance of our Restaurant Group companies' business is also adversely affected by increases in the price of utilities, such as natural gas, whether as a result of inflation, shortages or interruptions in supply, or otherwise. The Restaurant Group companies' business will also incur significant costs for insurance, labor, marketing, taxes, real estate, borrowing and litigation, all of which could increase due to inflation, changes in laws and regulations, competition or other events beyond the Restaurant Group companies' control.

Negative customer experiences or negative publicity surrounding our Restaurant Group companies' restaurants or other restaurants could adversely affect sales in one or more of our Restaurant Group companies' restaurants and make our concepts less valuable, which could have a material adverse effect on our business, financial condition and results of operations.

Because we believe our Restaurant Group companies' success depends significantly on their ability to provide exceptional food quality, outstanding service and an excellent overall dining experience, adverse publicity, whether or not accurate, relating to food quality, public health concerns, illness, safety, injury or government or industry findings concerning our Restaurant Group companies' restaurants, restaurants operated by other food service providers or others across the food industry supply chain could affect our Restaurant Group companies more than it would other restaurants that compete primarily on price or other factors. If customers perceive or experience a reduction in the food quality, service or ambiance at our Restaurant Group companies' restaurants or in any way believe our Restaurant Group companies' restaurants have failed to deliver a consistently positive experience, the value and popularity of one or more of our Restaurant Group companies' concepts could suffer. Further, because our restaurant businesses rely heavily on "word-of-mouth," as opposed to more conventional mediums of advertisement, to establish concept recognition, our restaurant businesses may be more adversely affected by negative customer experiences than other dining establishments, including those of our restaurant businesses' competitors.

Our restaurant businesses could suffer due to reduced demand for our restaurant businesses' brands or specific menu offerings if our restaurant businesses are the subject of negative publicity or litigation regarding allegations of food-related contaminations or illnesses, which could have a material adverse effect on our business, financial condition and results of operations.

Food safety is a top priority, and our Restaurant Group companies dedicate substantial resources to ensuring that their customers enjoy safe, quality food products. Food-related contaminations and illnesses may be caused by a variety of food-borne pathogens, such as e-coli or salmonella, which are frequently carried on unwashed fruits and vegetables, from a variety of illnesses transmitted by restaurant workers, such as hepatitis A, which may not be diagnosed prior to being infectious, and from contamination of food by foreign substances. Contamination and food borne illness incidents could also be caused at the point of source or by food suppliers and distributors. As a result, we cannot control all of the potential sources of contamination or illness that can be contained in or transmitted from our Restaurant Group companies' food. Regardless of the source or cause, any report of food-borne illnesses or other food safety issues including food tampering or contamination, at one of our Restaurant Group companies' restaurants could adversely affect the reputation of our Restaurant Group companies' brands and have a negative impact on their sales. Even instances of food-borne illness, food tampering or food contamination occurring solely at restaurants of our Restaurant Group companies' competitors or at one of our Restaurant Group companies' suppliers could result in negative publicity about the food service industry generally and adversely impact our Restaurant Group companies' sales.

If any person becomes injured or ill, or alleges becoming injured or ill, as a result of eating our Restaurant Group companies' food, our Restaurant Group companies may temporarily close some restaurants or their bakery facilities, which would decrease their revenues, and our restaurant businesses may be liable for damages or be subject to governmental regulatory action, either of which could have long-lasting, negative effects on our restaurant businesses' reputation, financial condition and results of operations, regardless of whether the allegations are valid or whether our restaurant businesses are found liable. The occurrence of food-borne illnesses or food safety issues could also adversely affect the price and availability of affected ingredients, resulting in higher costs and lower margins.

Our Restaurant Group companies' failure to comply with government regulation, and the costs of compliance or non-compliance, could have a material adverse effect on our business, financial condition and results of operations.

The Restaurant Group companies are subject to various federal, state and local laws and regulations affecting their business. Each of their restaurants and their bakery division are subject to licensing and regulation by a number of federal, state and local governmental authorities, which may include, among others, alcoholic beverage control, health and safety, nutritional menu labeling, health care, environmental and fire agencies. Difficulty in obtaining or failure to obtain the required licenses, including liquor or other licenses, permits or approval could delay or prevent the development of a new restaurant in a particular area. Additionally, difficulties or inabilities to retain or renew licenses, or increased compliance costs due to changed regulations, could adversely affect operations at existing restaurants.

While only approximately 9% of the Restaurant Group companies' consolidated restaurant sales in 2018 were attributable to the sale of alcoholic beverages, approximately 19% of the restaurant sales at Ninety Nine were attributable to the sale of alcoholic beverages in 2018. Alcoholic beverage control regulations require each restaurant to apply to a state authority and, in certain locations, county or municipal authorities for a license or permit to sell alcoholic beverages on the premises and to provide service for extended hours and on Sundays. Typically, licenses must be renewed annually and may be revoked or suspended for cause at any time. Alcoholic beverage control regulations relate to numerous aspects of daily operations of the Restaurant Group companies' restaurants, including minimum ages of patrons and employees, hours of operation, advertising, training, wholesale purchasing, inventory control and the handling, storage and dispensation of alcoholic beverages. The failure of a restaurant to obtain or retain liquor or food service licenses would adversely affect the restaurant's operations.

Our restaurant businesses' operations are also subject to federal and state labor laws, including the Fair Labor Standards Act of 1938, as amended, governing such matters as minimum wages, overtime, tip credits and worker conditions. The Restaurant Group companies' employees who receive tips as part of their compensation, such as servers, are generally paid at a minimum wage rate, after giving effect to applicable tip credits. The Restaurant Group companies rely on their employees to accurately disclose the full amount of their tip income, and they base their Federal Insurance Contributions Act tax reporting on the disclosures provided to them by such tipped employees. Significant numbers of these personnel are paid at rates related to the applicable minimum wage and thus, further increases in the federal or state minimum wage or other changes in these laws could increase our Restaurant Group companies' labor costs. Their ability to respond to minimum wage increases by increasing menu prices will depend on the responses of their competitors and customers.

In 2010, the Patient Protection and Affordable Care Act of 2010 (the "PPACA") was signed into law in the U.S. to require healthcare coverage for many uninsured individuals and expand coverage to those already insured. Starting in 2015, the PPACA required the Restaurant Group companies to offer healthcare benefits to all full-time employees (including full-time hourly employees) that meet certain minimum requirements of coverage and affordability, or face penalties. Continued compliance with the requirements of the PPACA and rising costs of healthcare may impose additional administrative costs. The costs and other effects of these healthcare requirements may significantly increase our Restaurant Group companies' healthcare coverage costs in future periods and could have a material adverse effect on our business, financial condition and results of operations.

There is also a potential for increased regulation of certain food establishments in the U.S., where compliance with Hazard Analysis & Critical Control Points ("HACCP") management systems may now be required. HACCP refers to a management system in which food safety is addressed through the analysis and control of potential hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product. Many states have required restaurants to develop and implement HACCP programs and the U.S. government continues to expand the sectors of the food industry that must adopt and implement HACCP programs. For example, the Food Safety Modernization Act, signed into law in January 2011, granted the FDA new authority regarding the safety of the entire food system, including through increased inspections and mandatory food recalls. We anticipate that the new requirements may impact the restaurant industry. Additionally, our Restaurant Group companies' suppliers may initiate or otherwise be subject to food recalls that may impact the availability of certain products, result in adverse publicity or require the Restaurant Group companies' to take actions that could be costly for them or otherwise harm their business.

In addition, in order to develop and construct restaurants, the Restaurant Group companies must comply with applicable zoning, land use and environmental regulations. Such regulations have not had a material effect on its operations to date, but more stringent and varied requirements of local governmental bodies could delay or prevent construction and increase development costs for new restaurants. The Restaurant Group companies are also subject to federal and state laws which prohibit discrimination and other accessibility standards as mandated by the Americans with Disabilities Act (the "ADA"), which generally, among other things, prohibits discrimination in accommodation or employment based on disability. The ADA became effective as to public accommodations and employment in 1992. Pursuant to the ADA, our restaurant businesses may in the future have to modify restaurants, by adding access ramps or redesigning certain architectural fixtures for example, to provide service to or make reasonable accommodations for disabled persons. While these expenses could be material, the Restaurant Group companies' current expectation is that any such actions will not require substantial capital expenditures.

The Restaurant Group companies are subject to a variety of federal, state and local laws and regulations relating to the use, storage, discharge, emission and disposal of hazardous materials. There also has been increasing focus by the U.S. on other environmental matters, such as climate change, the reduction of greenhouse gases and water consumption. This increased focus may lead to new initiatives directed at regulating an as yet unspecified array of environmental matters, such as the emission of greenhouse gases, and "cap and trade" initiatives could effectively impose a tax on carbon emissions. Legislative, regulatory or other efforts to combat climate change or other environmental concerns could result in future increases in the cost of raw materials, commodities, taxes, transportation and utilities, which could decrease our Restaurant Group companies' operating profits and necessitate future investments in facilities and equipment.

The Restaurant Group companies are subject to laws and regulations relating to information security, privacy, cashless payments, gift cards and consumer credit, protection and fraud, and any failure or perceived or alleged failure to comply with these laws and regulations could harm their reputation or lead to litigation, which could have a material adverse effect on our financial condition and results of operations.

The impact of current laws and regulations, the effect of future changes in laws or regulations that impose additional requirements and the consequences of litigation relating to current or future laws and regulations, or an insufficient or ineffective response to significant regulatory or public policy issues, could increase our Restaurant Group companies' cost structure or lessen their operational efficiencies and talent availability, and therefore have a material adverse effect on our financial condition and results of operations. Failure to comply with the laws and regulatory requirements of federal, state and local authorities could result in, among other things, revocation of required licenses, administrative enforcement actions, fines and civil and criminal liability. Compliance with these laws and regulations can be costly and can increase the Restaurant Group companies' exposure to litigation or governmental investigations or proceedings.

Restaurant companies, including our restaurant companies, are the target of claims and lawsuits from time to time in the ordinary course of business. Proceedings of this nature, if successful, could result in our payment of substantial costs and damages, which could have a material adverse effect on our business, financial condition and results of operations.

Our Restaurant Group companies and other restaurant companies have been subject to claims and lawsuits alleging various matters from time to time in the ordinary course of business, including those that follow. Claims and lawsuits may include class action lawsuits, alleging violations of federal and state laws regarding workplace and employment matters, discrimination and similar matters. A number of these lawsuits have resulted in the payment of substantial damages by the defendants. Similar lawsuits have been instituted from time to time alleging violations of various federal and state wage and hour laws regarding, among other things, employee meal deductions, the sharing of tips amongst certain employees, overtime eligibility of assistant managers and failure to pay for all hours worked. Although our restaurant businesses will maintain what we believe to be adequate levels of insurance, insurance may not be available at all or in sufficient amounts to cover any liabilities with respect to these matters. Accordingly, if our restaurant businesses are required to pay substantial damages and expenses as a result of these types or other lawsuits, such payments or expenses could have a material adverse effect on our business and results of operations.

Occasionally, our Restaurant Group companies' customers may file complaints or lawsuits against the Restaurant Group companies alleging that they are responsible for some illness or injury the customers suffered at or after a visit to one of the Restaurant Group companies' restaurants, including actions seeking damages resulting from food-borne illness and relating to notices with respect to chemicals contained in food products required under state law. Our Restaurant Group companies may also be subject to a variety of other claims from third parties arising in the ordinary course of their business, including personal injury claims, contract claims and claims alleging violations of federal and state laws. In addition, most of our Restaurant Group companies' restaurants are subject to state "dram shop" or similar laws which generally allow a person to sue our restaurant businesses if that person was injured by a legally intoxicated person who was wrongfully served alcoholic beverages at one of our Restaurant Group companies' restaurants. The restaurant industry has also been subject to a growing number of claims that the menus and actions of restaurant chains have led to the obesity of certain of their customers. In addition, the Restaurant Group companies may also be subject to lawsuits from their employees or others alleging violations of federal and state laws regarding workplace and employment matters, discrimination and similar matters. A number of these lawsuits in the restaurant industry have resulted in the payment of substantial damages by the defendants.

Additionally, certain of the Restaurant Group companies' tax returns and employment practices are subject to audits by the IRS and various state tax authorities. Such audits could result in disputes regarding tax matters that could lead to litigation that would be costly to defend or could result in the payment of additional taxes, which could have a material adverse effect on our business, results of operations and financial condition.

Regardless of whether any claims against the Restaurant Group companies are valid or whether they are liable, claims may be expensive to defend and may divert resources away from their operations. In addition, such claims may generate negative publicity, which could reduce customer traffic and sales. Although our restaurant businesses will maintain what they believe to be adequate levels of insurance, insurance may not be available at all or in sufficient amounts to cover any liabilities with respect to these or other matters. Defense costs, even for unfounded claims, or a judgment or other liability in excess of our restaurant businesses' insurance coverage for any claims or any adverse publicity resulting from claims could have a material adverse effect on our business, results of operations and financial condition.

The Restaurant Group companies rely heavily on information technology and any material failure, interruption, or security breach in their systems could have a material adverse effect on our business, financial condition and results of operations.

The Restaurant Group companies rely heavily on information technology systems across their operations and corporate functions, including for order and delivery from suppliers and distributors, point-of-sale processing in their restaurants, management of their supply chains, payment of obligations, collection of cash, bakery production, data warehousing to support analytics, finance or accounting systems, labor optimization tools, gift cards, online business and various other processes and transactions, including the storage of employee and customer information. The Restaurant Group companies' ability to effectively manage their business and coordinate the production, distribution and sale of their products will depend significantly on the reliability and capacity of these systems. In August 2015, the Restaurant Group companies upgraded their information systems using a third-party provider. However, the failure of these systems to operate effectively, maintenance problems or problems with transitioning to upgraded or replacement systems could cause delays in product sales and reduced efficiency of our restaurant businesses' operations, and significant capital investments could be required to remediate the problem.

The regulatory environment surrounding information security and privacy is increasingly demanding, with the frequent imposition of new and constantly changing requirements. Compliance with these requirements may result in cost increases due to necessary systems changes and the development of new administrative processes. In addition, customers and employees have a high expectation that our restaurant businesses will adequately protect their personal information. The majority of our restaurant businesses' restaurant sales are by credit or debit cards. We and other restaurants and retailers have experienced security breaches in which credit and debit card information of their customers has been stolen.

In addition, any breach in customer payment information could result in investigations by the U.S. Secret Service Electronic Crimes Task Force ("ECTF") and increased cost in our restaurant businesses' efforts to cooperate with the ECTF.

The Restaurant Group companies also maintain certain personal information regarding their employees. In addition to government investigations, the Restaurant Group companies may in the future become subject to lawsuits or other proceedings for purportedly fraudulent transactions arising out of the actual or alleged theft of their customers' credit or debit card information or if customer or employee information is obtained by unauthorized persons or used inappropriately. If the Restaurant Group companies fail to comply with these laws and regulations or experience a significant breach of customer, employee or company data, their reputation could be damaged and they could experience lost sales, fines or lawsuits. Additionally, if a person is able to circumvent the security measures intended to protect our Restaurant Group companies' employee or customer private data, he or she could destroy or steal valuable information and disrupt our restaurant businesses' operations. The Restaurant Group companies may also be required to incur additional costs to modify or enhance their systems in order to prevent or remediate any such attacks.

The success of the Restaurant Group depends, in part, on its intellectual property, which we may be unable to protect.

We regard our service marks, including "O'Charley's", "Ninety Nine", "Village Inn", "Legendary Baking", and "Bakers Square", and other service marks and trademarks as having significant value and as being important factors in the marketing of our restaurants. We have also obtained trademarks for several of our menu items and for various advertising slogans. We are aware of names and marks similar to our service marks and trademarks used by other persons in certain geographic areas where we have restaurants. We believe such uses will not adversely affect us and our policy is to pursue registration of our marks whenever possible and to oppose vigorously any infringement of our marks.

We license the use of our registered trademarks and service marks to franchisees and third parties through franchise arrangements and licenses. The franchise and license arrangements restrict franchisees' and licensees' activities with respect to the use of our trademarks and service marks, and impose quality control standards in connection with goods and services offered in connection with the trademarks and service marks.

Occasionally, third parties may assert that we are, or may be, infringing on or misappropriating their intellectual property rights. In these cases, we intend to defend against claims or negotiate licenses when we consider these actions appropriate. Intellectual property cases are uncertain and involve complex legal and factual questions. If we become involved in this type of litigation, it could consume significant resources and divert our attention from business operations.

If we are found to infringe on the intellectual property rights of others, we could incur significant damages, be enjoined from continuing to use certain marks, or be required to obtain a license to continue using the affected marketing and promotional materials. A license could be very expensive to obtain or may not be available at all. Similarly, changing our marketing plan to avoid infringing the rights of others may be costly or impracticable.

Factors Relating to Ceridian

Ceridian's solutions and business are subject to a variety of U.S. and international laws and regulations, including those regarding privacy, data protection, and information security. Any failure by Ceridian or its third party service providers, as well as the failure of its platform or services, to comply with applicable laws and regulations could have a material adverse effect on our business, financial condition, and results of operations.

Ceridian is subject to a variety of U.S. and international laws and regulations, including regulation by various federal government agencies, including the FTC, and state and local agencies. The United States and various state and foreign governments have adopted or proposed limitations on, or requirements regarding, the collection, distribution, use, security, and storage of Personally Identifiable Information ("PII") of individuals; and the FTC and many state attorneys general are applying federal and state consumer protection laws to impose standards on the online collection, use and dissemination of data. Self-regulatory obligations, other industry standards, policies, and other legal obligations may apply to Ceridian's collection, distribution, use, security, or storage of PII or other data relating to individuals. In addition, most states and some foreign governments have enacted laws requiring companies to notify individuals of data security breaches involving certain types of PII. These obligations may be interpreted and applied in an inconsistent manner from one jurisdiction to another and may conflict with one another, other regulatory requirements, or Ceridian's internal practices. Any failure or perceived failure by Ceridian to comply with U.S., E.U., or other foreign privacy or security laws, regulations, policies, industry standards, or legal obligations, or any security incident that results in the unauthorized access to, or acquisition, release, or transfer of, PII may result in governmental enforcement actions, litigation, fines and penalties, or adverse publicity and could cause Ceridian's customers to lose trust in it, which could harm its reputation and have a material adverse effect on our business, financial condition, and results of operations.

We expect that there will continue to be new proposed laws, regulations, and industry standards concerning privacy, data protection and information security in the United States, Canada, the European Union, and other jurisdictions, and we cannot yet determine the impact such future laws, regulations, and standards may have on Ceridian's business. For example, in May 2018, the General Data Protection Regulation came into force, bringing with it a complete overhaul of E.U. data protection laws: the new rules supersede E.U. data protection legislation, impose more stringent E.U. data protection requirements, and provide for greater penalties for non-compliance. Changing definitions of what constitutes PII may also limit or inhibit Ceridian's ability to operate or to expand its business, including limiting strategic partnerships that may involve the sharing of data. Also, some jurisdictions require that certain types of data be retained on servers within these jurisdictions. Ceridian's failure to comply with applicable laws, directives, and regulations may result in enforcement action against it, including fines and imprisonment, and damage to Ceridian's reputation, any of which may have an adverse effect on its business and operating results. Further, in October 2015, the European Court of Justice issued a ruling invalidating the U.S.-E.U. Safe Harbor Framework, which facilitated transfers of PII to the United States in compliance with applicable E.U. data protection laws. In July 2016, the E.U. and the U.S. political authorities adopted the E.U.-U.S. Privacy Shield, replacing the Safe Harbor Framework and providing a new mechanism for companies to transfer E.U. PII to the United States. U.S. organizations wishing to self-certify under the Privacy Shield must pledge their compliance with its seven core and sixteen supplemental principles, which are based on European Data Protection Law.

If Ceridian's service is perceived to cause, or is otherwise unfavorably associated with, violations of privacy or data security requirements, it may subject it or its customers to public criticism and potential legal liability. Public concerns regarding PII processing, privacy and security may cause some of its customers' end users to be less likely to visit their websites or otherwise interact with them. If enough end users choose not to visit Ceridian's customers' websites or otherwise interact with them, Ceridian's customers could stop using its platform. This, in turn, may reduce the value of its services and slow or eliminate the growth of its business. Existing and potential privacy laws and regulations concerning privacy and data security and increasing sensitivity of consumers to unauthorized processing of PII may create negative public reactions to technologies, products, and services such as Ceridians.

Evolving and changing definitions of what constitutes PII and / or "Personal Data" within the United States, Canada, the European Union, and elsewhere, especially relating to the classification of internet protocol, or IP addresses, machine or device identification numbers, location data and other information, may limit or inhibit Ceridian's ability to operate or to expand its business. Future laws, regulations, standards and other obligations could impair Ceridian's ability to collect or to use information that it utilizes to provide email delivery and marketing services to its customers, thereby impairing its ability to maintain and to grow its customer base and to increase revenue. Future restrictions on the collection, use, sharing, or disclosure of our customers' data or additional requirements for express or implied consent of customers for the use and disclosure of such information may limit our ability to develop new services and features.

Privacy concerns and laws or other domestic or foreign data protection regulations may reduce the effectiveness of Ceridian's applications, which could have a material adverse effect on our business, financial condition, and results of operations.

Ceridian's customers can use its applications to collect, to use, and to store PII regarding their employees, independent contractors, and job applicants. Federal, state, and foreign government bodies and agencies have adopted, are considering adopting, or may adopt laws and regulations regarding the collection, use, storage and disclosure of PII obtained from individuals. The costs of compliance with, and other burdens imposed by, such laws and regulations that are applicable to the businesses of Ceridian's customers, or to its business directly, may limit the use and adoption of Ceridian's applications and reduce overall demand, or lead to significant fines, penalties, or liabilities for any non-compliance with such privacy laws. Furthermore, privacy concerns may cause Ceridian's customers' workers to resist providing PII necessary to allow its customers to use its applications effectively. Even the perception of privacy concerns, whether or not valid, may inhibit market adoption of Ceridian's applications in certain industries.

All of these domestic and international legislative and regulatory initiatives may adversely affect Ceridian's customers' ability to process, to handle, to store, to use, and to transmit demographic information and PII from their employees, independent contractors, job applicants, customers, and suppliers, which could reduce demand for our applications. The European Union and many countries in Europe have stringent privacy laws and regulations, which may impact Ceridian's ability to profitably operate in certain European countries.

Further, international data protection regulations trending toward increased localized data residency rules make transfers from outside the regulation's jurisdiction increasingly complex and may impact our ability to deliver solutions that meet all customers' needs. If the processing of PII were to be further curtailed in this manner, our solutions could be less effective, which may reduce demand for our applications, which could have a material adverse effect on our business, financial condition, and results of operations.

In addition to government activity, privacy advocacy groups and the technology and other industries are considering various new, additional, or different self-regulatory standards that may place additional burdens on us. If the processing of PII were to be curtailed in this manner, our solutions would be less effective, which may reduce demand for our applications, which could have a material adverse effect on our business, financial condition, and results of operations.

Ceridian's indebtedness could have a material adverse effect on our business, financial condition and results of operations.

Ceridian's outstanding indebtedness as of December 31, 2018 consisted of (i) a Senior Term Loan in the original principal amount of $680.0 million and (ii) a $300.0 million committed Revolving Facility. The Senior Credit Facilities are secured substantially by all of our assets. The Senior Term Loan has a maturity date of April 30, 2025, and the Revolving Facility has a maturity date of April 30, 2023. As of December 31, 2018, we had $678.3 million outstanding principal under our Senior Term Loan and no principal outstanding under our Revolving Facility.

Ceridian's outstanding indebtedness and any additional indebtedness it incurs may have important consequences for Ceridian, including, without limitation, that:

- Ceridian may be required to use a substantial portion of its cash flow to pay the principal of and interest on its indebtedness;
- Ceridian's indebtedness and leverage may increase its vulnerability to adverse changes in general economic and industry conditions, as well as to competitive pressures;
- Ceridian's ability to obtain additional financing for working capital, capital expenditures, acquisitions and for general corporate and other purposes may be limited;
- Ceridian's indebtedness may expose it to the risk of increased interest rates because certain of its borrowings, including and most significantly its borrowings under its Senior Credit Facilities, are at variable rates of interest;
- Ceridian's indebtedness may prevent it from taking advantage of business opportunities as they arise or successfully carrying out its plans to expand its business; and
- Ceridian's flexibility in planning for, or reacting to, changes in its business and industry may be limited.

Under the terms of the agreements governing Ceridian's Senior Credit Facilities, Ceridian is required to comply with specified operating covenants and, under certain circumstances, a financial covenant applicable to the Revolving Facility, which may limit Ceridian's ability to operate its business as it otherwise might operate it. For example, the obligations under the Senior Credit Facilities may be accelerated upon the occurrence of an event of default, including, without limitation, payment defaults, cross-defaults to certain material indebtedness, covenant defaults, material inaccuracy of representations and warranties, bankruptcy events, material judgments, material defects with respect to guarantees and collateral, and change of control. If not cured, an event of default could result in any amounts outstanding, including any accrued interest and unpaid fees, becoming immediately due and payable, which would require Ceridian, among other things, to seek additional financing in the debt or equity markets, to refinance or restructure all or a portion of its indebtedness, to sell selected assets, and/or to reduce or to delay planned capital or operating expenditures. Such measures might not be sufficient to enable Ceridian to service its debt, and any such financing or refinancing might not be available on economically favorable terms or at all. If Ceridian is not able to generate sufficient cash flows to meet its debt service obligations or are forced to take additional measures to be able to service its indebtedness, it could have a material adverse effect on our business, financial condition, and results of operations.

An information security breach of Ceridian's systems or the loss of, or unauthorized access to, customer information, failure to comply with the U.S. Federal Trade Commission's ("FTC") ongoing consent order regarding data protection, or a system disruption could have a material adverse effect on our business, market brand, financial condition, and results of operations.

Ceridian's business is dependent on its payroll, transaction, financial, accounting, and other data processing systems. Ceridian relies on these systems to process, on a daily and time sensitive basis, a large number of complicated transactions. Ceridian electronically receives, processes, stores, and transmits data and personally identifiable information ("PII") about its customers and their employees, as well as its vendors and other business partners, including names, social security numbers, and checking account numbers. Ceridian keeps this information confidential. However, Ceridian's websites, networks, applications and technologies, and other information systems may be targeted for sabotage, disruption, or data misappropriation. The uninterrupted operation of Ceridian's information systems and Ceridian's ability to maintain the confidentiality of PII and other customer and individual information that resides on its systems are critical to the successful operation of Ceridian's business. While Ceridian has information security and business continuity programs, these plans may not be sufficient to ensure the uninterrupted operation of its systems or to prevent unauthorized access to the systems by unauthorized third parties. Because techniques used to obtain unauthorized access or to sabotage systems change frequently and may not be recognized until launched against a target, Ceridian may be unable to anticipate these techniques or to implement adequate preventative measures. These concerns about information security are increased with the mounting sophistication of social engineering. Ceridian's network security hardening may be bypassed by phishing and other social engineering techniques that seek to use end user behaviors to distribute computer viruses and malware into its systems, which might disrupt Ceridian's delivery of services and make them unavailable, and might also result in the disclosure or misappropriation of PII or other confidential or sensitive information. In addition, a significant cyber security breach could prevent or delay Ceridian's ability to process payment transactions.

Any information security breach in Ceridian's business processes or of its processing systems has the potential to impact its customer information and its financial reporting capabilities, which could result in the potential loss of business and Ceridian's ability to accurately report financial results. If any of these systems fail to operate properly or become disabled even for a brief period of time, Ceridian could potentially miss a critical filing period, resulting in potential fees and penalties, or lose control of customer data, all of which could result in financial loss, a disruption of Ceridian's businesses, liability to customers, regulatory intervention, or damage to its reputation. The continued occurrence of high-profile data breaches provides evidence of an external environment increasingly hostile to information security. If Ceridian's security measures are breached as a result of third party action, employee or subcontractor error, malfeasance or otherwise, and, as a result, someone obtains unauthorized access to customer data, Ceridian's reputation may be damaged, its business may suffer, and Ceridian could incur significant liability. Ceridian may also experience security breaches that may remain undetected for an extended period of time. Techniques used to obtain unauthorized access or to sabotage systems change frequently and are growing increasingly sophisticated. As a result, Ceridian may be unable to anticipate these techniques or to implement adequate preventative measures.

This environment demands that Ceridian continuously improve its design and coordination of security controls throughout the company. Despite these efforts, it is possible that Ceridian's security controls over data, training, and other practices it follows may not prevent the improper disclosure of PII or other confidential information. Any issue of data privacy as it relates to unauthorized access to or loss of customer and/or employee information could result in the potential loss of business, damage to Ceridian's market reputation, litigation, and regulatory investigation and penalties. For example, in December 2009 a criminal hacked into Ceridian's discontinued U.S. payroll application. Following receipt of an "access letter" in May 2010 from the FTC for a non-public review of the matter, Ceridian worked with the FTC and entered into a twenty-year consent order which became final in June 2011. Ceridian conceded no wrongdoing in the order and they were not subject to any monetary fines or penalties. However, in connection with the order, Ceridian is required to, among other things, maintain a comprehensive information security program that is reasonable and appropriate for its size, and complexity, and for the type of PII it collects. Ceridian is also required to have portions of its security program, which apply to certain segments of its U.S. business, reviewed by an independent third party on a biennial basis. Maintaining, updating, monitoring, and revising an information security program in an effort to ensure that it remains reasonable and appropriate in light of changes in security threats, changes in technology, and security vulnerabilities that arise from legacy systems is time-consuming and complex, and is an ongoing effort.

There may be other such security vulnerabilities that come to Ceridian's attention. The independent third party that reviews Ceridian's security program pursuant to the FTC consent order may determine that the existence of vulnerabilities in its security controls or the failure to remedy them in a timeframe they deem appropriate means that its security program does not provide a reasonable level of assurance that the security, confidentiality, and integrity of PII is protected by Ceridian (or that there was a failure to protect at some point in the reporting period). While Ceridian has taken and continues to take steps to ensure compliance with the consent order, if they are determined not to be in compliance with the consent order, or if any new breaches of security occur, the FTC may take enforcement actions or other parties may initiate a lawsuit. Any such resulting fines and penalties could have a material adverse effect on Ceridian's liquidity and financial results, and any reputational damage therefrom could adversely affect Ceridian's relationships with its existing customers and its ability to attain new customers. Ceridian's continued investment in the security of its technology systems, continued efforts to improve the controls within its technology systems, business processes improvements and the enhancements to its culture of information security may not successfully prevent attempts to breach Ceridian's security or unauthorized access to PII or other confidential, sensitive or proprietary information. In addition, in the event of a catastrophic occurrence, either natural or man-made, Ceridian's ability to protect its infrastructure, including PII and other customer data, and to maintain ongoing operations could be significantly impaired. Ceridian's business continuity and disaster recovery plans and strategies may not be successful in mitigating the effects of a catastrophic occurrence. Insurance may be inadequate or may not be available in the future on acceptable terms, or at all. In addition, Ceridian's insurance policies may not cover all claims made against them, and defending a suit, regardless of its merit, could be costly and divert management's attention. If Ceridian's security is breached, if PII or other confidential information is accessed, if Ceridian fails to comply with the consent order or if Ceridian experiences a catastrophic occurrence, it could have a material adverse effect on its business, financial condition, and results of operations, and ultimately the value of our investment in Ceridian.

Litigation and regulatory investigations aimed at Ceridian or resulting from actions of its predecessor may result in significant financial losses and harm to its reputation.

Ceridian faces risk of litigation, regulatory investigations, and similar actions in the ordinary course of its business, including the risk of lawsuits and other legal actions relating to breaches of contractual obligations or tortious claims from customers or other third parties, fines, penalties, interest, or other damages as a result of erroneous transactions, breach of data privacy laws, or lawsuits and legal actions related to Ceridian's predecessors. Any such action may include claims for substantial or unspecified compensatory damages, as well as civil, regulatory, or criminal proceedings against Ceridian's directors, officers, or employees;

and the probability and amount of liability, if any, may remain unknown for significant periods of time. Ceridian may be also subject to various regulatory inquiries, such as information requests, and book and records examinations, from regulators and other authorities in the geographical markets in which Ceridian operates. A substantial liability arising from a lawsuit judgment or settlement or a significant regulatory action against Ceridian or a disruption in its business arising from adverse adjudications in proceedings against its directors, officers, or employees could have a material adverse effect on Ceridian's business, financial condition, and results or operations and ultimately the value of our investment in Ceridian.

Additionally, Ceridian is subject to claims and investigations as a result of its predecessor, Control Data Corporation (“CDC”), Ceridian Corporation, and other former entities for whom Ceridian is successor-in-interest with respect to assumed liabilities. For example, in September 1989, CDC became party to an environmental matters agreement with Seagate Technology plc (“Seagate”) related to groundwater contamination on a parcel of real estate in Omaha, Nebraska sold by CDC to Seagate. In February 1988, CDC entered into an arrangement with Northern Engraving Corporation and the Minnesota Pollution Control Agency in relation to groundwater contamination at a site in Spring Grove, Minnesota. In August 2017, Ceridian received notice of a mesothelioma claim related to CDC. Although Ceridian is fully reserved for the groundwater contamination liabilities, Ceridian cannot at this time accurately assess the merits of these claims, and cannot be certain if additional liabilities related to such predecessor companies will surface. Moreover, even if Ceridian ultimately prevails in or settles any litigation, regulatory action, or investigation, Ceridian could suffer significant harm to its reputation, which could materially affect its ability to attract new customers, to retain current customers, and to recruit and to retain employees, which could have a material adverse effect on Ceridian's business, financial condition, and results of operations, and ultimately, the value of our investment in Ceridian.

The failure of Ceridian's business to comply with applicable laws could result in substantial taxes, penalties and liabilities that could have a material adverse effect on our business, financial condition and results of operations.

Ceridian is subject to various laws and regulations, and its failure to comply with such laws and regulations could adversely affect our business. For example, Ceridian's customers remit employer and employee tax funds to its businesses. Ceridian processes the data received from its customers and remits the funds along with a tax return to the appropriate taxing authorities when due. Under various service agreements with its customers, Ceridian assumes financial responsibility for the payment of the taxes, penalties and liabilities assessed against its customers arising out of its failure to fulfill its obligations under its agreements with these customers, unless these taxes, penalties or liabilities are attributable to the customer's failure to comply with the terms of the agreement the customer has with Ceridian. These taxes, penalties and liabilities could, in some cases, be substantial and could adversely affect Ceridian's business and operating results. Additionally, Ceridian's failure to fulfill its obligations under its customer agreements could adversely affect Ceridian's reputation, its relationship with its customers and its ability to gain new customers. In addition, mistakes may occur in connection with this service. Ceridian and its customers may be subject to penalties imposed by tax authorities for late filings or underpayment of taxes.

Ceridian is subject to risks related to its international operations, which could have a material adverse effect on our business, financial condition and results of operations.

Approximately 30% of Ceridian's revenue for the year ended December 31, 2018 was obtained from companies headquartered outside of the United States, primarily from Canada. Ceridian's Canada operations provide certain HCM solutions for its Canadian customers. Ceridian is continuing to expand its international Cloud solutions into other countries. As such, Ceridian's international operations are subject to risks that could adversely affect those operations or its business as a whole, including:

- costs of localizing products and services for foreign customers;
- difficulties in managing and staffing international operations;
- difficulties and increased expenses related to introducing corporate policies and controls in our international operations;
- difficulties with or inability to engage global partners;
- longer sales and payment cycles;
- the burdens of complying with a wide variety of foreign laws;
- compliance with applicable anti-bribery laws, including the Foreign Corrupt Practices Act;
- additional regulatory compliance requirements;
- exposure to legal jurisdictions that may not recognize or interpret customer contracts appropriately;
- potentially adverse tax consequences, including the complexities of foreign value added tax systems, the tax cost on the repatriation of earnings, and changes in tax rates;
- restrictions on transfer of funds, laws and business practices favoring local competitors;

- reduced or varied protection for intellectual property and other legal rights as compared to the United States;
- practical difficulties in enforcing intellectual property and other rights outside of the United States;
- exposure to local economic and political conditions; and
- changes in currency exchange rates, and in particular, changes in the currency exchange rate between U.S. dollars and Canadian dollars.

In addition, we anticipate that customers and potential customers may increasingly require and demand that a single vendor provide HCM solutions and services for their employees in a number of countries. If we are unable to provide the required services on a multinational basis, there may be a negative impact on our new orders and customer retention, which would negatively impact revenue and earnings. Although we have a multinational strategy, additional investment and efforts may be necessary to implement such strategy. Some of our business partners also have international operations and are subject to the risks described above. Even if we are able to successfully manage the risks of international operations, our business may be adversely affected if our business partners are not able to successfully manage these risks.

Factors Relating to T-System

The healthcare industry is heavily regulated at the local, state and federal levels. T-System's failure to comply with regulatory requirements could create liability for us, result in adverse publicity and negatively affect T-System's business.

The healthcare industry is heavily regulated and is constantly evolving due to the changing political, legislative and regulatory landscapes. In some instances, to the extent that they are subject to these laws and regulations, these regulations directly impact T-System's business. However, these regulations also impact T-System's business indirectly as, in a number of circumstances, T-System's solutions and services must be capable of being used by its customers in a way that complies with those laws and regulations, even though T-System may not be directly regulated by the specific healthcare laws and regulations. There is a significant number of wide-ranging regulations, including regulations in the areas of healthcare fraud, e-prescribing, claims processing and transmission, medical devices, the security and privacy of patient data, the American Reinvestment and Recovery Act ("ARRA") meaningful use program, and interoperability standards, that may be directly or indirectly applicable to T-System's operations and relationships or the business practices of its customers.

Economic, market and other factors may cause a decline in spending for information technology and services by T-System's current and prospective customers which may result in less demand for its products, lower prices and, consequently, lower revenues and a lower revenue growth rate.

The purchase of T-System's information system involves a significant financial commitment by its customers. At the same time, the healthcare industry faces significant financial pressures that could adversely affect overall spending on healthcare information technology and services. For example, the recent actual and potential reductions in federal and state funding for Medicare and Medicaid has caused hospitals to reduce, eliminate or postpone information technology related and other spending. To the extent spending for healthcare information technology and services declines or increases slower than T-System's anticipates, demand for its products and services, as well as the prices it charges, could be adversely affected. Accordingly, we cannot assure you that T-System will be able to increase or maintain its revenues or its revenue growth rate.

If T-System's security is breached, it could be subject to liability, and clients could be deterred from using its products and services.

T-System's business relies on the secure electronic transmission, storage and hosting of sensitive information, including Protected Health Information ("PHI"), financial information and other sensitive information relating to its clients, company and workforce. As a result, T-System faces risk of a deliberate or unintentional incident involving unauthorized access to its computer systems or data that could result in the misappropriation or loss of assets or the disclosure of sensitive information, the corruption of data, or other disruption of its business operations. Similarly, denial-of-service, ransomware or other Internet-based attacks may range from mere vandalism of T-System's electronic systems to systematic theft of sensitive information and intellectual property. We believe that, in recent years, companies in T-System's industry have been targeted by such events with increasing frequency, primarily due to the increasing value of healthcare-related data.

Various risks could affect T-System's worldwide operations, exposing it to significant costs.

T-System conducts operations in the United States, India, and the Philippines, either directly or through its service providers. Such worldwide operations expose T-System to potential operational disruptions and costs as a result of a wide variety of events, including local inflation or economic downturn, currency exchange fluctuations, political turmoil, terrorism, labor issues, natural disasters, unfavorable intellectual property protection, and pandemics. Any such disruptions or costs could have a negative effect on T-System's ability to provide its services or meet its contractual obligations, the cost of its services, client and user satisfaction, its ability to attract or maintain clients and users, and, ultimately, its profits.

If T-System is unable to effectively grow revenue and profitability we may be required to record impairment charges to their assets, the carrying value of their goodwill or other intangible assets, which could have a material adverse effect on our financial condition and results of operations.

We assess the potential impairment of T-System's long-lived assets whenever events or changes in circumstances indicate that the carrying value of the assets or asset group may not be recoverable. Factors considered include, but are not limited to, significant underperformance relative to historical or projected future operating results, significant changes in the manner in which an asset is being used, an expectation that an asset will be disposed of significantly before the end of its previously estimated useful life and significant negative industry or economic trends. We annually review and compare the carrying value of intangible assets, including goodwill, to the fair value. We cannot accurately predict the amount and timing of any recorded impairment to T-System's assets and there could be a material adverse effect on our financial condition and results of operations.

Factors Relating to the Company's Corporate and Other Businesses

Competition and technology may erode the Corporate and Other business franchises and result in lower earnings, which could have a material adverse effect on our business, financial condition and results of operations.

Each of the Corporate and Other businesses face intense competitive pressures within markets in which they operate. While we will manage our businesses with the objective of achieving long-term sustainable growth by developing and strengthening competitive advantages, many factors, including market and technology changes, may erode or prevent the strengthening of competitive advantages. Accordingly, future operating results will depend to some degree on whether our Corporate and Other businesses are successful in protecting or enhancing their competitive advantages. If our Corporate and Other businesses are unsuccessful in these efforts, our periodic operating results in the future may decline from current levels.

The Corporate and Other businesses, from time to time in the ordinary course of business, are involved in legal proceedings and may experience unfavorable outcomes, which could have a material adverse effect on our business, financial condition and results of operations.

The Corporate and Other businesses, from time to time in the ordinary course of business, are involved in pending and threatened litigation matters, some of which include claims for punitive or exemplary damages. These companies are also subject to compliance with extensive government laws and regulations related to employment practices and policies. The Corporate and Other businesses may not be able to successfully resolve these types of conflicts to their satisfaction, and these matters may involve claims for substantial amounts of money or for other relief that might necessitate changes to their business or operations. The defense of these actions may be both time consuming and expensive and their outcomes cannot be predicted with certainty. Determining reserves for pending litigation is a complex, fact-intensive process that requires significant legal judgment. It is possible that unfavorable outcomes in one or more such proceedings could result in substantial payments that could have a material adverse effect on the Corporate and Other businesses' cash flows in a particular period or on our business, financial condition and results of operations.

Failure to comply with, or changes in, laws or regulations applicable to the Corporate and Other businesses could have a material adverse effect on our business, financial condition and results of operations.

The Corporate and Other businesses will be subject to certain laws, such as certain environmental laws, takeover laws, anti-bribery and anti-corruption laws, escheat or abandoned property laws, and antitrust laws, that may impose requirements on us and them as an affiliated group. As a result, we could become jointly and severally liable for all or part of fines imposed on our Corporate and Other businesses or be fined directly for violations committed by these businesses, and such fines imposed directly on us could be greater than those imposed on such businesses. Compliance with these laws or contracts could also require us to commit significant resources and capital towards information gathering and monitoring thereby increasing our operating costs.

Similarly, the Corporate and Other businesses may be subject to contractual obligations which may impose obligations or restrictions on their affiliates. The interpretation of such contractual provisions will depend on local laws. Given that we do not control all of the Corporate and Other businesses and that they generally operate independently of each other, there is a risk that we could contravene one or more of such laws, regulations and contractual arrangements due to limited access and opportunities to monitor compliance. In addition, compliance with these laws or contracts could require us to commit significant resources and capital towards information gathering and monitoring thereby increasing our operating costs.

We need qualified personnel to manage and operate our Corporate and Other businesses, which could have a material adverse effect on our business, financial condition and results of operations.

In our decentralized business model, we need qualified and competent management to direct day-to-day business activities of our Corporate and Other businesses. Our Corporate and Other businesses also need qualified and competent personnel in executing their business plans and serving their customers, suppliers and other stakeholders. Changes in demographics, training requirements and the unavailability of qualified personnel could negatively impact our Corporate and Other businesses' ability to meet demands of customers to supply goods and services. Recruiting and retaining qualified personnel is important to all of our Corporate and Other businesses' operations. Although our Corporate and Other businesses have adequate personnel for the current business environment, unpredictable increases in demand for goods and services may exacerbate the risk of not having sufficient numbers of trained personnel, which could have a negative impact on our operating results, financial condition and liquidity.

Factors Relating to the Company's Investments

Our management may seek growth through acquisitions in lines of business that will not necessarily be limited to our current areas of focus or geographic areas. This expansion of our business subjects us to associated risks, such as the diversion of management's attention and lack of experience in operating such businesses, which could have a material adverse effect on our business, financial condition and results of operations.

We may make acquisitions in lines of business that are not directly tied to or synergistic with our current portfolio companies. Accordingly, we may in the future acquire businesses in industries or geographic areas with which management is less familiar than we are with our current businesses.

The acquisition and integration of any business we may acquire involves a number of risks and may result in unforeseen operating difficulties and expenditures in assimilating or integrating the businesses, technologies, products, personnel or operations of the acquired business. Furthermore, acquisitions may:

- involve our entry into geographic or business markets in which we have little or no prior experience;
- involve difficulties in retaining the customers of the acquired business;
- involve difficulties and expense associated with regulatory requirements, competition controls or investigations;
- result in a delay or reduction of sales for both us and the business we acquire; and
- disrupt our ongoing business, divert our resources and require significant management attention that would otherwise be available for ongoing development of our current business.

To complete future acquisitions, we may determine that it is necessary to use a substantial amount of our cash or engage in equity or debt financing. If we raise additional funds through further issuances of equity or convertible debt securities, our existing stockholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges senior to those of holders of our common stock. Any debt financing obtained by us in the future could involve restrictive covenants relating to our capital-raising activities and other financial and operational matters that make it more difficult for us to obtain additional capital in the future and to pursue other business opportunities, including potential acquisitions. In addition, we may not be able to obtain additional financing on terms favorable to us, if at all, which could limit our ability to engage in acquisitions. Moreover, we can make no assurances that the anticipated benefits of any acquisition, such as operating improvements or anticipated cost savings, would be realized or that we would not be exposed to unexpected liabilities in connection with any acquisition.

Further, an acquisition may negatively affect our operating results because it may require us to incur charges and substantial debt or other liabilities, may cause adverse tax consequences, substantial depreciation and amortization of deferred compensation charges, may require the amortization, write-down or impairment of amounts related to deferred compensation, goodwill and other intangible assets, may include substantial contingent consideration payments or other compensation that reduce our earnings during the quarter in which incurred, or may not generate sufficient financial return to offset acquisition costs.

We may often pursue investment opportunities that involve business, regulatory, legal or other complexities, which could have a material adverse effect on our business, financial condition and results of operations.

As an element of our investment style, we may pursue unusually complex investment opportunities. This could often take the form of substantial business, regulatory or legal complexity. Our tolerance for complexity may present risks, as such transactions can be more difficult, expensive and time-consuming to finance and execute; it may be more difficult to manage or realize value from the assets acquired in such transactions; and such transactions may sometimes entail a higher level of regulatory scrutiny or a greater risk of contingent liabilities. Any of these risks could harm our performance.

The loss of key personnel could impair our operating abilities and could have a material adverse effect on our business, financial condition and results of operations.

Our success will substantially depend on our ability to attract and retain key members of our senior management team and officers. If we lose one or more of these key employees, our operating results and in turn the value of our common stock could be materially adversely affected. Although we will have employment agreements with many of our officers, there can be no assurance that the entire term of the employment agreement will be served or that the employment agreement will be renewed upon expiration.

The due diligence process that we undertake in connection with new acquisitions may not reveal all facts that may be relevant in connection with an investment.

Before making acquisitions, we will conduct due diligence that we deem reasonable and appropriate based on the facts and circumstances applicable to each investment. When conducting due diligence, we may be required to evaluate important and complex business, financial, tax, accounting, environmental and legal issues. Outside consultants, legal advisers, accountants and investment banks may be involved in the due diligence process in varying degrees depending on the type of investment. Nevertheless, when conducting due diligence and making an assessment regarding an acquisition, we will rely on the resources available to us, including information provided by the target of the investment and, in some circumstances, third party investigations. The due diligence investigation that we will carry out with respect to any opportunity may not reveal or highlight all relevant facts (including fraud) that may be necessary or helpful in evaluating such opportunity. Moreover, such an investigation will not necessarily result in the investment being successful.

Factors Relating to the Split-Off

We may incur material costs as a result of our separation from FNF, which could have a material adverse effect on our business, financial condition and results of operations.

We will incur costs and expenses not previously incurred as a result of our separation from FNF. These increased costs and expenses may arise from various factors, including financial reporting or costs associated with complying with the federal securities laws (including compliance with the Sarbanes-Oxley Act of 2002, tax administration and human resources related functions.) Although FNF will continue to provide many of these services for us at no-cost (other than reimbursement of FNF's out-of-pocket costs and expenses) under the corporate services agreement for up to three years following the Split-Off. If the corporate services agreement is not mutually terminated by Cannae Holdings and FNF prior to the expiration of the initial three-year term, the corporate services agreement will automatically renew for successive one-year terms on mutually agreeable arm's length terms unless FNF and Cannae Holdings mutually agree to terminate the agreement. We cannot assure you that we will not incur third-party vendor costs or out-of-pocket expenses under the corporate services agreement that are material to our business. Moreover, we will have to develop internal departments/functions to perform the services at the end of the term of the corporate services agreement.

Our company has overlapping directors and officers with FNF, which may lead to conflicting interests.

Four of our executive officers, Brent B. Bickett, Richard L. Cox, Michael L. Gravelle and David Ducommun, are also employed by FNF or FNF's subsidiaries and two of our directors, William P. Foley, II and Richard N. Massey also serve on the boards of directors of FNF or its subsidiaries. Our executive officers and members of our board of directors have fiduciary duties to our stockholders. Likewise, any such persons who serve in similar capacities at FNF or any other public company have fiduciary duties to that company's stockholders. We also are party to a variety of related party agreements and relationships with FNF and certain of FNF's subsidiaries and FNF and subsidiaries of FNF have an ownership interest in Cannae Holdings. From time to time, we may enter into transactions with FNF and/or its respective subsidiaries or other affiliates. There can be no assurance that the terms of any such transactions will be as favorable to our company, FNF or any of our or its respective subsidiaries or affiliates as would be the case where there is no overlapping officer or director.

Our agreements with FNF were negotiated while we were a subsidiary of FNF.

We have a number of inter-company agreements covering matters such as tax sharing and our responsibility for certain liabilities previously undertaken by FNF for certain of our businesses. In addition, we have entered into (i) a corporate services agreement with FNF, pursuant to which FNF provides to us certain "back office" services at no-cost (other than reimbursement of FNF's out-of-pocket costs and expenses), (ii) a voting agreement with FNF, pursuant to which FNF agrees to appear or cause all shares of Cannae Holdings common stock that FNF or its subsidiaries, as applicable, own after the Split-Off to be counted as present at any meeting of the stockholders of Cannae Holdings, for the purpose of establishing a quorum, and agrees to vote all of such Cannae Holdings shares (or cause them to be voted) in the same manner as, and in the same proportion to, all shares voted by holders of Cannae Holdings common stock (other than FNF and its subsidiaries), (iii) a registration rights agreement, pursuant to which FNF or its subsidiaries, as applicable, received registration rights with respect to the shares in Cannae held by FNF and (iv) a revolver note with FNF, pursuant to which Cannae Holdings may borrow revolving loans, the proceeds of which may be used for investment purposes and working capital needs, from FNF from time to time in an aggregate amount not to exceed $100.0 million. The terms of all of these agreements were established while we were a wholly-owned subsidiary of FNF, and hence may not be the result of arm's length negotiations. We believe that the terms of these inter-company agreements are commercially reasonable and fair to all parties under the circumstances; however, conflicts could arise in the interpretation or any extension or renegotiation of the foregoing agreements after the Split-Off.

Factors Relating to the Company's Common Stock and the Securities Market

Our charter, bylaws and provisions of Delaware law may discourage or prevent strategic transactions, including a takeover of our company, even if such a transaction would be beneficial to our stockholders.

Provisions contained in our charter and bylaws and provisions of the Delaware General Corporate Law ("DGCL"), could delay or prevent a third party from entering into a strategic transaction with us, as applicable, even if such a transaction would benefit our stockholders. For example, our charter and bylaws:

- authorize the issuance of "blank check" preferred stock that could be issued by us upon approval of our board of directors to increase the number of outstanding shares of capital stock, making a takeover more difficult and expensive;

- provide that directors may be removed from office only for cause and that any vacancy on our board of directors may only be filled by a majority of our directors then in office, which may make it difficult for other stockholders to reconstitute our board of directors;

- provide that special meetings of the stockholders may be called only upon the request of a majority of our board of directors or by our executive chairman, chief executive officer or president, as applicable;

- require advance notice to be given by stockholders for any stockholder proposals or director nominees;

- provide that directors are elected by a plurality of the votes cast by stockholders, which results in each director nominee elected by a plurality winning his or her seat upon receiving one "for" vote; and

- provide that the board of directors is divided into three classes, as nearly equal in number as possible, with one class being elected at each annual meeting of stockholders, which could make it more difficult for a third party to acquire, or discourage a third party from seeking to acquire, control of Cannae.

These restrictions and provisions could keep us from pursuing relationships with strategic partners and from raising additional capital, which could impede our ability to expand our business and strengthen our competitive position. These restrictions could also limit stockholder value by impeding a sale of our company.

Factors Relating to the Company's Investment in Dun & Bradstreet

Our investment in D&B may expose us to certain risks, which could have a material adverse effect on our results of operations or financial position.

On February 8, 2019, Cannae and an investment consortium (the “Consortium”) including CC Capital Partners LLC and Thomas H. Lee Partners along with other investors completed the previously announced acquisition of The Dun & Bradstreet Corporation, a Delaware corporation ("Dun & Bradstreet" or "D&B")(the "DNB Acquisition"). Of our previously disclosed $900.0 million commitment to purchase common equity of the parent of Dun & Bradstreet, we retained and funded a $505.6 million investment, representing 24.5% of the outstanding common equity, and syndicated the remainder to other investors.

Refer to discussion under Recent Developments in Item 7 of Part II of this Annual Report for further information on the DNB Acquisition and related transactions.

D&B’s strategy is designed to drive long-term sustainable growth as one global company delivering content through modern channels to serve customer needs with their forward-leaning culture. The achievement of their strategic initiatives depends on a number of factors, including but not limited to their ability to maintain the integrity of their brand and reputation, customer demand for their products, the effect of macro-economic challenges on their customers and vendors, their reliance on third parties to provide data and certain operational services and their ability to protect their information technology. D&B may not be able to successfully implement their strategic initiatives in accordance with their expectations, or in the timeframe they desire, which may result in us not realizing our expected return on investment, or a negative return on investment.

D&B has undertaken a strategic and operational review of their business to help them find ways to accelerate value realization, including certain cost saving initiatives. Based on this review, D&B intends to undertake certain strategic and cost saving initiatives, which they believe will help them to achieve this goal. They cannot guarantee they will be able to successfully implement these strategic or cost saving initiatives. Furthermore, they may be unable to achieve, or may be delayed in achieving, some or all of the benefits from such initiatives. Additionally, even if they achieve these goals, they may not receive the expected benefits of the initiatives, or the costs of implementing these initiatives could exceed the related benefits. If they are unable to successfully implement these initiatives, if these initiatives are not as successful as planned or if they do not receive the expected benefits of these initiatives, they may not be able to meet their value realization expectations, which may result in us not realizing our expected return on investment, or a negative return on investment.

We expect our investment will be accounted for under the equity method of accounting, through which we will record our proportionate share of their net earnings or loss in our consolidated financial statements. Equity-method investments are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the investment may not be recoverable. If our equity-method investment is not recoverable, we may be required to record an impairment charge, which could have a material adverse effect on our results of operations.

Our company has overlapping directors with D&B, which may lead to conflicting interests.

Two of our directors, William P. Foley, II and Richard N. Massey also serve on the boards of directors of D&B or its parent and subsidiaries. From time to time, we may enter into transactions with D&B and/or its respective subsidiaries or other affiliates. There can be no assurance that the terms of any such transactions will be as favorable to our company, D&B or any of our or its respective subsidiaries or affiliates as would be the case where there is no overlapping director.

Item 1B. ***Unresolved Staff Comments***

None.

Item 2. ***Properties***

Our corporate headquarters are located in Las Vegas, Nevada in leased facilities.

Restaurant Group. The Restaurant Group's headquarters are located in Nashville, Tennessee with other office locations in Woburn, Massachusetts and Denver, Colorado. The majority of the restaurants are leased from third parties, and are located in 40 states throughout the United States and Guam. Substantially all of our Restaurant Group's revenues are generated in those states.

Ceridian. The principal executive offices of Ceridian are located in Minneapolis, Minnesota and Toronto, Ontario. As of December 31, 2018, Ceridian's principal computer and office facilities are located in the metropolitan areas of Minneapolis, Minnesota; Atlanta, Georgia; Los Angeles, California; Chicago, Illinois; St. Petersburg, Florida; St. Louis, Missouri; Honolulu, Hawaii; Louisville, Kentucky; in Winnipeg, Manitoba, Montreal, Quebec, Ottawa, Ontario, Calgary, Alberta, Halifax, Nova Scotia, Charlottetown, Prince Edward Island, Canada; and in Ebene, Mauritius.

T-System. T-System's headquarters are located in Dallas, Texas with other leased offices located in Kansas City, Kansas.

Corporate and Other. The Golf & Real Estate segment of CTR owns a 1,800 acre ranch-style luxury resort and residential community in Bend/Powell Butte, Oregon and an 18-hole championship golf facility located in Rock Creek, Idaho.

Item 3. ***Legal Proceedings***

For a description of our legal proceedings see discussion under *Legal and Regulatory Contingencies* in Note M. *Commitments and Contingencies* to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report, which is incorporated by reference into this Part I, Item 3.

PART II

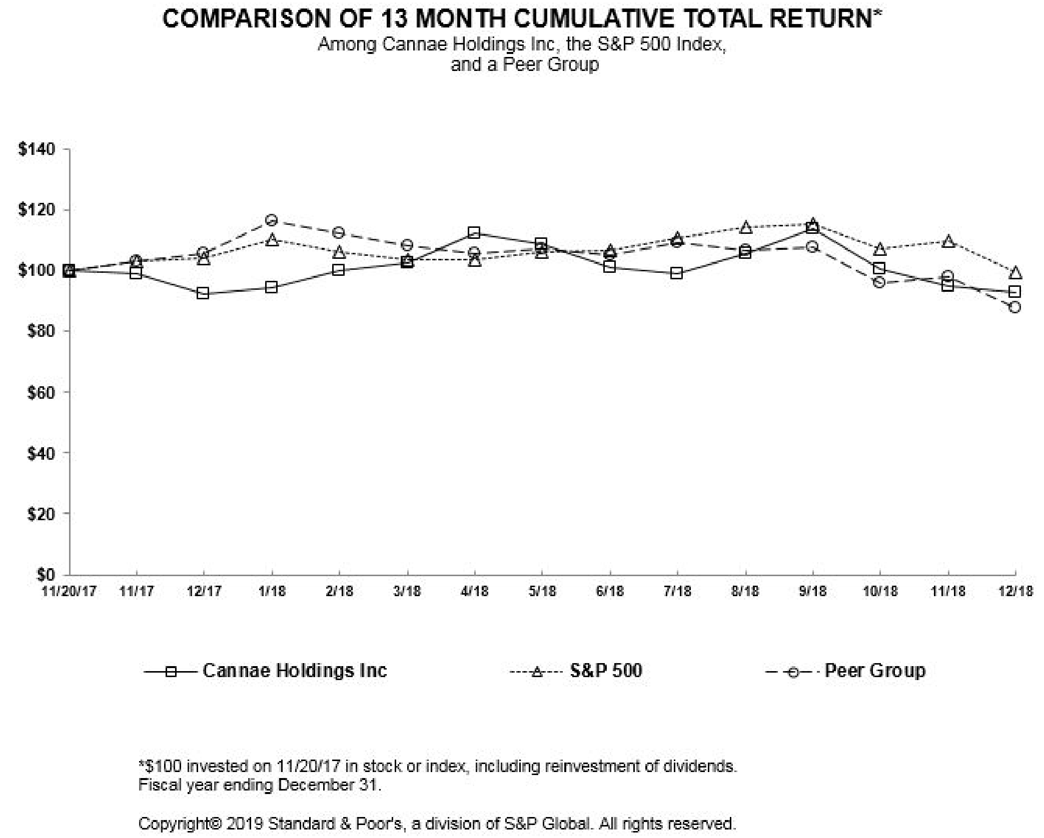
Item 5. ***Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities***

The Company's common stock trades on The New York Stock Exchange under the trading symbol "CNNE".

Information concerning securities authorized for issuance under our equity compensation plans will be included in Item 12 of Part III of this Annual Report.

PERFORMANCE GRAPH

Set forth below is a graph comparing cumulative total shareholder return on our Cannae Holdings (CNNE) common stock against the cumulative total return on the S&P 500 Index and against the cumulative total return of a peer group index consisting of certain companies against which we compete for the period ending December 31, 2018. The peer group comparison has been weighted based on their stock market capitalization. The graph assumes an initial investment of $100.00 on November 20, 2017, the date which CNNE began trading.



	11/20/2017	12/31/2017	12/31/2018
Cannae Holdings, Inc.	100.00	92.60	93.09
S&P 500	100.00	104.21	99.64
Peer Group (1)	100.00	105.90	88.01

(1) This peer group consists of the following companies: Apollo Global Management, LLC, Ares Capital Corporation, BlackRock, Inc., The Blackstone Group L.P., The Carlyle Group L.P., Compass Diversified Holdings, Jefferies Financial Group Inc., KKR & Co. Inc., and Qurate Retail Inc.

On January 31, 2019, the last reported sale price of Cannae Holdings common stock on The New York Stock Exchange was $19.34 per share. We had approximately 5,073 shareholders of record of Cannae Holdings common stock.

Item 6. *Selected Financial Data*

The information set forth below should be read in conjunction with the Consolidated and Combined Financial Statements and related notes and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included elsewhere in this Form 10-K. Certain reclassifications have been made to the prior year amounts to conform with the 2018 presentation.

On June 6, 2017, we closed on the sale of OneDigital for $560.0 million in an all-cash transaction. The operations of One Digital are included in discontinued operations for the years ended December 31, 2017, 2016 and 2015. We recognized a pre-tax gain of $276.0 million on the sale and $126.3 million in income tax expense, which are included in Net earnings from discontinued operations on the Consolidated and Combined Statement of Operations for the quarter ended June 30, 2017.

On September 28, 2015, we completed the distribution of J. Alexander's to FNFV shareholders. The results of J. Alexander's operations are included through the distribution date.

On December 31, 2014, we completed the distribution of Remy International, Inc. to FNFV shareholders. The results of operations of Remy are included in discontinued operations for the year ended December 31, 2014.

Summary Balance Sheet Data:

	As of December 31,				
	2018	2017	2016	2015	2014
	(in millions)				
Balance Sheet Data:					
Cash and cash equivalents	$ 323.0	$ 245.6	$ 141.7	$ 273.8	203.0
Total assets	1,459.5	1,487.2	1,473.3	1,469.5	1,918.1
Notes payable, long term	42.2	12.7	93.3	92.8	113.0
Equity	1,199.7	1,153.1	1,009.8	1,056.5	1,483.6

Summary Statement of Operations Data:

	Year Ended December 31,				
	2018	2017	2016	2015	2014
	(in millions, except per share amounts)				
Operating Data:					
Operating revenue	$ 1,205.4	$ 1,169.5	$ 1,178.4	$ 1,414.7	$ 1,453.8
Expenses:					
Operating Expenses:					
Cost of restaurant revenues	991.3	991.0	984.1	1,195.2	1,219.6
Personnel costs	170.3	103.2	68.3	85.4	110.7
Depreciation and amortization	61.3	49.3	44.7	49.8	53.2
Other operating expenses, including asset impairments	132.3	104.4	83.5	96.4	90.6
Total operating expenses	1,355.2	1,247.9	1,180.6	1,426.8	1,474.1
Operating loss	(149.8)	(78.4)	(2.2)	(12.1)	(20.3)
Total other income (expense), net	168.4	3.2	7.4	8.3	(1.4)
Earnings (loss) before income taxes, equity in (loss) earnings of unconsolidated affiliates, and noncontrolling interest	18.6	(75.2)	5.2	(3.8)	(21.7)
Income tax expense (benefit)	13.1	(16.6)	(10.4)	(19.7)	160.3
Earnings (loss) before equity in (loss) earnings of unconsolidated affiliates	5.5	(58.6)	15.6	15.9	(182.0)
Equity in (loss) earnings of unconsolidated affiliates	(16.1)	3.4	(29.5)	(26.0)	431.9
(Loss) earnings from continuing operations, net of tax	(10.6)	(55.2)	(13.9)	(10.1)	249.9
Earnings from discontinued operations, net of tax	—	147.7	2.0	2.8	10.1
Net (loss) earnings	(10.6)	92.5	(11.9)	(7.3)	260.0
Less: Net (loss) earnings attributable to noncontrolling interests	(38.2)	(16.3)	0.5	15.6	3.8
Net earnings (loss) attributable to Cannae Holdings	$ 27.6	$ 108.8	$ (12.4)	$ (22.9)	$ 256.2
Per Share Data:					
Basic					
Net earnings (loss) from continuing operations attributable to Cannae Holdings common shareholders (1)	$ 0.39	$ (0.55)	$ (0.21)	$ (0.36)	$ 3.49
Net earnings from discontinued operations attributable to Cannae Holdings common shareholders (1)	—	2.09	0.03	0.04	0.14
Net earnings (loss) per share attributable to Cannae Holdings common shareholders (1)	$ 0.39	$ 1.54	$ (0.18)	$ (0.32)	$ 3.63
Weighted average shares outstanding Cannae Holdings, basic basis (1)	71.2	70.6	70.6	70.6	70.6
Diluted					
Net earnings (loss) from continuing operations attributable to Cannae Holdings common shareholders (1)	$ 0.39	$ (0.55)	$ (0.21)	$ (0.36)	$ 3.49
Net earnings from discontinued operations attributable to Cannae Holdings common shareholders (1)	—	2.09	0.03	0.04	0.14
Net earnings (loss) per share attributable to Cannae Holdings common shareholders (1)	$ 0.39	$ 1.54	$ (0.18)	$ (0.32)	$ 3.63
Weighted average shares outstanding Cannae Holdings, diluted basis (1)	71.3	70.6	70.6	70.6	70.6
Cash dividends paid per share Cannae Holdings common stock	$ —	$ —	$ —	$ —	$ —
Book value per share Cannae Holdings (1)(2)	$ 16.61	$ 16.33	$ 14.30	$ 14.96	$ 21.01

(1) On November 17, 2017, the date of the consummation of the Split-Off, 70.6 million common shares of CNNE were distributed to FNFV Group shareholders. For comparative purposes, the weighted average number of common shares outstanding and basic and diluted earnings per share for the years ended December 31, 2016, 2015, and 2014 were calculated using the number of shares distributed as if those shares were issued and outstanding beginning January 1, 2014.

(2) Book value per share is calculated as equity at December 31 of each year presented divided by actual shares outstanding at December 31 of each year presented.

Summary Quarterly Financial Data (Unaudited)

Selected quarterly financial data is as follows:

	Quarter Ended			
	March 31,	**June 30,**	**September 30,**	**December 31,**
	(in millions, except per share amounts)			
2018:				
Operating revenue (1)	$ 292.4	$ 302.3	$ 293.5	$ 317.2
(Loss) earnings before income taxes, equity in (loss) earnings of unconsolidated affiliates, and noncontrolling interest (1)	(9.7)	(0.2)	(12.8)	41.3
Net (loss) earnings attributable to Cannae Holdings (1)	$ (1.1)	$ (19.8)	$ 1.5	$ 47.0
Basic (loss) earnings per share attributable to Cannae Holdings common shareholders (1)	$ (0.02)	$ (0.28)	$ 0.02	$ 0.66
Diluted (loss) earnings per share attributable to Cannae Holdings common shareholders (1)	$ (0.02)	$ (0.28)	$ 0.02	$ 0.66
Cash dividends paid per share Cannae Holdings common stock	$ —	$ —	$ —	$ —
2017:				
Operating revenue	$ 275.3	$ 295.5	$ 281.3	$ 317.4
(Loss) earnings before income taxes, equity in losses of unconsolidated affiliates, and noncontrolling interest	(2.2)	(35.4)	(21.2)	(16.4)
Net earnings (loss) attributable to Cannae Holdings	$ 0.5	$ 126.4	$ (16.6)	$ (1.5)
Basic earnings (loss) per share attributable to Cannae Holdings common shareholders	$ —	$ 1.79	$ (0.24)	$ (0.02)
Diluted earnings (loss) per share attributable to Cannae Holdings common shareholders	$ —	$ 1.79	$ (0.24)	$ (0.02)
Cash dividends paid per share Cannae Holdings common stock	$ —	$ —	$ —	$ —

(1) Previously reported quarterly information is different from the previously reported amounts in our Form 10-Qs for the periods ended March 31, June 30 and September 30, 2018 due to immaterial corrections made during the fourth quarter of 2018. Operating revenue for the quarters ended March 31 and June 30, 2018 decreased by $1.5 million and $1.6 million, respectively, from the previously reported amounts. (Loss) earnings before income taxes, equity in (loss) earnings of unconsolidated affiliates, and noncontrolling interest for the quarters ended March 31, June 30, and September 30, 2018 (increased) decreased by $(0.9) million, $(1.2) million, and $0.6 million, respectively from the previously reported amounts. Net (loss) earnings attributable to Cannae Holdings for the quarters ended March 31, June 30, and September 30, 2018 increased (decreased) by $0.6 million, $(1.0) million, and $0.4 million, respectively from the previously reported amounts. Basic loss per share attributable to Cannae Holdings common shareholders and Diluted loss per share attributable to Cannae Holdings common shareholders for the quarter ended June 30, 2018 increased by $0.02 per share from the previously reported amounts. The corrections relate to the immaterial correction of errors discussed further in Note A *Business and Summary of Significant Accounting Policies* to our Consolidated and Combined Financial Statements.

Item 7. ***Management's Discussion and Analysis of Financial Condition and Results of Operations***

The following discussion should be read in conjunction with the Consolidated and Combined Financial Statements and the Notes thereto and Selected Financial Data included elsewhere in this Form 10-K.

Overview

For a description of our business, including descriptions of segments, see the discussion under Business in Item 1 of Part I of this Annual Report, which is incorporated by reference into this Part II, Item 7 of this Annual Report.

Recent Developments

Dun & Bradstreet

On August 8, 2018, we entered into an agreement to partner with an investment consortium (the "Consortium") including CC Capital Partners LLC and Thomas H. Lee Partners along with other investors to acquire The Dun & Bradstreet Corporation, a Delaware corporation ("Dun & Bradstreet") (the "DNB Acquisition"). Contemporaneously, Dun & Bradstreet entered into an Agreement and Plan of Merger (the "Merger Agreement") by and between Dun & Bradstreet, Star Parent, L.P. ("Star"), a Delaware limited partnership, and Star Merger Sub, Inc. ("Merger Sub"), a Delaware corporation and a wholly owned subsidiary of Star, and upon the terms and subject to the conditions set forth in the Merger Agreement, Merger Sub will merge with and into Dun & Bradstreet (the "Merger"), with Dun & Bradstreet continuing as the surviving company in the Merger. Under the terms of the Merger, Dun & Bradstreet shareholders received $145.00 in cash for each share of common stock they owned at closing.

On February 8, 2019, the DNB Acquisition closed and was financed through a combination of $2.1 billion of common equity financing provided by the Consortium, $1.1 billion of preferred equity from preferred equity sources and $4.0 billion of debt financing from various lenders.

Of our previously disclosed $900.0 million commitment to purchase common equity of Star and Dun & Bradstreet, we retained and funded a $505.6 million investment, representing 24.5% of the outstanding common equity, and syndicated the remainder to other investors. We expect to account for the DNB Investment as an equity method investment which will result in our initial investment being recorded as an Investment in unconsolidated affiliate on our balance sheet and our portion (24.5%) of Dun & Bradstreet's periodic earnings or losses to be included in Equity in earnings (losses) of unconsolidated affiliates, outside of operating income or loss, on our statement of operations.

Dun & Bradstreet is a global leader in commercial data and analytics and provides various services helping companies improve their operational performance.

Ceridian

On April 26, 2018, Ceridian's previously announced registration statement on Form S-1 was declared effective by the SEC and Ceridian priced its initial public offering of 21,000,000 shares of common stock at a price of $22.00 per share (the "Ceridian IPO"). In addition, the underwriters of the Ceridian IPO were granted and exercised a 30-day option to purchase up to an additional 3,150,000 shares at the initial public offering price, less underwriting discounts and commissions. The New York Stock Exchange ("NYSE") and the Toronto Stock Exchange ("TSX") have approved the listing of Ceridian's shares. Ceridian's shares trade on the NYSE and TSX under the ticker symbol "CDAY."

In accordance with the terms of our management agreement with Ceridian, the agreement was terminated upon closing of the Ceridian IPO. The termination resulted in a termination fee of $5.6 million which was paid to us on May 1, 2018 and is included in Other operating revenue on the Consolidated and Combined Statement of Operations for the year ended December 31, 2018.

Subsequent to the Ceridian IPO, and participation in a concurrent private placement investment in which we acquired 1,521,030 shares of CDAY representing an investment of $33.4 million from funds previously invested by us and held at Ceridian, we owned a total of 37,135,921 shares of CDAY. We recorded a gain of $63.2 million related to our change in ownership of Ceridian which is included in Realized gains, net on the Consolidated and Combined Statement of Operations for the year ended December 31, 2018. The recorded gain is net of $21.1 million of losses (exclusive of $4.4 million of income tax benefit) related to reclassification adjustments from Other comprehensive income.

On May 7, 2018, the Compensation Committee of the Board of Directors approved a success bonus of up to $67.1 million resulting from the successful Ceridian IPO. The success bonus was calculated based on 10% of the value of our investment in Ceridian in excess of our basis in Ceridian prior to the Ceridian IPO. The success bonus was paid to certain members of the Board of Directors and management who contributed to acquiring and growing Ceridian over Cannae's and its predecessor's ten year ownership of Ceridian, and was paid in a combination of cash and stock. On May 16, 2018, we issued 991,906 shares of our common stock for the stock portion of the bonuses. The remaining $46.9 million was paid in cash during the year ended December 31, 2018. The expense resulting from the success bonus is included in Personnel expense on the Consolidated and Combined Statement of Operations for the year ended December 31, 2018.

LifeWorks Corporation Ltd. ("LifeWorks"), a former minority-owned subsidiary of Ceridian, was distributed pro-rata to Ceridian shareholders contemporaneously with the Ceridian IPO. On July 27, 2018, LifeWorks was sold to Morneau Shepell, Inc. for $325.0 million. Cannae's cash proceeds for its equity interest in LifeWorks were $56.2 million. We recorded a gain of $24.0 million on the sale which is included in Realized gains (losses), net on the Consolidated and Combined Statements of Operations for the year ended December 31, 2018.

On November 16, 2018, we completed the sale of 4,396,694 shares of common stock of Ceridian as part of an underwritten secondary public offering by certain stockholders of Ceridian at a public offering price of $36.00 per share. In connection with the sale, the Company received $34.695 per share (after the applicable underwriter discount) for aggregate proceeds of $152.5 million. We recorded a gain of $92.6 million on the sale which is included in Realized gains (losses), net on the Consolidated and Combined Statements of Operations for the year ended December 31, 2018. Subsequent to the sale, we own 23.5% of the outstanding common stock of Ceridian.

Restaurant Group

On November 6, 2018, we entered into various definitive agreements with Fidelity Newport Holdings, LLC ("FNH", a subsidiary of the Company and the direct parent of ABRH), ABRH and 99 Restaurants (together with its direct and indirect subsidiaries, the "99 Companies") pursuant to which the following occurred (collectively, the "ABRH-99 Restructuring"): (i) ABRH and certain of its direct and indirect subsidiaries transferred to the applicable 99 Companies those assets principally associated with the 99 Restaurants brand that were not already owned by the 99 Companies; (ii) the existing intercompany credit facility (with an outstanding balance of approximately $133.0 million in principal, plus accrued but unpaid interest and fees) under which we were the sole lender to ABRH, for the benefit of ABRH and its subsidiaries, including the 99 Companies (the “Intercompany Credit Facility”), was modified so that 99 Holdings became the direct borrower (and ABRH and all of its direct and indirect subsidiaries, other than the 99 Companies, were released from their obligations thereunder); (iii) $100.0 million of the outstanding balance due to Cannae under the Intercompany Credit Facility was exchanged for 66.7% of the direct equity interest in 99 Holdings (with ABRH being the direct holder of the remaining 33.3% of the equity interests in 99 Holdings); (iv) FNH paid a facilitation fee to us in the form of 18,023,407 Class A units of FNH and (v) ABRH agreed to continue to provide support services to the 99 Companies. As a result of the ABRH-99 Restructuring, Cannae (x) owns 65.4% of FNH directly and (y) 88.5% of 99 Holdings beneficially (through a combination of its directly held equity interests in 99 Holdings and the equity interests it holds in FNH).

On December 21, 2018, a wholly-owned subsidiary of 99 Restaurants entered into a credit agreement (the "99 Restaurants Credit Facility") with various banks. Proceeds of $36.2 million were received at closing and primarily used to repay the remaining balance outstanding under the Intercompany Credit Facility. See Note K for further details of the material terms of the agreements.

During the year ended December 31, 2018, we entered into a plan to sell certain real estate assets of ABRH including its corporate offices located in Nashville, Tennessee and Denver, Colorado. In conjunction with the plan of sale, we reclassified $9.3 million of assets held for sale from Property and equipment, net to Prepaid expenses and other current assets on the Consolidated and Combined Balance Sheet as of December 31, 2018.

Other Developments

On November 7, 2018, our wholly-owned subsidiary entered into a Margin Loan Agreement (the "Loan Agreement"), and certain other related agreements, with various lenders pursuant to which we may borrow up to $300.0 million (the "Margin Facility") in term loans at an interest rate of the three-month LIBOR plus an applicable margin. See Note K to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report for further discussion.

On August 10, 2018, our Board of Directors adopted a resolution increasing the size of the Company’s Board of Directors to eight, and elected Erika Meinhardt to serve on our Board of Directors. Ms. Meinhardt will serve in Class II of our Board of Directors, and her term will expire at the annual meeting of our shareholders to be held in 2019. Ms. Meinhardt has not been appointed to any committee of our Board.

Acquisitions and Dispositions

The results of operations and financial position of the entities acquired during any year are included in the Consolidated and Combined Financial Statements from and after the date of acquisition. In the years ended December 31, 2017 and 2016, we made several acquisitions and dispositions of businesses. See Note B *Acquisitions and Dispositions* of our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report for further discussion.

Related Party Transactions

Our financial statements for all years presented reflect transactions with FNF. See Note R to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report for further discussion.

Business Trends and Conditions

Restaurant Group

The restaurant industry is highly competitive and is often affected by changes in consumer tastes and discretionary spending patterns; changes in general economic conditions; public safety conditions or concerns; demographic trends; weather conditions; the cost of food products, labor, energy and other operating costs; and governmental regulations. Higher labor costs due to state and local minimum wage increases and shopping pattern shifts to e-commerce and “ready to eat” grocery and convenience stores have had a negative impact on restaurant performance, particularly in the casual and family dining restaurants in which the company operates.

The restaurant industry is also characterized by high capital investments for new restaurants and relatively high fixed or semi-variable restaurant operating expenses. Because of the high fixed and semi-variable expenses, changes in sales in existing restaurants are generally expected to significantly affect restaurant profitability because many restaurant costs and expenses are not expected to change at the same rate as sales. Restaurant profitability can also be negatively affected by inflationary and regulatory increases in operating costs and other factors. The most significant commodities that may affect our cost of food and beverage are beef, seafood, poultry, and dairy, which accounted for approximately half of our overall cost of food and beverage in the past. Generally, temporary increases in these costs are not passed on to guests; however, in the past, we have adjusted menu prices to compensate for increased costs of a more permanent nature.

Average weekly sales per restaurant are typically higher in the first and fourth quarters than in other quarters, and we typically generate a disproportionate share of our earnings from operations in the first and fourth quarters. Holidays, severe weather and other disruptive conditions may impact sales volumes seasonally in some operating regions.

Our revenues in future periods will continue to be subject to these and other factors that are beyond our control and, as a result, are likely to fluctuate.

Ceridian

As of December 31, 2018, we own a 23.5% interest in Ceridian. Ceridian is a global company that offers a broad range of services and software designed to help employers more effectively manage employment processes, such as payroll, payroll related tax filing, human resource information systems, employee self-service, time and labor management, and recruitment and applicant screening. As a result of Ceridian's acquisition of Dayforce Corporation in 2012, which built Dayforce, a cloud HCM solution, Ceridian generally stopped actively selling its bureau solutions to new customers in the United States to focus its resources on expanding the Dayforce platform and growing cloud solutions. Through the year ended December 31, 2018, Ceridian’s cloud revenue is more than double its legacy bureau revenue and continues to grow.

Over the last several years, a number of factors have significantly affected Ceridian’s results of operations, including its capital restructuring resulting from the initial acquisition by Thomas H. Lee Partners, L.P., a Delaware limited partnership ("THL") and FNFV, LLC of all of the outstanding equity of the Ceridian entities that was completed on November 9, 2007 (such acquisition, the "2007 Merger"), and the related interest expense, the accounting and purchase price allocations from the 2007 Merger, the acquisition in 2012 of the Dayforce legal entities, and Ceridian’s corporate restructuring following the 2013 separation of Ceridian HCM and Comdata. Other factors that have affected Ceridian’s results of operations over the last several years include the levels of customer trust funds held, transaction volumes, price increases, foreign currency exchange rates, interest rates (including interest earned on customer trust funds and interest expense on debt), customer employment levels, and its cost savings initiatives. Ceridian is subject to the risks arising from adverse changes in domestic and global economic conditions. Ceridian believes all of such factors may continue to significantly affect its results of operations.

T-System

The healthcare industry is impacted by several factors that can impact the business landscape in which T-System operates. In the past several years health care providers have shown a preference for single IT platforms across all venues. During this same time, there has been a push for interoperability across different healthcare IT systems due to the likelihood that a single patient will have medical information from multiple health care facilities or providers. Healthcare IT systems continue to face rising costs from factors such as legislative and regulatory reform, complex reimbursement models, and difficulties in electronic data exchange. These factors may continue to impact the results of T-System’s operations.

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with U.S. GAAP. See Note A to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report for discussion our significant accounting policies.

The accounting policies and estimates described below are those we consider critical in preparing our Consolidated and Combined Financial Statements. Management is required to make estimates and assumptions that can affect the reported amounts of assets and liabilities and disclosures with respect to contingent assets and liabilities at the date of the Consolidated and Combined Financial Statements and the reported amounts of revenues and expenses during the reporting period. Actual amounts could differ from those estimates.

Valuation of Goodwill. Goodwill represents the excess of cost over fair value of identifiable net assets acquired and assumed in a business combination. Goodwill and other intangible assets with indefinite useful lives are reviewed for impairment annually or more frequently if circumstances indicate potential impairment, through a comparison of fair value to the carrying amount. We have the option to first assess goodwill for impairment based on a review of qualitative factors to determine if events and circumstances exist which will lead to a determination that the fair value of a reporting unit is greater than its carrying amount, prior to performing a full fair-value assessment. If, after assessing the totality of events or circumstances, the Company determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the quantitative impairment test is unnecessary. However, if the Company concludes otherwise, then it is required to perform the quantitative impairment test by calculating the fair value of the reporting unit and comparing the fair value with the carrying amount of the reporting unit. Goodwill impairment, if any, is measured as the amount by which a reporting unit's carrying value exceeds its fair value.

We allocate goodwill to reporting units based on the reporting unit expected to benefit from the business combination. We evaluate our reporting units on at least an annual basis and, if necessary, reassign goodwill using a relative fair value allocation approach. Goodwill is tested for impairment at the reporting unit level (operating segment or one level below an operating segment) annually in the fourth quarter (October 1) and between annual tests 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. These events or circumstances could include a significant change in the business climate, legal factors, operating performance indicators, competition, or sale or disposition of a significant portion of a reporting unit.

We use a combination of discounted cash flow analyses and market approaches to determine the fair value of each of our reporting units. Our discounted cash flow projections include assumptions for growth rates for revenues, costs and earnings, which are based on various long-range financial and operational plans of each reporting unit. Additionally, discount rates used in our goodwill analysis are based on weighted-average cost of capital, driven by comparable public companies, the prevailing interest rates, credit ratings, financing abilities and opportunities of each reporting unit, among other factors. Our market-based valuations utilize earnings multiples of comparable public companies, which are reflective of the market in which each respective reporting unit operates, and recent comparable market transactions. Changes in the factors used in our fair value estimates, including declines in industry or company-specific sales, margin erosion, discount rates used, and market multiples could have a significant impact on the fair values of the reporting units.

For the year ended December 31, 2018, we recorded $26.7 million of impairment to goodwill in our ABRH reporting unit within our Restaurant Group segment. The impairment charge was a result of deteriorating operating results and cash flow resulting from declining same store sales and increased costs.

For years ended December 31, 2017 and 2016, we determined that there were no events or circumstances which indicated that the carrying value of goodwill exceeded the fair value and no impairment was recorded.

With the completion of the T-System acquisition in October 2017, we established new T-System reporting units. Because these reporting units consist solely of the acquired businesses, the book value of which equaled its fair value as of the acquisition date, no cushion of fair value over book value existed at the acquisition date. During our 2018 goodwill impairment testing of the reporting unit, we determined that T-System's two reporting units' cushion of fair value over book value was nominal. Given that the fair value is not substantially in excess of the book value, relatively small decreases in future cash flows from forecasted results or changes in discount rates or other assumptions could result in impairment of goodwill.

Valuation of Other Intangible Assets. We have other intangible assets, not including goodwill, which consist primarily of customer relationships and contracts, trademarks and tradenames which are generally recorded in connection with acquisitions at their fair value, franchise rights, the fair value of purchased software and capitalized software development costs. Intangible assets with estimable lives are amortized over their respective estimated useful lives to their estimated residual values and reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. In general, customer relationships are amortized over their estimated useful lives using an accelerated method which takes into consideration expected customer attrition rates. Contractual relationships are generally amortized over their respective contractual lives. Useful lives of computer software range from 3 to 10 years. Trademarks and tradenames are generally considered intangible assets with indefinite lives and are reviewed for impairment at least annually. Capitalized software development costs and purchased software are recorded at cost and amortized using the straight-line method over their estimated useful life.

Our primary indefinite-lived other intangible assets are the tradenames of our Restaurant Group brands. Tradenames are tested for impairment annually in the fourth quarter (October 1) and between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a tradename below its carrying value. We use a relief from royalty method to determine the fair value of our tradenames which includes assumptions for growth rates for revenues, tax rates, discount rates and royalty rates. Changes in the factors used in our fair value estimates, including declines in industry or company-specific sales, discount rates used, and royalty rates could have a significant impact on the fair values of our tradenames.

We recorded $5.8 million of impairment expense related to a tradename and an abandoned software project in our Restaurant Group in the year ended December 31, 2018. We recorded $2.9 million of impairment expense related to a tradename in our Restaurant Group in the year ended December 31, 2017. We recorded no impairment expense related to other intangible assets in the year ended December 31, 2016.

Accounting for Income Taxes. We recognize deferred tax assets and liabilities for temporary differences between the financial reporting basis and the tax basis of our assets and liabilities and expected benefits of utilizing net operating loss and credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The impact of changes in tax rates and laws on deferred taxes, if any, is applied to the years during which temporary differences are expected to be settled and reflected in the financial statements in the period enacted.

Refer to Note L to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report for further discussion of our accounting for income taxes.

Revenue Recognition.

On January 1, 2018, we adopted ASC Topic 606 by applying the modified retrospective method. Results for reporting periods beginning after January 1, 2018 are presented under ASC Topic 606, while prior period amounts are not adjusted and continue to be reported under the accounting standards in effect for the prior period. The adoption of ASC Topic 606 did not have a significant impact on the timing or amount of recognition of revenue for our primary sources of revenue. Differences between our historical revenue recognition and revenue which would have been recorded had we restated prior periods in conformity with ASC Topic 606 are not considered material.We recorded a cumulative effect adjustment to opening equity as of January 1, 2018 of $1.9 million as a result of the adoption of ASC Topic 606. As a result of errors identified in our adjustment for the cumulative effect of the adoption of ASC Topic 606 as of the date of adoption (January 1, 2018), as further discussed in Note A *Business and Summary of Significant Accounting Policies* to our Consolidated and Combined Financial Statements, the cumulative effect adjustment decreased by $2.4 million from the $4.3 million (net of tax), as reported, to $1.9 million (net of tax), as corrected.

Our revenue consists of:

Revenue Stream	Segment	Year ended December 31, 2018 Total Revenue
		(in millions)
Restaurant revenue:		
Restaurant sales	Restaurant Group	$ 1,023.0
Bakery sales	Restaurant Group	88.8
Franchise and other	Restaurant Group	6.0
Total restaurant revenue		1,117.8
Other operating revenue:		
T-System, point-in-time	T-System	24.5
T-System, over time	T-System	33.4
Real estate and resort	Corporate and other	23.2
Other	Corporate and other	6.5
Total other operating revenue		87.6
Total operating revenues		1,205.4

Restaurant revenue consists of restaurant sales, bakery operations, and, to a lesser extent, franchise revenue and other revenue. Restaurant sales include food and beverage sales and gift card breakage, are net of applicable state and local sales taxes and discounts, and are recognized at a point in time as services are performed and goods are provided. Revenue from bakery operations is recognized at a point in time in the period during which the products are shipped and control transfers to the customer. Franchise revenue and other revenue consist of development fees and royalties on sales by franchised units. Initial franchise fees are recognized as income upon commencement of the franchise operation and completion of all material services and conditions by the Company. Royalties are calculated as a percentage of the franchisee sales and recognized in the period in which the sales are generated. Revenue resulting from the sale of gift cards is recognized in the period in which the gift card is redeemed and is recorded as deferred revenue until recognized.

T-System recognizes revenue when a customer obtains control of the promised goods or services. The amount of revenue recognized is determined by the consideration that T-System expects to be entitled to in exchange for the goods and services.

T-System offers a software as a service solution with full-service coding ("RevCycle+") available, through contracts with customers to either provide access to its proprietary coding software platform or provide medical chart coding services. Billing for both services occurs monthly as services are provided. Billing for medical chart coding services is based on a fixed monthly fee. Revenue for RevCycle+ is recognized ratably over the term of the contract as services are consumed by the customer. Revenue for implementation and upfront training services provided to the customer, if any, are billed separately and recognized at a point in time upon completion of such services as T-System's performance obligation is considered complete.

T-System sells an electronic version of the medical documentation system (“EV”), provided in the form of a non-exclusive license to use the software at the sites under the agreement. The Company sells software licenses through recurring fixed-term or subscription fee arrangements and one-time perpetual license arrangements. Software contracts include performance obligations that are both satisfied at a point in time and over a period of time as goods and services are transferred. T-System also sells legacy medical documentation templates ("T-Sheets") to emergency care providers to be used for documentation of patient care. T-Sheets includes various optional recurring fixed-term or subscription licenses which are recognized over time after access to the template has been delivered to the customer.

Other operating revenue consists of income generated by our resort operations which includes sales of real estate, lodging rentals, food and beverage sales, and other income from various resort services offered. Revenue is recognized upon closing of the sale of real estate or once goods and services have been provided and billed to the customer.

Certain Factors Affecting Comparability

Year ended December 31, 2017. On October 16, 2017, we completed the T-System Merger. The results of operation of T-System subsequent to the T-System Merger are included in the T-System segment.

On June 6, 2017, we closed on the sale of OneDigital for $560.0 million in an all-cash transaction. As a result of the sale of OneDigital, we have reclassified the financial results of OneDigital to discontinued operations for all periods presented in our Consolidated and Combined Statements of Operations.

Results of Operations

Consolidated Results of Operations

Net earnings. The following table presents certain financial data for the years indicated:

	Year ended December 31,		
	2018	2017	2016
		(In millions)	
Revenues:			
Restaurant revenue	$ 1,117.8	$ 1,129.0	$ 1,157.6
Other operating revenue	87.6	40.5	20.8
Total operating revenues	1,205.4	1,169.5	1,178.4
Operating expenses:			
Cost of restaurant revenue	991.3	991.0	984.1
Personnel costs	170.3	103.2	68.3
Depreciation and amortization	61.3	49.3	44.7
Other operating expenses	105.6	104.4	83.5
Goodwill impairment	26.7	—	—
Total operating expenses	1,355.2	1,247.9	1,180.6
Operating loss	(149.8)	(78.4)	(2.2)
Other income (expense):			
Interest and investment income	6.3	5.3	3.3
Interest expense	(4.7)	(7.0)	(5.2)
Realized gains, net	166.8	4.9	9.3
Total other income	168.4	3.2	7.4
Earnings (loss) from continuing operations before income taxes and equity in (losses) earnings of unconsolidated affiliates	18.6	(75.2)	5.2
Income tax expense (benefit)	13.1	(16.6)	(10.4)
Earnings (loss) from continuing operations before equity in (losses) earnings of unconsolidated affiliates	5.5	(58.6)	15.6
Equity in (losses) earnings of unconsolidated affiliates	(16.1)	3.4	(29.5)
Loss from continuing operations	(10.6)	(55.2)	(13.9)
Net earnings from discontinued operations, net of tax	—	147.7	2.0
Net (loss) earnings	(10.6)	92.5	(11.9)
Less: Net (loss) earnings attributable to non-controlling interests	(38.2)	(16.3)	0.5
Net earnings (loss) attributable to Cannae Holdings, Inc. common shareholders	$ 27.6	$ 108.8	$ (12.4)

Revenues

Total revenue in 2018 increased $35.9 million compared to 2017, primarily due to an increase in revenue in our T-System and Corporate and Other segments, offset by a decline in revenue in the Restaurant Group segment. Total revenue in 2017 decreased $8.9 million compared to 2016, primarily due to a decrease in revenue in our Restaurant Group, partially offset by an increase in revenue in our Corporate and Other segment.

The change in revenues from our segments is discussed in further detail at the segment level below.

Expenses

Our operating expenses consist primarily of personnel costs, cost of restaurant revenue, other operating expenses, and depreciation and amortization.

Personnel costs include base salaries, commissions, benefits, stock-based compensation and bonuses paid to employees, and are one of our most significant operating expenses. Personnel costs that are directly attributable to the operations of the Restaurant Group are included in Cost of restaurant revenue.

Cost of restaurant revenue includes cost of food and beverage, primarily the costs of beef, groceries, produce, seafood, poultry and alcoholic and non-alcoholic beverages, net of vendor discounts and rebates, payroll and related costs and expenses directly relating to restaurant level activities, and restaurant operating costs including occupancy and other operating expenses at the restaurant level.

Other operating expenses include professional fees, advertising costs, travel expenses and impairments of operating assets.

Depreciation and amortization expense consists of our depreciation related to investments in property and equipment as well as amortization of intangible assets.

The change in expenses from our segments is discussed in further detail at the segment level below.

Income tax expense (benefit) on continuing operations was $13.1 million, $(16.6) million, and $(10.4) million for the years ended December 31, 2018, 2017, and 2016, respectively. The effective tax rate for the years ended December 31, 2018, 2017, and 2016 was 70.4%, 22.0%, and (204.3)%, respectively. The increase in the effective tax rate in 2018 from 2017 is primarily attributable to the change in tax laws disallowing the tax deductibility of certain executive compensation. The increase in the effective tax rate in 2017 from 2016 is primarily attributable to increased net earnings and decreased losses from unconsolidated affiliates in 2017 from 2016. The fluctuation in income tax benefit as a percentage of earnings from continuing operations before income taxes is attributable to our estimate of ultimate income tax liability and changes in the characteristics of net earnings year to year, such as the weighting of operating income versus investment income.

For a detailed breakout of our effective tax rate, see Note L to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report.

Other

Net realized gains totaled $166.8 million, $4.9 million, and $9.3 million for the years ended December 31, 2018, 2017, and 2016, respectively. The net realized gain for the year ended December 31, 2018 is primarily attributable to $92.6 million gain on the sale of Ceridian shares in the fourth quarter of 2018, $63.2 million of realized gains associated with the Ceridian IPO and the gain of $24.0 million on the sale of LifeWorks, partially offset by impairment losses of $12.5 million recognized on fixed maturity securities in the 2018 period and $5.1 million of realized gains associated with sales of equity investment securities in the 2017 period. The net realized gain for the year ended December 31, 2017 is primarily attributable to the sale of equity securities available for sale. The net realized gain for the year ended December 31, 2016 primarily includes a net realized gain of $15.0 million on the sale of our 15% ownership interest in Stillwater Insurance ("Stillwater"), a property and casualty insurance company sold during the second quarter of 2016 for proceeds of $36.0 million. The gain was partially offset by net realized losses of $2.5 million on the sale of the Max & Erma's restaurant concept by our Restaurant Group, and net realized losses of $3.0 million on impairment of a cost method investment in our Corporate and Other segment.

Equity in (losses) earnings of unconsolidated affiliates was $(16.1) million, $3.4 million, and $(29.5) million for the years ended December 31, 2018, 2017, and 2016, respectively, and consisted of our equity in the net loss of Ceridian and other investments in unconsolidated affiliates. The increase in equity in loss of unconsolidated affiliates is primarily attributable to increased losses at Ceridian for the year ended December 31, 2018 compared to 2017.

Net Earnings

Net earnings attributable to Cannae decreased $81.2 million in the year ended December 31, 2018, compared to the 2017 period. The decrease consisted of a $34.7 million decrease in earnings in our Corporate and Other segment and $7.7 million decrease in net earnings from T-System, acquired in the fourth quarter of 2017, in addition to a $38.8 million increased loss at our Restaurant Group. Total net earnings attributable to Cannae increased $121.2 million in the year ended December 31, 2017, compared to the 2016 period. The increase consisted of a $140.1 million increase in earnings in our Corporate and Other segment and $1.5 million in net earnings from T-System, acquired in the fourth quarter of 2017, partially offset by a $20.4 million increased loss at our Restaurant Group.

The change in net earnings from the segments is discussed in further detail at the segment level below.

Segment Results of Operations

Restaurant Group

The following table presents the results from operations of our Restaurant Group segment:

	Year ended December 31,		
	2018	2017	2016
		(In millions)	
Revenues:			
Restaurant revenue	$ 1,117.8	$ 1,129.0	$ 1,157.6
Operating expenses:			
Cost of restaurant revenue	991.3	991.0	984.1
Personnel costs	47.3	52.8	52.9
Depreciation and amortization	44.9	43.6	42.4
Other operating expenses	86.3	71.1	70.2
Goodwill impairment	26.7	—	—
Total operating expenses	1,196.5	1,158.5	1,149.6
Operating (loss) income	(78.7)	(29.5)	8.0
Other expense:			
Interest expense	(16.0)	(6.6)	(4.7)
Realized losses, net	(2.1)	—	(2.5)
Total other expense	(18.1)	(6.6)	(7.2)
(Loss) earnings from continuing operations before income taxes and equity in losses of unconsolidated affiliates	(96.8)	(36.1)	0.8

Total revenues for the Restaurant Group segment decreased $11.2 million, or 1.0% in the year ended December 31, 2018 from the 2017 period. The decrease is primarily attributable to a decrease in restaurant sales, primarily driven by closed restaurants, decreased comparable store sales and guest counts overall, partially offset by increases in bakery sales. Total revenues for the Restaurant Group segment decreased $28.6 million, or 2.5% in the year ended December 31, 2017 from the 2016 period primarily due to a $17.3 million, or 1.6%, decrease in consolidated comparable store sales, a decrease of $8.4 million related to the inclusion of revenue from the Max & Erma's restaurant concept in the 2016 period, a $5.2 million decrease from the net effect of new and closed restaurants, and a $4.5 million decrease related to timing of store days, partially offset by a $7.1 million increase in third-party bakery operation sales.

Comparable Store Sales. One method we use in evaluating the performance of our restaurants is to compare sales results for restaurants period over period. We include a restaurant in our comparable store sales figures starting in the first period following a new restaurant's first seventy-eight weeks of operations. Changes in comparable store sales reflect changes in sales for the comparable store group of restaurants over a specified period of time. This measure highlights the performance of existing restaurants, as the impact of new restaurant openings is excluded. Comparable store sales for our Restaurant Group decreased 0.6% and 1.6 % in the years ended December 31, 2018 and 2017, respectively, from the prior fiscal years. The decrease in both periods is primarily attributable to decreased comparable store sales at our O'Charley's, Village Inn and Baker's Square concepts, partially offset by increased comparable store sales at our 99 Restaurants concept.

Other operating expenses increased by $15.2 million or 21.4% in the year ended December 31, 2018 from the 2017 period. The increase is primarily attributable to impairments of other intangible assets in the 2018 period.

Cost of restaurant revenue increased $0.3 million, or less than 1%, in the year ended December 31, 2018 from the 2017 period. Cost of restaurant revenue increased $6.9 million or 0.7% in the year ended December 31, 2017 from the 2016 period. Cost of restaurant revenue as a percentage of restaurant revenue were approximately 88.7%, 87.8%, and 85.0% in the years ended December 31, 2018, 2017 and 2016, respectively. The increase in cost of restaurant revenue as a percentage of restaurant revenue in the 2018 period from the comparable 2017 period was primarily attributable to increased cost of food and labor. The increase in cost of restaurant revenue as a percentage of restaurant revenue in the 2017 period from the comparable 2016 period was primarily driven by reduced operating leverage associated with lower same store sales, increased hourly labor costs, and an increase in value promotions offered in the 2017 period.

For the year ended December 31, 2018, we recorded $26.7 million of impairment to goodwill in our ABRH reporting unit in our Restaurant Group segment. The impairment charge was a result of deteriorating operating results and cash flow resulting from declining same store sales and increased costs. The impairment recorded was calculated as the deficit between the carrying value of ABRH compared to its fair value determined by performing a combination of discounted cash flow and market approaches.

Loss from continuing operations before income taxes increased $60.7 million in the year ended December 31, 2018 from the 2017 period. The increase in loss was primarily attributable to the factors discussed above. (Loss) earnings from continuing operations before income taxes decreased $36.9 million in the year ended December 31, 2017 from the 2016 period.

Ceridian

We own a 23.5% economic interest in Ceridian. We account for our investment in Ceridian under the equity method of accounting; therefore, its results of operations do not consolidate into ours. Details relating to the results of operations of Ceridian (NYSE: "CDAY") can be found in its periodic filings with the SEC. The audited financial statements of Ceridian can also be found at Exhibit 99.1 to this Annual Report.

T-System

We acquired T-System on October 16, 2017. The following table presents the results from operations of our T-System segment :

	Year ended December 31,	
	2018	2017
	(In millions)	
Revenues:		
Other operating revenue	$ 57.9	12.9
Total operating revenues	57.9	12.9
Operating expenses:		
Personnel costs	33.1	7.6
Depreciation and amortization	15.0	3.1
Other operating expenses	13.8	3.1
Total operating expenses	61.9	13.8
Operating loss	(4.0)	(0.9)
Other expense:		
Interest expense	(4.3)	—
Total other expense	(4.3)	—
Loss from continuing operations before income taxes and equity in losses of unconsolidated affiliates	$ (8.3)	$ (0.9)

The increases in our revenues, expenses and operating loss for our T-System segment are attributable to the recording of a full year of results of operation for the segment in the 2018 period.

Corporate and Other

The Corporate and Other segment consists of certain other unallocated corporate overhead expenses, and other smaller investments.

The Corporate and Other segment generated revenues of $29.7 million, $27.6 million, and $20.8 million for the years ended December 31, 2018, 2017, and 2016, respectively. Revenues increased $2.1 million in 2018 compared to 2017 primarily driven by a $5.6 million termination fee associated with the termination of our management agreement with Ceridian, partially offset by a decrease in real estate sales. Revenues increased $6.8 million in 2017 compared to 2016 primarily due to growth in sales of real estate.

Personnel costs were $89.9 million, $42.8 million, and $15.4 million in the years ended December 31, 2018, 2017, and 2016, respectively. The increase in 2018 from 2017 is primarily attributable to investment success bonuses associated with the Ceridian IPO and sale of LifeWorks. The increase in 2017 from 2016 is primarily attributable to Investment Success Incentive Program bonuses associated with the sale of OneDigital.

Other operating expenses for the Corporate and Other segment were $5.5 million, $30.2 million, and $13.3 million in the years ended December 31, 2018, 2017 and 2016, respectively. The decrease in the 2018 period from the 2017 period is primarily attributable to lower corporate overhead costs and decreased expense in our real estate operations. The increase in the 2017 period from the 2016 period is primarily attributable to increased cost at our real estate subsidiaries and costs associated with our separation from FNF.

This segment generated earnings (losses) from continuing operations before income taxes of $123.7 million, $(38.2) million, and $4.4 million for the years ended December 31, 2018, 2017, and 2016, respectively. The increase in earnings in 2018 compared to 2017 is attributable to the aforementioned changes in revenues and expenses as well as a $92.6 million gain on sale of Ceridian shares in the fourth quarter of 2018, $63.2 million of realized gains associated with the Ceridian IPO and the gain of $24.0 million on the sale of LifeWorks, partially offset by impairment losses of $12.5 million recognized on fixed maturity securities in the 2018 period and $5.1 million of realized gains associated with sales of equity investment securities in the 2017 period. The decrease in earnings in 2017 compared to 2016 is attributable to the aforementioned changes in revenue and expenses.

Discontinued Operations

As a result of the sale of OneDigital, the financial results of OneDigital have been reclassified to discontinued operations for the years ended December 31, 2017 and 2016. Earnings from discontinued operations were $147.7 million and $2.0 million for the years ended December 31, 2017 and 2016, respectively. The increase in 2017 compared to 2016 was primarily attributable to the after-tax gain of $149.7 million on the sale of OneDigital.

Liquidity and Capital Resources

Cash Requirements. Our current cash requirements include personnel costs, operating expenses, taxes, payments of interest and principal on our debt, capital expenditures, business acquisitions, and stock repurchases. There are no restrictions on our retained earnings regarding our ability to pay dividends to stockholders, although there are limits on the ability of certain subsidiaries to pay dividends to us, as a result of provisions in certain debt agreements. The declaration of any future dividends is at the discretion of our Board of Directors. Additional uses of cash flow are expected to include stock repurchases, acquisitions, and debt repayments.

We continually assess our capital allocation strategy, including decisions relating to reducing debt, repurchasing our stock, and/or conserving cash. We believe that all anticipated cash requirements for current operations will be met from internally generated funds, cash dividends from subsidiaries, cash generated by investment securities, potential sales of non-strategic assets, and borrowings on existing credit facilities. Our short-term and long-term liquidity requirements are monitored regularly to ensure that we can meet our cash requirements. We forecast the needs of all of our subsidiaries and periodically review their short-term and long-term projected sources and uses of funds, as well as the asset, liability, investment and cash flow assumptions underlying such forecasts.

We are focused on evaluating our assets and investments as potential vehicles for creating liquidity. Our intent is to use that liquidity for general corporate purposes, including, potentially reducing debt, repurchasing shares of our stock, other strategic initiatives and/or conserving cash.

Operating Cash Flows. Our cash flows (used in) provided by operations for the years ended December 31, 2018, 2017, and 2016 were $(22.9) million, $(90.7) million and $60.3 million, respectively. The decrease in cash used in operations of $67.8 million from 2018 to 2017 is primarily attributable to decreased taxes paid of $117.5 million in the 2018 period from the comparable period in 2017, partially offset by cash provided by discontinued operations of $17.3 million in the 2017 period, increased cash bonus expenses of $26.4 million in the 2018 period, and decreased consolidated pretax loss (increased earnings) in the 2018 period. The remainder of the variance is attributable to the timing of payment and receipt of accounts payable and receivable. The decrease in cash provided by operations of $151.0 million from 2017 to 2016 is primarily attributable to increased payments for income taxes in the 2017 period which primarily related to the sale of OneDigital. The proceeds from the sale of OneDigital were recorded as an investing cash flow.

Investing Cash Flows. Our cash flows provided by (used in) investing activities for the years ended December 31, 2018, 2017, and 2016 were $186.7 million, $91.7 million and $(168.2) million, respectively. The increase in cash provided by investing activities of $95.0 million from 2018 to 2017 is primarily attributable to proceeds from the sale of Ceridian shares and LifeWorks in 2018, and decreased outflow for acquisitions in 2018 compared to 2017, partially offset by net purchases of short term investments in 2018 and the sale of One Digital in 2017. The increase in cash provided by (decrease in cash used in) investing activities of $259.9 million from 2017 to 2016 is primarily attributable to proceeds of $326.0 million from the sale of OneDigital, decreased investments in unconsolidated affiliates of $67.2 million, and lower spending on other investments in the 2017 period, partially offset by increased cash used for acquisitions of businesses, primarily T-System, in the 2017 period.

Capital Expenditures. Total capital expenditures for property and equipment and other intangible assets were $15.9 million, $40.1 million and $55.2 million for the years ended December 31, 2018, 2017, and 2016, respectively. Capital expenditures in the 2018 period primarily consist of purchases of property and equipment in our Restaurant Group segment and to a lesser extent property improvements at our real estate operations. The decrease in expenditures in the 2018 period from the 2017 period is reflective of a decrease in spending in our Restaurant Group segment and decreased spending at OneDigital due to its sale in June 2017. Capital expenditures in the 2017 period primarily consist of purchases of property, equipment and software in our Restaurant Group segment. The decrease in expenditures in the 2017 period from the 2016 period is primarily attributable to the sale of OneDigital.

Financing Cash Flows. Our cash flows (used in) provided by financing activities for the years ended December 31, 2018, 2017, and 2016 were $(86.4) million, $98.2 million and $(20.8) million, respectively. The decrease in cash provided by (increase in cash used in) financing activities of $184.6 million from 2018 to 2017 is primarily attributable to the payoff of ABRH's external debt and decreased borrowings in the 2018 period. The increase in cash provided by (decrease in cash used in) financing activities of $119.0 million from 2017 to 2016 is primarily attributable to the $100 million FNF Investment and an increase in net borrowings (net of debt service payments).

Financing Arrangements. In our Restaurant Group, financing arrangements are used both as part of our overall capitalization structure as well as to fund purchases of seasonal inventory in advance of sales. For a description of our historical financing arrangements see Note K to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report. On February 7, 2019, we borrowed $150 million under our Margin Facility and drew the entire $100 million available under our FNF Revolver and used the proceeds to fund, in part, the DNB Acquisition.

Contractual Obligations. Unconditional purchase obligations include agreements to purchase goods or services that are enforceable, are legally binding and specify all significant terms, including fixed or minimum quantities to be purchased, fixed, minimum or variable price provisions, and the approximate timing of the transaction. The Restaurant Group has unconditional purchase obligations with various vendors, primarily related to food and beverage obligations with fixed commitments in regards to the time period of the contract and the quantities purchased with annual price adjustments that can fluctuate. Future purchase obligations are estimated by assuming historical purchase activity over the remaining, non-cancellable terms of the various agreements. For agreements with minimum purchase obligations, at least the minimum amounts we are legally required to purchase are included. These agreements do not include fixed delivery terms. We used both historical and projected volume and pricing as of December 31, 2018 to determine the amount of the obligations.

As of December 31, 2018, our required annual payments relating to these contractual obligations were as follows:

	2019	2020	2021	2022	2023	Thereafter	Total
Notes payable	$ 5.9	$ 6.6	$ 5.8	$ 5.8	$ 16.1	$ 9.1	$ 49.3
Operating lease payments	62.0	57.7	51.3	40.7	34.1	133.2	379.0
Unconditional purchase obligations	194.4	80.9	46.7	8.9	3.4	7.3	341.6
Total	$ 262.3	$ 145.2	$ 103.8	$ 55.4	$ 53.6	$ 149.6	$ 769.9

Capital Stock Transactions. On May 7, 2018, the Compensation Committee of the Board of Directors approved a success bonus of up to $67.1 million resulting from the successful Ceridian IPO. The success bonus was calculated based on 10% of the excess value of our investment in Ceridian HCM over our basis in Ceridian prior to the Ceridian IPO. The success bonus was paid to certain members of the Board of Directors and management who contributed to acquiring and growing Ceridian over Cannae's and its predecessor's ten year ownership of Ceridian and was paid in a combination of cash and stock. On May 16, 2018, we issued 991,906 shares of our common stock for the stock portion of the bonuses.

On November 17, 2017, FNF completed the previously announced Split-Off of its FNFV Group and redeemed each outstanding share of its FNFV Group common stock, par value $0.0001, for one share of common stock, par value $0.0001, of Cannae (NYSE: CNNE), with cash in lieu of fractional shares. As of November 17, 2017, FNF and Cannae are separate publicly traded companies.

On November 16, 2017, certain subsidiaries of FNF contributed an aggregate of $100.0 million to us in exchange for 5,706,134 shares of Cannae common stock.

Equity Security Investments. During the year ended December 31, 2018, we sold the remainder of our equity securities holdings for gross proceeds of $17.7 million resulting in net realized gains of $0.1 million.

Off-Balance Sheet Arrangements. We do not engage in off-balance sheet activities other than facility and equipment operating leasing arrangements.

Recent Accounting Pronouncements

For a description of recent accounting pronouncements, see Note S to our Consolidated and Combined Financial Statements included in Item 8 of Part II of this Annual Report.

Item 7A. ***Quantitative and Qualitative Disclosure about Market Risk***

Commodity Price Risk

We are exposed to market price fluctuations in beef, seafood, produce and other food product prices. Given the historical volatility of beef, seafood, produce and other food product prices, these fluctuations can materially impact the food and beverage costs incurred in our Restaurant Group segment. While our Restaurant Group companies have taken steps to qualify multiple suppliers who meet our standards as suppliers for our restaurants and have entered into agreements with suppliers for some of the commodities used in our restaurant operations, there can be no assurance that future supplies and costs for such commodities will not fluctuate due to weather and other market conditions outside of our control. Consequently, such commodities can be subject to unforeseen supply and cost fluctuations. Dairy costs can also fluctuate due to government regulation. Because we typically set our menu prices in advance of our food product prices, our menu prices cannot immediately take into account changing costs of food items. To the extent that we are unable to pass the increased costs on to our guests through price increases, our results of operations would be adversely affected. We do not use financial instruments to hedge our risk to market price fluctuations in beef, seafood, produce and other food product prices at this time.

Item 8. ***Financial Statements and Supplementary Data***

CANNAE HOLDINGS, INC.

INDEX TO FINANCIAL INFORMATION

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors
Cannae Holdings, Inc.
Las Vegas, Nevada

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Cannae Holdings, Inc. and subsidiaries (the "Company") as of December 31, 2018, 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, because of the effect of the material weaknesses identified below on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of December 31, 2018, 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) ("PCAOB"), the consolidated and combined financial statements as of and for the year ended December 31, 2018, of the Company and our report dated March 18, 2019, expressed an unqualified opinion and included an explanatory paragraph related to a change in accounting principle for revenue due to the adoption of FASB ASC 606, *Revenue from Contracts with Customers* ("ASC 606"), on January 1, 2018 using a modified retrospective method.

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 Management's Report 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.

Material Weaknesses

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company’s annual or interim financial statements will not be prevented or detected on a timely basis. The following material weaknesses have been identified and included in management's assessment:

Material weaknesses exist related to the Company’s control activities, information and communication, and monitoring activities around the Company’s adoption and subsequent application of ASC 606 at the Company’s T System subsidiary and are attributable to the failure of management to (1) design and implement control activities over the accuracy and completeness of the underlying information used to derive the revenue related accounting entries for the adoption and application of ASC 606 at T System; (2) design and implement control activities, including the related supporting documentation, around the determination of the ongoing revenue accounting at T System; and (3) monitor related revenue control activities at T System in order to prevent or detect material misstatements.

These material weaknesses were considered in determining the nature, timing, and extent of audit tests applied in our audit of the consolidated and combined financial statements as of and for the year ended December 31, 2018, of the Company, and this report does not affect our report on such financial statements.

/s/ Deloitte & Touche LLP

Las Vegas, Nevada
March 18, 2019

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors
Cannae Holdings, Inc.
Las Vegas, Nevada

Opinion on the Financial Statements

We have audited the accompanying consolidated and combined balance sheets of Cannae Holdings, Inc. and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated and combined statements of operations, comprehensive earnings (loss), equity, and cash flows for each of the three years in the period ended December 31, 2018, 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, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

We did not audit the consolidated financial statements of Ceridian HCM Holdings, Inc., the Company's investment in which is accounted for by use of the equity method. The accompanying financial statements of the Company include its equity investment in Ceridian HCM Holdings, Inc. of $359.7 million and $324.9 million as of December 31, 2018 and 2017, respectively, and its equity in (losses) earnings in Ceridian HCM Holdings, Inc. of ($20.5) million, $1.9 million and ($29.1) million for the years ended December 31, 2018, 2017 and 2016, respectively. Those statements were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for Ceridian HCM Holdings, Inc., is based solely on the report of the other auditors.

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, 2018, 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 March 18, 2019, expressed an adverse opinion on the Company's internal control over financial reporting because of material weaknesses identified.

Change in Accounting Principle

As discussed in Notes A and S to the financial statements, the Company has changed its method of accounting for revenue due to the adoption of FASB ASC 606, *Revenue from Contracts with Customers*, on January 1, 2018 using a modified retrospective method.

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

Las Vegas, Nevada
March 18, 2019

We have served as the Company’s auditor since 2017.

CANNAE HOLDINGS, INC.
CONSOLIDATED AND COMBINED BALANCE SHEETS

	December 31, 2018	December 31, 2017
	(in millions)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 323.0	$ 245.6
Short-term investments	31.4	—
Trade receivables	49.8	35.8
Inventory	22.3	29.7
Equity securities, at fair value	—	17.7
Prepaid expenses and other current assets	25.2	21.4
Total current assets	451.7	350.2
Investments in unconsolidated affiliates	397.2	424.9
Property and equipment, net	176.4	218.8
Other intangible assets, net	175.8	214.5
Goodwill	164.8	202.7
Fixed maturity securities available for sale, at fair value	17.8	14.8
Deferred tax assets	16.9	10.6
Other long term investments and noncurrent assets	58.9	50.7
Total assets	$ 1,459.5	$ 1,487.2
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable and other accrued liabilities, current	$ 98.4	$ 100.7
Income taxes payable	24.2	0.8
Deferred revenue, current	31.5	26.1
Notes payable, current	5.9	122.2
Total current liabilities	160.0	249.8
Deferred revenue, long-term	0.2	9.1
Notes payable, long-term	42.2	12.7
Accounts payable and other accrued liabilities, long-term	57.4	62.5
Total liabilities	259.8	334.1
Commitments and contingencies - see Note M		
Equity:		
Cannae common stock, $0.0001 par value; authorized 115,000,000 shares as of December 31, 2018 and December 31, 2017; issued of 72,234,330 and 70,858,143 as of December 31, 2018 and December 31, 2017, respectively; and outstanding of 72,223,692 and 70,858,143 as of December 31, 2018 and December 31, 2017, respectively	—	—
Preferred stock, $0.0001 par value; authorized 10,000,000 shares; issued and outstanding, none as of December 31, 2018 and December 31, 2017	—	—
Retained earnings	45.8	0.2
Additional paid-in capital	1,146.2	1,130.2
Less: Treasury stock, 10,638 shares as of December 31, 2018, at cost	(0.2)	—
Accumulated other comprehensive loss	(67.2)	(71.0)
Total Cannae shareholders' equity	1,124.6	1,059.4
Noncontrolling interests	75.1	93.7
Total equity	1,199.7	1,153.1
Total liabilities and equity	$ 1,459.5	$ 1,487.2

See Notes to Consolidated and Combined Financial Statements

CANNAE HOLDINGS, INC.
CONSOLIDATED AND COMBINED STATEMENTS OF OPERATIONS

	Year ended December 31,		
	2018	2017	2016
		(in millions)	
Revenues:			
Restaurant revenue	$ 1,117.8	$ 1,129.0	$ 1,157.6
Other operating revenue	87.6	40.5	20.8
Total operating revenues	1,205.4	1,169.5	1,178.4
Operating expenses:			
Cost of restaurant revenue	991.3	991.0	984.1
Personnel costs	170.3	103.2	68.3
Depreciation and amortization	61.3	49.3	44.7
Other operating expenses	105.6	104.4	83.5
Goodwill impairment, see Note A	26.7	—	—
Total operating expenses	1,355.2	1,247.9	1,180.6
Operating loss	(149.8)	(78.4)	(2.2)
Other income (expense):			
Interest and investment income	6.3	5.3	3.3
Interest expense	(4.7)	(7.0)	(5.2)
Realized gains, net	166.8	4.9	9.3
Total other income	168.4	3.2	7.4
Earnings (loss) from continuing operations before income taxes and equity in earnings (losses) of unconsolidated affiliates	18.6	(75.2)	5.2
Income tax expense (benefit)	13.1	(16.6)	(10.4)
Earnings (loss) from continuing operations before equity in (losses) earnings of unconsolidated affiliates	5.5	(58.6)	15.6
Equity in (losses) earnings of unconsolidated affiliates	(16.1)	3.4	(29.5)
Loss from continuing operations	(10.6)	(55.2)	(13.9)
Net earnings from discontinued operations, net of tax - see Note N	—	147.7	2.0
Net (loss) earnings	(10.6)	92.5	(11.9)
Less: Net (loss) earnings attributable to non-controlling interests	(38.2)	(16.3)	0.5
Net earnings (loss) attributable to Cannae Holdings, Inc. common shareholders	$ 27.6	$ 108.8	$ (12.4)
Amounts attributable to Cannae Holdings, Inc. common shareholders			
Net earnings (loss) from continuing operations attributable to Cannae Holdings, Inc. common shareholders	$ 27.6	$ (38.7)	$ (14.3)
Net earnings from discontinued operations attributable to Cannae Holdings, Inc. common shareholders	—	147.5	1.9
Net earnings (loss) attributable to Cannae Holdings, Inc. common shareholders	$ 27.6	$ 108.8	$ (12.4)
Earnings per share			
Basic			
Net earnings (loss) per share from continuing operations	$ 0.39	$ (0.55)	$ (0.21)
Net earnings per share from discontinued operations	—	2.09	0.03
Net earnings (loss) per share	$ 0.39	$ 1.54	$ (0.18)
Diluted			
Net earnings (loss) per share from continuing operations	$ 0.39	$ (0.55)	$ (0.21)
Net earnings per share from discontinued operations	—	2.09	0.03
Net earnings (loss) per share	$ 0.39	$ 1.54	$ (0.18)
Weighted average shares outstanding Cannae Holdings common stock, basic basis	71.2	70.6	70.6
Weighted average shares outstanding Cannae Holdings common stock, diluted basis	71.3	70.6	70.6

See Notes to Consolidated and Combined Financial Statements

CANNAE HOLDINGS, INC.
CONSOLIDATED AND COMBINED STATEMENTS OF COMPREHENSIVE EARNINGS (LOSS)

	Year Ended December 31,		
	2018	2017	2016
	(in millions)		
Net (loss) earnings	$ (10.6)	$ 92.5	$ (11.9)
Other comprehensive earnings (loss), net of tax:			
Unrealized gain (loss) on investments and other financial instruments, net (excluding investments in unconsolidated affiliates) (1)	0.9	(8.7)	2.6
Unrealized (loss) gain relating to investments in unconsolidated affiliates (2)	(12.0)	8.9	4.8
Reclassification of unrealized losses on investments in unconsolidated affiliates, net of tax, included in net earnings (3)	24.0	—	—
Reclassification of unrealized losses (gains) on investments and other financial instruments, net of tax, included in net earnings (4)	7.0	(3.1)	—
Other comprehensive earnings (loss)	19.9	(2.9)	7.4
Comprehensive earnings (loss)	9.3	89.6	(4.5)
Less: Comprehensive (loss) earnings attributable to noncontrolling interests	(38.2)	(16.3)	0.5
Comprehensive earnings (loss) attributable to Cannae	$ 47.5	$ 105.9	$ (5.0)

(1) Net of income tax expense (benefit) of $0.3 million, $(3.1) million and $1.6 million for the years ended December 31, 2018, 2017 and 2016, respectively.

(2) Net of income tax (benefit) expense of $(3.2) million, $2.4 million and $2.9 million for the years ended December 31, 2018, 2017 and 2016, respectively.

(3) Net of income tax benefit of $6.4 million for the year ended December 31, 2018.

(4) Net of income tax (benefit) expense of $(1.9) million and $1.9 million for the years ended December 31, 2018 and 2017, respectively.

See Notes to Consolidated and Combined Financial Statements

CANNAE HOLDINGS, INC.
CONSOLIDATED AND COMBINED STATEMENTS OF EQUITY

	Common Stock		Parent Investment in FNFV	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comp (Loss) Earnings	Treasury Stock		Non-controlling Interests	Total Equity
	Shares	$					Shares	$		
						(in millions)				
Balance, December 31, 2015	—	$ —	$ 1,018.4	$ —	$ —	$ (75.5)	$ —	$ —	$ 113.6	$ 1,056.5
Other comprehensive earnings — unrealized gain on investments and other financial instruments, net of tax	—	—	—	—	—	2.6	—	—	—	2.6
Other comprehensive earnings — unrealized gain on investments in unconsolidated affiliates, net of tax	—	—	—	—	—	4.8	—	—	—	4.8
Subsidiary stock-based compensation	—	—	—	—	—	—	—	—	1.2	1.2
Ceridian stock-based compensation	—	—	5.1	—	—	—	—	—	—	5.1
Acquisition of Brasada	—	—	—	—	—	—	—	—	2.0	2.0
Dissolution of consolidated subsidiary	—	—	—	—	—	—	—	—	(0.3)	(0.3)
Net change in Parent investment in FNFV	—	—	(49.5)	—	—	—	—	—	—	(49.5)
Subsidiary dividends paid to noncontrolling interests	—	—	—	—	—	—	—	—	(0.7)	(0.7)
Net (loss) earnings	—	—	(12.4)	—	—	—	—	—	0.5	(11.9)
Balance, December 31, 2016	—	$ —	$ 961.6	$ —	$ —	$ (68.1)	$ —	$ —	$ 116.3	$ 1,009.8
Other comprehensive earnings — unrealized loss on investments and other financial instruments, net of tax	—	—	—	—	—	(8.7)	—	—	—	(8.7)
Other comprehensive earnings — unrealized gain on investments in unconsolidated affiliates, net of tax	—	—	—	—	—	8.9	—	—	—	8.9
Reclassification adjustments for unrealized gains and losses included in net earnings	—	—	—	—	—	(3.1)	—	—	—	(3.1)
Stock-based compensation	—	—	—	0.2	—	—	—	—	0.3	0.5
Issuance of restricted stock	0.3	—	—	—	—	—	—	—	—	—
Sale of OneDigital	—	—	—	—	—	—	—	—	(6.2)	(6.2)
Contribution of CSA services from FNF	—	—	—	0.1	—	—	—	—	—	0.1
Ceridian stock-based compensation	—	—	—	5.7	—	—	—	—	—	5.7
Net change in Parent investment in FNFV	—	—	(46.0)	—	—	—	—	—	—	(46.0)
Subsidiary dividends paid to noncontrolling interests	—	—	—	—	—	—	—	—	(0.4)	(0.4)
FNF investment	5.7	—	—	100.0	—	—	—	—	—	100.0
FNF contribution of FNFV	64.9	—	(1,024.2)	1,024.2	—	—	—	—	—	—
Net earnings (loss)	—	—	108.6	—	0.2	—	—	—	(16.3)	92.5
Balance, December 31, 2017	70.9	$ —	$ —	$ 1,130.2	$ 0.2	$ (71.0)	—	$ —	$ 93.7	$ 1,153.1
Adjustment for cumulative effect of adoption of ASC Topic 606	—	—	—	—	1.9	—	—	—	—	1.9
Adjustment for adoption of ASU 2018-02	—	—	—	—	16.1	(16.1)	—	—	—	—
Reclassification of unrealized losses on investments in unconsolidated affiliates, net of tax, included in net earnings	—	—	—	—	—	24.0	—	—	—	24.0
Reclassification of unrealized losses on investments and other financial instruments, net of tax, included in net earnings	—	—	—	—	—	7.0	—	—	—	7.0
Other comprehensive earnings — unrealized loss on investments and other financial instruments, net of tax	—	—	—	—	—	0.9	—	—	—	0.9
Other comprehensive earnings — unrealized loss on investments in unconsolidated affiliates, net of tax	—	—	—	—	—	(12.0)	—	—	—	(12.0)
Stock-based compensation	—	—	—	2.0	—	—	—	—	—	2.0
Issuance of restricted stock	0.3	—	—	—	—	—	—	—	—	—
Shares withheld for taxes and in treasury	—	—	—	—	—	—	—	(0.2)	—	(0.2)
Shares issued for investment success bonuses, net of issuance costs	1.0	—	—	19.8	—	—	—	—	—	19.8
Contribution of CSA services from FNF	—	—	—	1.3	—	—	—	—	—	1.3
Ceridian stock-based compensation	—	—	—	6.5	—	—	—	—	—	6.5
ABRH-99 Restructuring, see Note A	—	—	—	(13.6)	—	—	—	—	15.6	2.0
Subsidiary dividends paid to noncontrolling interests	—	—	—	—	—	—	—	—	(0.1)	(0.1)
Sale of noncontrolling interest in consolidated subsidiary	—	—	—	—	—	—	—	—	4.1	4.1
Net earnings (loss)	—	—	—	—	27.6	—	—	—	(38.2)	(10.6)
Balance, December 31, 2018	72.2	$ —	$ —	$ 1,146.2	$ 45.8	$ (67.2)	—	$ (0.2)	$ 75.1	$ 1,199.7

See Notes to Consolidated and Combined Financial Statements.

CANNAE HOLDINGS, INC.
CONSOLIDATED AND COMBINED STATEMENTS OF CASH FLOWS

	Year ended December 31,		
	2018	2017	2016
	(in millions)		
Cash flows from operating activities:			
Net (loss) earnings	$ (10.6)	$ 92.5	$ (11.9)
Adjustments to reconcile net earnings (loss) to net cash (used in) provided by operating activities:			
Depreciation and amortization	61.3	58.1	62.9
Equity in losses (earnings) of unconsolidated affiliates	16.1	(3.4)	29.5
Distributions from investments in unconsolidated affiliates	1.4	—	—
Realized gains, net, excluding asset impairments	(182.7)	(4.9)	(9.3)
Gain on sale of OneDigital	—	(276.0)	—
Impairment of assets	55.2	9.9	3.3
Stock-based compensation cost	21.8	0.5	1.2
Changes in assets and liabilities, net of effects from acquisitions:			
Net increase in trade receivables	(7.3)	(1.2)	(4.2)
Net decrease (increase) in inventory, prepaid expenses and other assets	9.5	(12.2)	11.8
Net (decrease) increase in accounts payable, accrued liabilities, deferred revenue and other	0.9	15.0	(7.6)
Net change in income taxes	11.5	31.0	(15.4)
Net cash (used in) provided by operating activities	(22.9)	(90.7)	60.3
Cash flows from investing activities:			
Proceeds from sale of equity securities	17.7	31.6	—
Proceeds from sale of Ceridian shares	152.5	—	—
Proceeds from sale of LifeWorks	56.2	—	—
Additions to property and equipment	(15.6)	(39.0)	(49.6)
Additions to other intangible assets	(0.3)	(1.1)	(5.6)
Purchases of investment securities	(3.5)	(1.3)	(39.9)
Contributions to investments in unconsolidated affiliates	—	(1.4)	(68.6)
Proceeds from the sale of other investments	7.8	1.3	36.0
Proceeds from the sale of property and equipment	4.9	—	—
Purchases of other long-term investments	(7.4)	(4.3)	(6.3)
Distributions from investments in unconsolidated affiliates	0.4	1.1	42.4
Net purchases of short term investments	(31.4)	—	—
Net other investing activities	0.1	1.4	(0.7)
Acquisition of T-System, net of cash acquired	0.7	(201.6)	—
Acquisition of Brasada, net of cash acquired	—	—	(27.5)
Proceeds from sale of OneDigital	4.6	326.0	—
Other acquisitions/disposals of businesses, net of cash acquired/disposed	—	(21.0)	(48.4)
Net cash provided by (used in) investing activities	186.7	91.7	(168.2)
Cash flows from financing activities:			
Borrowings, net of debt issuance costs	33.9	84.4	76.7
Debt service payments	(124.1)	(35.8)	(44.7)
Sale of noncontrolling interest in consolidated subsidiary	4.1	—	—
Proceeds from FNF Investment	—	100.0	—
Subsidiary distributions paid to noncontrolling interest shareholders	(0.1)	(0.4)	(0.7)
Payment of contingent consideration for prior period acquisitions	—	(4.0)	—
Payment for shares withheld for taxes and in treasury	(0.2)	—	—
Equity transactions with Parent, net	—	(46.0)	(52.1)
Net cash (used in) provided by financing activities	(86.4)	98.2	(20.8)
Net increase (decrease) in cash and cash equivalents	77.4	99.2	(128.7)
Cash and cash equivalents at beginning of period, including cash of discontinued operations	245.6	146.4	275.1
Cash and cash equivalents at end of period	$ 323.0	$ 245.6	$ 146.4

See Notes to Consolidated and Combined Financial Statements

CANNAE HOLDINGS, INC.
NOTES TO CONSOLIDATED AND COMBINED FINANCIAL STATEMENTS

Note A. Business and Summary of Significant Accounting Policies

The following describes the significant accounting policies of Cannae Holdings, Inc. and its subsidiaries (collectively, “we,” “us,” “our,” "Cannae," or the "Company”) which have been followed in preparing the accompanying Consolidated and Combined Financial Statements.

Description of Business

We are a holding company engaged in actively managing and operating a group of companies and investments with a net asset value of approximately $1.1 billion as of December 31, 2018. Our business consists of managing and operating majority-owned subsidiaries, as well as making additional majority and minority equity portfolio investments in businesses, in order to achieve superior financial performance and maximize the value of these assets. Our primary investments as of December 31, 2018 include our ownership interest in Ceridian Holding HCM, Inc. ("Ceridian"); majority equity ownership stakes in American Blue Ribbon Holdings, LLC ("ABRH"), 99 Restaurants Holdings, LLC ("99 Restaurants") and T-System Holdings, LLC ("T-System"); and various other controlled portfolio companies and minority equity and debt investments.

See Note Q *Segment Information* for further discussion of the businesses comprising our reportable segments.

Split-off of Cannae from FNF

During December 2016, the board of directors of Fidelity National Financial, Inc. (“FNF” or “Parent”) authorized its management to pursue a plan to redeem each outstanding share of its Fidelity National Financial Ventures Group ("FNFV Group") common stock, par value $0.0001, for one share of common stock, par value $0.0001, of a newly formed entity, Cannae Holdings, Inc. (“Cannae”), with cash in lieu of fractional shares (the "Split-Off"). On November 17, 2017, FNF contributed to Cannae its majority and minority equity investment stakes in a number of entities, including ABRH, T-System, Ceridian, and various other controlled portfolio companies and minority equity investments. The Split-Off is intended to be tax-free to stockholders of FNFV Group common stock.

Following the Split-Off, FNF and Cannae operate as separate, publicly traded companies. In connection with the Split-Off, FNF and Cannae entered into certain agreements in order to govern certain of the ongoing relationships between the two companies after the Split-Off and to provide for an orderly transition. These agreements include a reorganization agreement, a corporate services agreement, a registration rights agreement, a voting agreement and a tax matters agreement.

The reorganization agreement provides for, among other things, the principal corporate transactions (including the internal restructuring) required to effect the Split-Off, certain conditions to the Split-Off and provisions governing the relationship between Cannae and FNF with respect to and resulting from the Split-Off. The tax matters agreement provides for the allocation and indemnification of tax liabilities and benefits between FNF and Cannae and other agreements related to tax matters. The voting and registration rights agreements provides for certain appearance and voting restrictions and registration rights on shares of Cannae owned by FNF after consummation of the Split-Off. Pursuant to the corporate services agreement (the "CSA"), FNF will provide Cannae with certain "back office" services including legal, tax, accounting, treasury and investor relations support. FNF will generally provide these services at no-cost for up to three years. Cannae will reimburse FNF for direct, out-of-pocket expenses incurred by FNF in providing these services.

The Split-Off was accounted for at historical cost due to the pro rata nature of the distribution to holders of FNFV Group common stock.

Principles of Consolidation and Combination and Basis of Presentation

The accompanying Consolidated and Combined Financial Statements are prepared in accordance with generally accepted accounting principles in the United States ("GAAP") and include the historical accounts as well as wholly-owned and majority-owned subsidiaries of the Company. Prior to the Split-Off, these financial statements represent a combination of the historical financial information of the operations attributed to FNFV, of which Cannae is comprised. The Company is allocated certain corporate overhead and management services expenses from FNF based on the terms of the CSA and our proportionate share of the expense determined on actual usage and our best estimate of management's allocation of time. Both FNF and Cannae believe such allocations are reasonable; however, they may not be indicative of the actual results of operations or cash flows of the Company had the Company been operating as an independent, publicly traded company for the periods presented or the amounts that will be incurred by the Company in the future.

All intercompany profits, transactions and balances have been eliminated. Our investments in non-majority-owned partnerships and affiliates are accounted for using the equity method until such time that they may become wholly or majority-owned. Earnings attributable to noncontrolling interests are recorded on the Consolidated and Combined Statements of Operations relating to majority-owned subsidiaries with the appropriate noncontrolling interest that represents the portion of equity not related to our ownership interest recorded on the Consolidated and Combined Balance Sheets in each period.

Management Estimates

The preparation of these Consolidated and Combined Financial Statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the Consolidated and Combined Financial Statements and the reported amounts of revenues and expenses during the reporting period. Significant estimates made by management include the carrying amount and depreciation of property and equipment (Note E), the valuation of acquired intangible assets (Note B and Note H), fair value measurements (Note C), and accounting for income taxes (Note L). Actual results could differ from estimates.

Recent Developments

Dun & Bradstreet

On August 8, 2018, we entered into an agreement to partner with an investment consortium (the “Consortium”) including CC Capital Partners LLC and Thomas H. Lee Partners along with other investors to acquire The Dun & Bradstreet Corporation, a Delaware corporation ("Dun & Bradstreet") (the "DNB Acquisition"). Contemporaneously, Dun & Bradstreet entered into an Agreement and Plan of Merger (the "Merger Agreement") by and between Dun & Bradstreet, Star Parent, L.P. ("Star"), a Delaware limited partnership, and Star Merger Sub, Inc. ("Merger Sub"), a Delaware corporation and a wholly owned subsidiary of Star, and upon the terms and subject to the conditions set forth in the Merger Agreement, Merger Sub will merge with and into Dun & Bradstreet (the "Merger"), with Dun & Bradstreet continuing as the surviving company in the Merger. Under the terms of the Merger, Dun & Bradstreet shareholders received $145.00 in cash for each share of common stock they owned at closing.

On February 8, 2019, the DNB Acquisition closed and was financed through a combination of $2.1 billion of common equity financing provided by the Consortium, $1.1 billion of preferred equity from preferred equity sources and $4.0 billion of debt financing from various lenders.

Of our previously disclosed $900.0 million commitment to purchase common equity of Star and Dun & Bradstreet, we retained and funded a $505.6 million investment (the "DNB Investment"), representing 24.5% of the outstanding common equity, and syndicated the remainder to other investors. We funded the DNB Investment through a combination of cash on hand and borrowings on existing credit facilities. We expect to account for the DNB Investment as an equity method investment which will result in our initial investment being recorded as an Investment in unconsolidated affiliate on our balance sheet and our portion (24.5%) of Dun & Bradstreet's periodic earnings or losses to be included in Equity in earnings (losses) of unconsolidated affiliates, outside of operating income or loss, on our statement of operations.

Dun & Bradstreet is a global leader in commercial data and analytics and provides various services to help companies improve their operational performance.

Ceridian

On April 26, 2018, Ceridian's previously announced registration statement on Form S-1 was declared effective by the SEC and Ceridian priced its initial public offering of 21,000,000 shares of common stock at a price of $22.00 per share (the "Ceridian IPO"). In addition, the underwriters of the Ceridian IPO were granted and exercised a 30-day option to purchase up to an additional 3,150,000 shares at the initial public offering price, less underwriting discounts and commissions. The New York Stock Exchange ("NYSE") and the Toronto Stock Exchange ("TSX") have approved the listing of Ceridian's shares. Ceridian’s shares trade on the NYSE and TSX under the ticker symbol “CDAY.”

In accordance with the terms of our management agreement with Ceridian, the agreement was terminated upon closing of the Ceridian IPO. The termination resulted in a termination fee of $5.6 million which was paid to us on May 1, 2018 and is included in Other operating revenue on the Consolidated and Combined Statement of Operations for the year ended December 31, 2018.

Subsequent to the Ceridian IPO, and participation in a concurrent private placement investment in which we acquired 1,521,030 shares of CDAY representing an investment of $33.4 million from funds previously invested by us and held at Ceridian, we owned a total of 37,135,921 shares of CDAY. We recorded a gain of $63.2 million related to our change in ownership of Ceridian which is included in Realized gains, net on the Consolidated and Combined Statement of Operations for the year ended December 31, 2018. The recorded gain is net of $21.1 million of losses (exclusive of $4.4 million of income tax benefit) related to reclassification adjustments from Other comprehensive income.

On May 7, 2018, the Compensation Committee of the Board of Directors approved a success bonus of up to $67.1 million resulting from the successful Ceridian IPO. The success bonus was calculated based on 10% of the value of our investment in Ceridian in excess of our basis in Ceridian prior to the Ceridian IPO. The success bonus was paid to certain members of the

Board of Directors and management who contributed to acquiring and growing Ceridian over Cannae’s and its predecessor’s ten year ownership of Ceridian, and was paid in a combination of cash and stock. On May 16, 2018, we issued 991,906 shares of our common stock for the stock portion of the bonuses. The remaining $46.9 million was paid in cash during the year ended December 31, 2018. The expense resulting from the success bonus is included in Personnel expense on the Consolidated and Combined Statement of Operations for the year ended December 31, 2018.

LifeWorks Corporation Ltd. ("LifeWorks"), a former minority-owned subsidiary of Ceridian, was distributed pro-rata to Ceridian shareholders contemporaneously with the Ceridian IPO. On July 27, 2018, LifeWorks was sold to Morneau Shepell, Inc. for $325.0 million. Cannae's cash proceeds for its equity interest in LifeWorks were $56.2 million. We recorded a gain of $24.0 million on the sale which is included in Realized gains (losses), net on the Consolidated and Combined Statements of Operations for the year ended December 31, 2018.

On November 16, 2018, we completed the sale of 4,396,694 shares of common stock of Ceridian as part of an underwritten secondary public offering by certain stockholders of Ceridian at a public offering price of $36.00 per share. In connection with the sale, the Company received $34.695 per share (after the applicable underwriter discount) for aggregate proceeds of $152.5 million. We recorded a gain of $92.6 million on the sale which is included in Realized gains (losses), net on the Consolidated and Combined Statements of Operations for the year ended December 31, 2018. Subsequent to the sale, we own 23.5% of the outstanding common stock of Ceridian.

Restaurant Group

On November 6, 2018, we entered into various definitive agreements with Fidelity Newport Holdings, LLC ("FNH", a subsidiary of the Company and the direct parent of ABRH), ABRH and 99 Restaurants (together with its direct and indirect subsidiaries, the "99 Companies") pursuant to which the following occurred (collectively, the "ABRH-99 Restructuring"): (i) ABRH and certain of its direct and indirect subsidiaries transferred to the applicable 99 Companies those assets principally associated with the 99 Restaurants brand that were not already owned by the 99 Companies; (ii) the existing intercompany credit facility (with an outstanding balance of approximately $133.0 million in principal, plus accrued but unpaid interest and fees) under which we were the sole lender to ABRH, for the benefit of ABRH and its subsidiaries, including the 99 Companies (the “Intercompany Credit Facility”), was modified so that 99 Holdings became the direct borrower (and ABRH and all of its direct and indirect subsidiaries, other than the 99 Companies, were released from their obligations thereunder); (iii) $100.0 million of the outstanding balance due to Cannae under the Intercompany Credit Facility was exchanged for 66.7% of the direct equity interest in 99 Holdings (with ABRH being the direct holder of the remaining 33.3% of the equity interests in 99 Holdings); (iv) FNH paid a facilitation fee to us in the form of 18,023,407 Class A units of FNH and (v) ABRH agreed to continue to provide support services to the 99 Companies. As a result of the ABRH-99 Restructuring, Cannae (x) owns 65.4% of FNH directly and (y) 88.5% of 99 Holdings beneficially (through a combination of its directly held equity interests in 99 Holdings and the equity interests it holds in FNH).

On December 21, 2018, a wholly-owned subsidiary of 99 Restaurants entered into a credit agreement (the "99 Restaurants Credit Facility") with various banks. Proceeds of $36.2 million were received at closing and primarily used to repay the remaining balance outstanding under the Intercompany Credit Facility that formerly eliminated in consolidation. See Note K for further details of the material terms of the agreements.

During the year ended December 31, 2018, we entered into a plan to sell certain real estate assets of ABRH including its corporate offices located in Nashville, Tennessee and Denver, Colorado. In conjunction with the plan of sale, we reclassified $9.3 million of assets held for sale from Property and equipment, net to Prepaid expenses and other current assets on the Consolidated and Combined Balance Sheet as of December 31, 2018.

Other Developments

On November 7, 2018, our wholly-owned subsidiary entered into a Margin Loan Agreement (the "Loan Agreement"), and certain other related agreements, with various lenders pursuant to which we may borrow up to $300.0 million (the "Margin Facility") in term loans at an interest rate of the three-month LIBOR plus an applicable margin. See Note K for further discussion.

On August 10, 2018, our Board of Directors adopted a resolution increasing the size of the Company’s Board of Directors to eight, and elected Erika Meinhardt to serve on our Board of Directors. Ms. Meinhardt will serve in Class II of our Board of Directors, and her term will expire at the annual meeting of our shareholders to be held in 2019. Ms. Meinhardt has not been appointed to any committee of our Board.

Cash and Cash Equivalents

Highly liquid instruments, including money market instruments, purchased as part of cash management with original maturities of three months or less, and certain amounts in transit from credit and debit card processors, are considered cash equivalents. The carrying amounts reported in the Consolidated and Combined Balance Sheets for these instruments approximate their fair value.

Investments

Fixed maturity securities are purchased based on factors including rate of return, maturity, credit risk, duration, and tax considerations. Fixed maturity securities, which may be sold prior to maturity, are carried at fair value and are classified as available for sale as of the balance sheet dates. Fair values for fixed maturity securities are principally a function of current market conditions and are valued based on quoted prices in markets that are not active or model inputs that are unobservable. See Note C. Discount or premium is recorded for the difference between the purchase price and the principal amount. The discount or premium is amortized or accrued using the interest method and is recorded as an adjustment to interest and investment income. The interest method results in the recognition of a constant rate of return on the investment equal to the prevailing rate at the time of purchase or at the time of subsequent adjustments of book value.

Equity securities held are carried at fair value as of the balance sheet dates. Our equity securities are Level 1 financial assets and fair values are based on quoted prices in active markets.

Investments in unconsolidated affiliates are recorded using the equity method of accounting.

Realized gains and losses on the sale of investments are determined on the basis of the cost of the specific investments sold and are credited or charged to income on a trade date basis. Unrealized gains or losses on fixed maturity securities which are classified as available for sale, net of applicable deferred income tax expenses (benefits), are excluded from earnings and credited or charged directly to a separate component of equity. If any unrealized losses on available for sale securities are determined to be other-than-temporary, such unrealized losses are recognized as realized losses. Unrealized losses are considered other-than-temporary if factors exist that cause us to believe that the value will not increase to a level sufficient to recover our cost basis. Some factors considered in evaluating whether or not a decline in fair value is other-than-temporary include: (i) our need and intent to sell the investment prior to a period of time sufficient to allow for a recovery in value; (ii) the duration and extent to which the fair value has been less than cost; and (iii) the financial condition and prospects of the issuer. Such reviews are inherently uncertain and the value of the investment may not fully recover or may decline in future periods resulting in a realized loss.

Fair Value of Financial Instruments

The fair values of financial instruments presented in the Consolidated and Combined Financial Statements are estimates of the fair values at a specific point in time using available market information and appropriate valuation methodologies. These estimates are subjective in nature and involve uncertainties and significant judgment in the interpretation of current market data. We do not necessarily intend to dispose of or liquidate such instruments prior to maturity. See Note C *Fair Value Measurements* for further details.

Trade Receivables

Restaurant Group. Trade receivables on the Consolidated and Combined Balance Sheets for the Restaurant Group consists primarily of billings to third-party customers of ABRH's bakery business, business to business gift card sales, insurance-related reimbursement, rebates, tenant improvement allowances, and billings to franchisees for royalties, initial and renewal fees, equipment sales and rent. Trade receivables are recorded net of an allowance for doubtful accounts which is our best estimate of the amount of probable credit losses related to existing receivables.

T-System. Trade receivables on the Consolidated and Combined Balance Sheets for T-System consists primarily of billings to third-party customers that are carried at the invoiced amount and unbilled receivables less an estimate for doubtful accounts.

The carrying values reported in the Consolidated and Combined Balance Sheets for trade receivables approximate their fair value.

Inventory

Inventory primarily consists of raw materials, finished pies, food, beverages packaging and supplies in our Restaurant Group segment and is stated at the lower of cost or net realizable value. Cost is determined using the first in, first out method for restaurant inventory and standard cost that approximates actual cost on a first in, first out basis for the bakery operations.

Other long term investments and non-current assets

Other long-term investments consist of land held for investment purposes, which are carried at historical cost.

Other non-current assets include notes receivable from third-parties and other miscellaneous non-current assets.

Goodwill

Goodwill represents the excess of cost over fair value of identifiable net assets acquired and assumed in business combinations. Goodwill and other intangible assets with indefinite useful lives are reviewed for impairment annually or more frequently if circumstances indicate potential impairment, through a comparison of fair value to the carrying amount. We have the option to first assess goodwill for impairment based on a review of qualitative factors to determine if events and circumstances exist which will lead to a determination that the fair value of a reporting unit is greater than its carrying amount, prior to performing a full fair-value assessment. If, after assessing the totality of events or circumstances, the Company determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the quantitative impairment test is unnecessary. However, if the Company concludes otherwise, then it is required to perform the quantitative impairment test by calculating the fair value of the reporting unit and comparing the fair value with the carrying amount of the reporting unit. Goodwill impairment, if any, is measured as the amount by which a reporting unit’s carrying value exceeds its fair value.

For the year ended December 31, 2018 we recorded $26.7 million of impairment to goodwill in our Restaurant Group segment. The impairment charge was a result of deteriorating operating results and cash flow resulting from declining same store sales and increased costs. The impairment recorded was calculated as the deficit between the carrying value of a reporting unit of the Restaurant Group segment compared to the fair value of the reporting unit determined by performing a combination of discounted cash flow and market approaches.

For years ended December 31, 2017 and 2016, we determined that there were no events or circumstances which indicated that the carrying value of goodwill exceeded the fair value and no impairment was recorded.

Other Intangible Assets

We have other intangible assets, not including goodwill, which consist primarily of customer relationships and contracts, trademarks and tradenames which are generally recorded in connection with acquisitions at their fair value, franchise rights, the fair value of purchased software and capitalized software development costs. Intangible assets with estimable lives are amortized over their respective estimated useful lives to their estimated residual values and reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. In general, customer relationships are amortized over their estimated useful lives using an accelerated method which takes into consideration expected customer attrition rates. Contractual relationships are generally amortized over their respective contractual lives. Useful lives of computer software range from 3 to 10 years. Trademarks and tradenames are generally considered intangible assets with indefinite lives and are reviewed for impairment at least annually. Capitalized software development costs and purchased software are recorded at cost and amortized using the straight-line method over their estimated useful life.

We recorded $5.8 million of impairment expense related to a tradename and an abandoned software project in our Restaurant Group in the year ended December 31, 2018. We recorded $2.9 million of impairment expense related to a tradename in our Restaurant Group in the year ended December 31, 2017. We recorded no impairment expense related to other intangible assets in the year ended December 31, 2016.

Property and Equipment, net

Property and equipment, net are recorded at cost, less accumulated depreciation. Depreciation is computed primarily using the straight-line method based on the estimated useful lives of the related assets: thirty to forty years for buildings and three to twenty-five years for furniture, fixtures and equipment. Leasehold improvements are amortized on a straight-line basis over the lesser of the term of the applicable lease or the estimated useful lives of such assets. Property and equipment are reviewed for impairment whenever events or circumstances indicate that the carrying amounts may not be recoverable.

In our Restaurant Group, all direct external costs associated with obtaining the land, building and equipment for each new restaurant, as well as construction period interest are capitalized. Direct external costs associated with obtaining the dining room and kitchen equipment, signage and other assets and equipment are also capitalized. In addition, for each new restaurant and re-branded restaurant, a portion of the internal direct costs of its real estate and construction department are also capitalized.

We recorded $8.1 million, $6.9 million, and $2.8 million of impairment expense related to Property and equipment in our Restaurant Group segment in the years ended December 31, 2018, 2017 and 2016, respectively, which is recorded within Other operating expenses on our Consolidated and Combined Statement of Operations for the years then ended.

Insurance Reserves

Our restaurant group companies are currently self-insured for a portion of its workers' compensation, general liability, and liquor liability losses (collectively, casualty losses) as well as certain other insurable risks. To mitigate the cost of its exposures for certain property and casualty losses, we make annual decisions to either retain the risks of loss up to a certain maximum per occurrence, aggregate loss limits negotiated with its insurance carriers, or fully insure those risks. Our restaurant group companies are also self-insured for healthcare claims for eligible participating employees subject to certain deductibles and limitations. We have accounted for such retained liabilities for casualty losses and healthcare claims, including reported and incurred but not reported claims, based on information provided by third-party actuaries. As of December 31, 2018, our restaurant group companies were committed under letters of credit totaling $15.4 million issued primarily in connection with casualty insurance programs.

Income Taxes

We recognize deferred tax assets and liabilities for temporary differences between the financial reporting basis and the tax basis of our assets and liabilities and expected benefits of utilizing net operating loss and credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The impact of changes in tax rates and laws on deferred taxes, if any, is applied to the years during which temporary differences are expected to be settled and reflected in the financial statements in the period enacted.

We recognize the benefits of uncertain tax positions in the financial statements only after determining a more likely than not probability that the uncertain tax positions will withstand challenge, if any, from taxing authorities. When facts and circumstances change, we reassess these probabilities and record any changes in the financial statements as appropriate. Uncertain tax positions are accounted for by determining the minimum recognition threshold that a tax position is required to meet before being recognized in the financial statements. This determination requires the use of judgment in assessing the timing and amounts of deductible and taxable items. Tax positions that meet the more likely than not recognition threshold are recognized and measured as the largest amount of tax benefit that is more than 50% likely to be realized upon settlement with a taxing authority that has full knowledge of all relevant information. The Company recognizes interest and penalties accrued related to unrecognized tax benefits as components of income tax expense.

Parent Investment in FNFV

Parent investment in FNFV on the Consolidated and Combined Statement of Equity represents FNF's historical investment in the Company, the Company's accumulated net earnings after taxes prior to the Split-Off, and the net effect of transactions with and allocations from FNF prior to the Split-Off. In conjunction with the Split-Off, Parent investment in FNFV was reclassified to Additional paid-in capital.

Revenue Recognition

Refer to Note U.

Advertising Costs

The Company expenses advertising and marketing costs as incurred, except for certain advertising production costs that are initially capitalized and subsequently expensed the first time the advertising takes place. During the years ended December 31, 2018, 2017, and 2016, the Company incurred $35.6 million, $35.6 million, and $36.1 million of advertising and marketing costs, respectively, related to advertising at ABRH, T-System and in our real estate operations. These costs are included in Other operating expenses on the Consolidated and Combined Statements of Operations.

Comprehensive Earnings (Loss)

We report comprehensive earnings (loss) in accordance with GAAP on the Consolidated and Combined Statements of Comprehensive Earnings (Loss). Total comprehensive earnings (loss) are defined as all changes in shareholders' equity during a period, other than those resulting from investments by and distributions to shareholders. While total comprehensive earnings (loss) is the activity in a period and is largely driven by net earnings in that period, accumulated other comprehensive earnings or loss represents the cumulative balance of other comprehensive earnings, net of tax, as of the balance sheet date. Amounts reclassified to net earnings relate to the realized gains (losses) on our investments and other financial instruments, excluding investments in unconsolidated affiliates, and are included in Realized gains and losses, net on the Consolidated and Combined Statements of Operations.

Changes in the balance of other comprehensive earnings (loss) by component are as follows:

	Unrealized gain (loss) on investments and other financial instruments, net (excluding investments in unconsolidated affiliates)	Unrealized (loss) gain relating to investments in unconsolidated affiliates	Total Accumulated Other Comprehensive (Loss) Earnings
		(In millions)	
Balance December 31, 2016	$ 4.9	$ (73.0)	$ (68.1)
Other comprehensive (losses) earnings	(8.7)	8.9	0.2
Reclassification adjustments	(3.1)	—	(3.1)
Balance December 31, 2017	(6.9)	(64.1)	(71.0)
Other comprehensive (losses) earnings	0.9	(12.0)	(11.1)
Adjustment for adoption of ASU 2018-02	(1.6)	(14.5)	(16.1)
Reclassification adjustments	7.0	24.0	31.0
Balance December 31, 2018	$ (0.6)	$ (66.6)	$ (67.2)

Stock-Based Compensation Plans

Stock-based compensation expense includes restricted stock awards granted to certain members of management in Cannae common stock, as well as in historical FNFV Group tracking stock. We account for stock-based compensation plans using the fair value method. Under the fair value method of accounting, compensation cost is measured based on the fair value of the award at the grant date, using quoted market prices of the underlying stock, and recognized over the service period. See Note O.

Earnings Per Share

Basic earnings per share, as presented on the Consolidated and Combined Statement of Operations, is computed by dividing net earnings available to common shareholders by the weighted average number of common shares outstanding during the period.

On November 17, 2017, the date of the consummation of the Split-Off, 70.6 million common shares of CNNE were distributed to FNFV Group shareholders. For comparative purposes, the weighted average number of common shares outstanding and basic and diluted earnings per share for the year ended December 31, 2016 was calculated using the number of shares distributed as if those shares were issued and outstanding beginning January 1, 2016.

In periods when earnings are positive, diluted earnings per share is calculated by dividing net earnings available to common shareholders by the weighted average number of common shares outstanding plus the impact of assumed conversions of potentially dilutive securities. For periods when we recognize a net loss, diluted earnings per share is equal to basic earnings per share as the impact of assumed conversions of potentially dilutive securities is considered to be antidilutive. We have granted certain shares of restricted stock which have been treated as common share equivalents for purposes of calculating diluted earnings per share for periods in which positive earnings have been reported.

Instruments which provide the ability to purchase shares of our common stock that are antidilutive are excluded from the computation of diluted earnings per share. For the year ended December 31, 2018, no antidilutive shares were outstanding. For the year ended December 31, 2017, 0.1 million shares of restricted stock were excluded from the calculation of diluted earnings per share as they were antidilutive.

Correction of Prior Interim Periods of the Current Year

In connection with the preparation of our Consolidated and Combined Financial Statements for the year ended December 31, 2018, we identified and corrected errors pertaining to (1) our adjustment for the cumulative effect of the adoption of ASC Topic 606 as of the date of adoption (January 1, 2018), (2) adjustments to the opening balance sheet of T-System in order to add a contract asset for its unbilled accounts receivable and to remove a portion of deferred revenue for which T-System had no further performance obligations, and (3) our accounting for certain revenue transactions in our T-System segment for each of our Quarterly Reports on Form 10-Q as of March 31, 2018, June 30, 2018 and September 30, 2018. As a result of errors identified in our adjustment for the cumulative effect of the adoption of ASC Topic 606 as of the date of adoption (January 1, 2018) the cumulative effect adjustment decreased by $2.4 million from the $4.3 million (net of tax), as reported, to $1.9 million (net of tax), as corrected.

In accordance with accounting guidance found in ASC Topic 250-10 *Accounting Changes and Error Corrections* (*SEC Staff Accounting Bulletin Topic 1M*), we assessed the materiality of the errors from quantitative and qualitative perspectives and concluded that the errors were not material, individually or in the aggregate, to any of our previously issued financial statements on Form 10-Q. Consequently, we will correct these errors prospectively in our quarterly filings on Form 10-Q.

Note B. Acquisitions and Dispositions

The results of operations and financial position of the entities acquired during any period are included in the Consolidated and Combined Financial Statements from and after the date of acquisition.

T-System

On October 16, 2017, we completed the T-System Merger for aggregate merger consideration of $202.2 million. T-System is a provider of clinical documentation and coding solutions to hospital-based and free-standing emergency departments and urgent care facilities.

The Company paid total consideration, net of cash received, of $200.9 million in exchange for 100% of the equity ownership of T-System. The total consideration paid was as follows (in millions):

Cash paid	$	202.2
Less: Cash acquired		1.3
Total cash consideration paid	$	200.9

The purchase price has been allocated to T-System's assets acquired and liabilities assumed based on our best estimates of their fair values as of the acquisition date. Our accounting for the T-System Merger was completed in the quarter ended December 31, 2018. The primary measurement period adjustments were (1) a $8.9 million decrease to Deferred revenue and a $5.7 million decrease to Goodwill (net of Deferred tax assets of $3.2 million) to remove the portion of the revenue for which the Company had no further performance obligations as of the acquisition date and (2) a $14.5 million decrease in Other intangible assets and corresponding $8.2 million increase in Other noncurrent assets and $6.3 million increase in Trade receivables for unbilled accounts receivable under ASC Topic 606. Goodwill has been recorded based on the amount that the purchase price exceeds the fair value of the net assets acquired. $32.8 million of the goodwill recorded is expected to be deductible for tax purposes.

The following table summarizes the total purchase price consideration and the fair value amounts recognized for the assets acquired, excluding cash received, and liabilities assumed as of the acquisition date (in millions):

	Fair Value
Trade receivables	$ 17.5
Prepaid and other current assets	2.0
Property and equipment	1.2
Goodwill	88.3
Other intangible assets	100.5
Other noncurrent assets	8.2
Total assets acquired	217.7
Accounts payable and accrued liabilities	6.6
Deferred revenue	2.1
Deferred tax liabilities	8.1
Total liabilities assumed	16.8
Net assets acquired	$ 200.9

For comparative purposes, selected unaudited pro-forma combined results of operations of Cannae for the years ended December 31, 2017 and 2016 are presented below (in millions). Pro-forma results presented assume the consolidation of T-System occurred as of the beginning of the 2016 period. Amounts are adjusted to exclude costs directly attributable to the acquisition of T-System, including transaction costs and amortization of acquired intangible assets.

	Year ended December 31,	
	2017	2016
	(Unaudited)	
Total revenues	$ 1,214.8	$ 1,242.5
Net earnings (loss) attributable to Cannae Holdings	109.8	(5.4)

The gross carrying values and weighted average estimated useful lives of property and equipment and other intangible assets acquired in the T-System acquisition consists of the following (dollars in millions):

	Gross Carrying Value	Weighted Average Estimated Useful Life (in years)
Property and equipment	$ 1.2	3 - 5
Other intangible assets:		
Customer relationships	51.0	10
Computer software	40.3	9
Tradename	9.2	10
Total other intangible assets	100.5	
Total	$ 101.7	

Corporate and other

Brasada

On January 18, 2016, we completed our purchase of certain assets of Brasada Ranch Development, LLC, Brasada Ranch Hospitality, LLC, Brasada Ranch Utilities, LLC, Brasada Rental Management, LLC, and Oregon Resorts, LLC (collectively, "Brasada") through our 87% owned subsidiary FNF NV Brasada, LLC. Brasada is a ranch-style resort in Bend/Powell Butte, Oregon which offers luxury accommodations, championship golf, world-class dining and amenities, and vast recreational activities. The acquisition was made to supplement our resort, land and real estate holdings.

The Company paid total consideration, net of cash received, of $27.5 million in exchange for the assets of Brasada. The total consideration paid was as follows (in millions):

Cash paid	$	12.0
Cash consideration financed through a mortgage loan		15.5
Total cash consideration paid	$	27.5

The purchase price has been allocated to Brasada's assets acquired and liabilities assumed based on our best estimates of their fair values as of the acquisition date.

The following table summarizes the total purchase price consideration and the fair value amounts recognized for the assets acquired, excluding cash received, and liabilities assumed as of the acquisition date (in millions):

		Fair Value
Trade receivables	$	0.4
Prepaid and other current assets		1.2
Other long-term investments		8.7
Property and equipment		14.4
Other intangible assets		7.0
Total assets acquired		31.7
Accounts payable and accrued liabilities		1.1
Deferred revenue		1.1
Notes payable		0.2
Total liabilities assumed		2.4
Total noncontrolling assumed		1.8
Net assets acquired	$	27.5

For comparative purposes, selected unaudited pro-forma combined results of operations of Cannae Holdings for the year ended December 31, 2016 is presented below (in millions). Pro-forma results presented assume the consolidation of Brasada occurred as of the beginning of the 2016 period. Amounts are adjusted to exclude costs directly attributable to the acquisition of Brasada, including transaction costs.

	Year ended December 31,	
	2016	
	(Unaudited)	
Total revenues	$	1,179.4
Net loss attributable to Cannae Holdings		(11.7)

The gross carrying values and weighted average estimated useful lives of property and equipment and other intangible assets acquired in the Brasada acquisition consists of the following (dollars in millions):

		Gross Carrying Value	Weighted Average Estimated Useful Life (in years)
Property and equipment	$	14.4	3 - 40
Other intangible assets:			
Management services contract		5.2	12
Tradename		1.8	15
Total other intangible assets		7.0	
Total	$	21.4	

Dispositions

On June 6, 2017, we closed on the sale of Digital Insurance, Inc. ("OneDigital") for $560.0 million in an all-cash transaction. After repayment of debt, payout to option holders and a minority equity investor and other transaction-related payments, the Company received $331.4 million from the sale, which includes $326.0 million in cash and $5.4 million in purchase price holdback receivable. We recognized a pre-tax gain of $276.0 million on the sale and $126.3 million in income tax expense which are included in Net earnings from discontinued operations on the Consolidated and Combined Statement of Operations for the year ended December 31, 2017. We received $4.5 million of the purchase price holdback and wrote-off the remainder in the year ended December 31, 2018.

On January 25, 2016, we completed the sale of our Max & Erma's restaurant concept for $6.5 million pursuant to an Asset Purchase Agreement ("APA"). In the year ended December 31, 2016 we recorded $3.0 million in total expense, inclusive of a $2.5 million loss on the sale and $0.5 million in impairment charges related to the sale which are included in realized gains and (losses), net and other operating expense, respectively, on the Consolidated and Combined Statements of Operations for the year then ended.

Note C. Fair Value Measurements

The fair value hierarchy established by the accounting standards on fair value measurements includes three levels which are based on the priority of the inputs to the valuation technique. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). If the inputs used to measure the financial instruments fall within different levels of the hierarchy, the categorization is based on the lowest level input that is significant to the fair value measurement of the instrument. Financial assets and liabilities that are recorded in the Consolidated and Combined Balance Sheets are categorized based on the inputs to the valuation techniques as follows:

Level 1. Financial assets and liabilities whose values are based on unadjusted quoted prices for identical assets or liabilities in an active market that we have the ability to access.

Level 2. Financial assets and liabilities whose values are based on quoted prices in markets that are not active or model inputs that are observable either directly or indirectly for substantially the full term of the asset or liability.

Level 3. Financial assets and liabilities whose values are based on model inputs that are unobservable.

Recurring Fair Value Measurements

The following table presents our fair value hierarchy for those assets and liabilities measured at fair value on a recurring basis as of December 31, 2018 and 2017, respectively:

	December 31, 2018			
	Level 1	Level 2	Level 3	Total
	(In millions)			
Assets:				
Fixed-maturity securities available for sale:				
Corporate debt securities	$ —	$ —	$ 17.8	$ 17.8
Total assets	$ —	$ —	$ 17.8	$ 17.8

	December 31, 2017			
	Level 1	Level 2	Level 3	Total
	(In millions)			
Assets:				
Fixed-maturity securities available for sale:				
Corporate debt securities	$ —	$ 14.8	$ —	$ 14.8
Equity securities	17.7	—	—	17.7
Total assets	$ 17.7	$ 14.8	$ —	$ 32.5

Our Level 3 fair value measurement for our fixed maturity securities available for sale are provided by a single third-party pricing service. Depending on security specific characteristics, either an income or a contingent claims approach was utilized in determining fair value of our Level 3 fixed-maturity securities available for sale. Discount rates are the primary unobservable inputs utilized for the securities valued using an income approach. The discount rates used are based on company-specific risk premiums, public company comparable securities, and leveraged loan indices. The discount rates used in our determination of the fair value of our Level 3 fixed-maturity securities available for sale varies by security type and ranged from 17.0% to 17.5% and had a weighted average of 17.5% as of December 31, 2018. Based on the total fair value of our Level 3 fixed-maturity securities available for sale as of December 31, 2018, changes in the discount rate utilized will not result in a fair value significantly different than the amount recorded.

The following table presents a summary of the changes in the fair values of Level 3 assets, measured on a recurring basis, for the year ended December 31, 2018.

	December 31, 2018
	Corporate debt securities
Fair value, December 31, 2017	$ —
Transfers from Level 2	21.4
Paid-in-kind dividends and interest (1)	0.3
Accretion of original purchase discount (1)	0.7
Impairment (2)	(12.5)
Reclassification of impairment previously included in other comprehensive earnings to net earnings	7.9
Fair value, December 31, 2018	$ 17.8

(1) Included in Interest and investment income on the Consolidated and Combined Statements of Operations
(2) Included in Realized gains, net on the Consolidated and Combined Statements of Operations

Transfers into or out of the Level 3 fair value category occur when unobservable inputs become more or less significant to the fair value measurement or upon a change in valuation technique. For the year ended December 31, 2018, transfers between Level 2 and Level 3 were based on changes in significance of unobservable inputs used associated with a change in the service provider and in the valuation technique used to value our corporate debt securities. The Company’s policy is to recognize transfers between levels in the fair value hierarchy at the end of the reporting period in which they occur.

As of December 31, 2017, we held no material assets or liabilities of continuing operations measured at fair value using Level 3 inputs.

All of the unrealized gain (loss) on investments and other financial instruments, net (excluding investments in unconsolidated affiliates) on our Consolidated Statements of Comprehensive Income for the year ended December 31, 2018 relate to fixed maturity securities considered Level 3 fair value measures.

Our recurring Level 2 fair value measure for our fixed-maturity securities available for sale are provided by a third-party provider. We rely on one price for the instruments to determine the carrying amount of the assets on our balance sheet. Quarterly, a comparable public company is utilized to determine the fair value. The inputs utilized in the analysis include observable measures such as reference data including public company operating results and share prices and market research publications. Other factors considered include the bond's yield, its terms and conditions, and any other feature which may influence its risk and thus marketability, as well as relative credit information and relevant sector news. We review the pricing methodologies for our Level 2 securities by obtaining an understanding of the valuation models and assumptions used by the third-party as well as independently comparing the resulting prices to other publicly available measures of fair value.

Additional information regarding the fair value of our investment portfolio is included in Note D.

The carrying amounts of trade receivables and notes receivable approximate fair value due to their short-term nature. The fair value of our notes payable is included in Note K.

Note D. Investments

Available for Sale Securities

The carrying amounts and fair values of our available for sale securities at December 31, 2018 and 2017 are as follows:

	December 31, 2018				
	Carrying Value	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
	(In millions)				
Fixed maturity securities available for sale:					
Corporate debt securities	$ 17.8	$ 18.8	$ 0.9	$ (1.9)	$ 17.8
Total	$ 17.8	$ 18.8	$ 0.9	$ (1.9)	$ 17.8

	December 31, 2017				
	Carrying Value	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
	(In millions)				
Fixed maturity securities available for sale:					
Corporate debt securities	$ 14.8	$ 26.3	$ 0.3	$ (11.8)	$ 14.8
Equity securities	17.7	17.7	0.3	(0.3)	17.7
Total	$ 32.5	$ 44.0	$ 0.6	$ (12.1)	$ 32.5

The cost basis of fixed maturity securities available for sale includes an adjustment for amortized premium or discount since the date of purchase.

As of December 31, 2018, the fixed maturity securities in our investment portfolio were corporate debt securities with a maturity of greater than one year but less than five years. Expected maturities may differ from contractual maturities because certain borrowers have the right to call or prepay obligations with or without call or prepayment penalties.

Net unrealized losses on investment securities and the fair value of the related securities, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position at December 31, 2018 were as follows (in millions):

	Less than 12 Months	
	Fair Value	Unrealized Losses
Corporate debt securities	$ 10.4	$ (1.9)
Total temporarily impaired securities	$ 10.4	$ (1.9)

During the year ended December 31, 2018, we incurred $12.5 million of other-than-temporary impairment charges relating to corporate debt securities which is included in Realized gains (losses), net on the Consolidated and Combined Statements of Operations. The impairment recorded relates to a corporate debt holding which has experienced a prolonged period of declining earnings and which we are uncertain of our ability to recover our initial investment. All of the loss represents credit loss recognized in earnings and no portion of the loss was included in other comprehensive earnings. During the year ended December 31, 2017, we incurred no other-than-temporary impairment charges relating investments in fixed-income or equity securities.

During the year ended December 31, 2018 and 2017, we sold equity securities for gross proceeds of $17.7 million and $31.6 million, respectively, resulting in net realized gains of less than $0.1 million and $5.1 million, respectively. We sold no securities in the year ended December 31, 2016.

During the years ended December 31, 2017 and 2016 we incurred no other-than-temporary impairment charges relating to available for sale investments. We recorded realized gains of less than $0.1 million and $5.1 million, respectively, in the years ended December 31, 2018 and 2017 related to the sales of equity securities. We recorded no realized gains or losses on investment securities in the year ended December 31, 2016.

As of December 31, 2018, we held $2.3 million of corporate debt securities for which an other-than-temporary impairment had been previously recognized. It is possible that future events may lead us to recognize potential future impairment losses related to our investment portfolio and that unanticipated future events may lead us to dispose of certain investment holdings and recognize the effects of any market movements in our results of operations.

Investments in Unconsolidated Affiliates

Investments in unconsolidated affiliates recorded using the equity method of accounting as of December 31, 2018 and 2017 consisted of the following (in millions):

	Ownership at December 31, 2018	2018	2017
Ceridian Holding LLC	—%	$ —	$ 324.9
Ceridian Holding II LLC	—%	—	58.4
Ceridian	23.5%	$ 359.7	—
Total investment in Ceridian		359.7	383.3
Other	various	37.5	41.6
Total		$ 397.2	$ 424.9

As a result of an internal restructuring occurring upon the closing of the Ceridian IPO, Ceridian Holding LLC and Ceridian Holding II LLC (collectively, "Ceridian LLC") were merged with and into Ceridian and all ownership interests therein were exchanged for common stock of Ceridian.

Based on quoted market prices, the aggregate value of our ownership of Ceridian common stock is $1.1 billion as of December 31, 2018.

Other Long-term Investments

Other long-term investments primarily consist of land held for investment purposes. In the year ended December 31, 2016 we recorded $3.0 million in impairment charges related to a formerly owned cost-method investment in which we determined recoverability of our investment was unlikely. The impairment is included in realized gains, net on the Consolidated and Combined Statement of Operations.

Short-term Investments

Short-term investments consist primarily of commercial paper and short-duration U.S. agency securities which have an original maturity of greater than three months but less than one year. Short-term investments are carried at amortized cost, which approximates fair value.

Note E. Property and Equipment

Property and equipment consists of the following:

	Year Ended December 31, 2018	Year Ended December 31, 2017
	(In millions)	
Furniture, fixtures and equipment	$ 192.9	$ 192.8
Leasehold improvements	138.5	146.3
Land	34.4	38.7
Buildings	27.2	33.5
	393.0	411.3
Accumulated depreciation and amortization	(216.6)	(192.5)
	$ 176.4	$ 218.8

Depreciation expense on property and equipment was $38.5 million, $41.9 million, and $41.4 million for the years ended December 31, 2018, 2017, and 2016, respectively.

Note F. Goodwill

Goodwill consists of the following:

	Restaurant Group	T-System	Corporate and Other	Total
		(in millions)		
Balance, December 31, 2016	$ 103.1	$ —	$ —	$ 103.1
Goodwill acquired during the year	—	99.6	—	99.6
Balance, December 31, 2017	$ 103.1	$ 99.6	$ —	$ 202.7
Measurement period adjustments to prior year acquisitions	—	(11.2)	—	(11.2)
Impairment	(26.7)	—	—	(26.7)
Balance, December 31, 2018	$ 76.4	$ 88.4	$ —	$ 164.8

See Note A for further information on current year goodwill impairment and Note B for further information on Goodwill acquired in conjunction with material business combinations.

Note G. Variable Interest Entities

The Company, in the normal course of business, engages in certain activities that involve variable interest entities ("VIEs"), which are legal entities in which the equity investors as a group lack any of the characteristics of a controlling interest. The primary beneficiary of a VIE is generally the enterprise that has both the power to direct the activities most significant to the economic performance of the VIE and the obligation to absorb losses or receive benefits that could potentially be significant to the VIE. The Company evaluates its interest in certain entities to determine if these entities meet the definition of a VIE and whether the Company is the primary beneficiary and should consolidate the entity based on the variable interests it held both at inception and when there is a change in circumstances that requires a reconsideration. If the Company is determined to be the primary beneficiary of a VIE, it must account for the VIE as a consolidated subsidiary. If the Company is determined not to be the primary beneficiary of a VIE but holds a variable interest in the entity, such variable interests are accounted for under accounting standards as deemed appropriate. As of and for the years ended December 31, 2018, 2017 and 2016, we are not the primary beneficiary of any VIEs.

Unconsolidated VIEs

The table below summarizes select information related to variable interests held by the Company as of December 31, 2018 and 2017, of which we are not the primary beneficiary:

	2018		2017	
	Total Assets	Maximum Exposure	Total Assets	Maximum Exposure
	(in millions)			
Investments in unconsolidated affiliates	9.2	9.2	13.0	14.7

Investments in Unconsolidated Affiliates

The Company holds variable interests in certain unconsolidated affiliates, outlined in the table above, which are primarily comprised of funds that hold minority ownership investments primarily in healthcare-related entities. The principal risk to which these funds are exposed is credit risk related to the underlying investees. In addition to the book value of our investments in unconsolidated affiliates, the maximum exposure to loss also includes $1.7 million as of December 31, 2017 for a note receivable from an investee. We do not provide any implicit or explicit liquidity guarantees or principal value guarantees to these VIEs. The assets are included in investments in unconsolidated affiliates on the Consolidated and Combined Balance Sheets and accounted for under the equity method of accounting.

Note H. Other Intangible Assets

Other intangible assets consist of the following:

	December 31,	
	2018	2017
	(In millions)	
Trademarks and tradenames	$ 80.3	$ 84.0
Software	57.4	67.4
Customer relationships and contracts	56.2	61.8
Other	51.4	17.4
	245.3	230.6
Accumulated amortization	(69.5)	(16.1)
	$ 175.8	$ 214.5

Amortization expense for amortizable intangible assets, which consist primarily of customer relationships and software, was $22.8 million, $7.4 million, and $3.4 million for the years ended December 31, 2018, 2017 and 2016, respectively. Estimated amortization expense for the next five years for assets owned at December 31, 2018, is $22.4 million in 2019, $19.7 million in 2020, $16.5 million in 2021, $14.0 million in 2022 and $12.6 million in 2023. As of December 31, 2018 and 2017, we had $69.2 million and $71.6 million, respectively of indefinite-lived tradenames.

Note I. Inventory

Inventory consists of the following:

	December 31,	
	2018	2017
	(In millions)	
Bakery inventory:		
Raw materials	$ 6.8	$ 9.1
Semi-finished and finished goods	5.6	7.5
Packaging	2.4	2.8
Obsolescence reserve	(3.0)	(0.6)
Total bakery inventory	11.8	18.8
Restaurant and other inventory	10.3	10.9
Other, non-restaurant inventory	0.2	—
Total inventory	$ 22.3	$ 29.7

Note J. Accounts Payable and Other Accrued Liabilities

Accounts payable and other accrued liabilities, current consist of the following:

	December 31,	
	2018	2017
	(In millions)	
Accrued payroll and employee benefits	$ 23.9	$ 23.7
Trade accounts payable	23.4	20.3
Accrued casualty insurance expenses	16.7	16.5
Other accrued liabilities	34.4	40.2
	$ 98.4	$ 100.7

Accounts payable and other accrued liabilities, long term consist of the following:

	December 31,	
	2018	2017
	(In millions)	
Unfavorable lease liability	$ 20.9	$ 25.6
Other accrued liabilities	36.5	36.9
	$ 57.4	$ 62.5

Note K. Notes Payable

Notes payable consists of the following:

	December 31,	
	2018	2017
	(In millions)	
ABRH Term Loan	$ —	$ 84.2
ABRH Revolving Credit Facility	—	38.0
99 Term Loan, due December 21, 2023 with interest payable monthly at 8.00%	36.1	—
99 Revolver, unused portion of $15.0 million at December 31, 2018	—	—
DLOC Loan, unused portion of $10.0 million at December 31, 2018	—	—
Margin Facility, unused portion of $300.0 million at December 31, 2018	—	—
Brasada Interstate Loans, due January 2026 with interest payable at varying rates	11.7	12.1
FNF Revolver, unused portion of $100.0 million at December 31, 2018	—	—
Other	0.3	0.6
Notes payable, total	$ 48.1	$ 134.9
Less: Notes payable, current	5.9	122.2
Notes payable, long term	$ 42.2	$ 12.7

At December 31, 2018, the carrying value of our outstanding notes payable approximated fair value. The respective carrying values of the 99 Term Loan, ABRH Term Loan and the B Note, Development Loan and Line of Credit Loan pursuant to the Interstate Credit Agreement, each as defined below, approximate fair value as they are variable rate instruments with monthly reset periods which reflect current market rates. The revolving credit facilities are considered Level 2 financial liabilities. The fixed-rate A Note, as defined below, pursuant to the Interstate Credit Agreement approximates fair value as of December 31, 2018.

On December 21, 2018, 99 Restaurants LLC, a direct, wholly-owned subsidiary of 99 Restaurants entered into the 99 Restaurants Credit Facility with Fifth Third Bank and other lenders thereto. The 99 Restaurants Credit Facility provides for (i) a maximum revolving loan of $15.0 million (the “99 Revolver”) with a maturity date of December 21, 2023; (ii) a maximum term loan of $37.0 million (the "99 Term Loan") with monthly installment repayments through November 30, 2023 and a maturity date of December 21, 2023 for the outstanding unpaid principal balance; and (iii) a maximum Development Line of Credit loan (the “DLOC Loan”) of up to $10.0 million to be advanced from time to time through December 21, 2020, with quarterly installment

payments through (a) September 30, 2024 with respect to DLOC Loans borrowed prior to December 21, 2019, and (b) September 30, 2025 with respect to DLOC Loans borrowed on or after December 21, 2019. Interest on the 99 Credit Facility is based on, at our option, an applicable margin of (x) two and one half percent (2.50%) per annum with respect to Base Rate Loans, as provided therein, and (y) three and one half percent (3.50%) per annum with respect to LIBOR Loans, as provided therein. The 99 Restaurants Credit Facility also allows for 99 Restaurants LLC to request up to $5.0 million of letters of credit commitments and $2.5 million in swingline debt from Fifth Third Bank as the administrative agent. The obligations of the 99 Restaurants LLC under the 99 Restaurants Credit Facility are guaranteed by 99 Restaurants. The 99 Restaurants Credit Facility is subject to affirmative, negative and financial covenants customary for financings of this type, including, among other things, limits on the Borrower’s creation of liens, sales of assets, incurrence of indebtedness, restricted payments and transactions with affiliates. The 99 Restaurants Credit Facility includes customary events of default for facilities of this type (with customary grace periods, as applicable). The 99 Restaurants Credit Facility provides that, upon the occurrence of an event of default, Fifth Third Bank, as administrative agent, may (i) declare the principal of, and any and all accrued and unpaid interest and all other amounts owed in respect of, the loans immediately due and payable, (ii) terminate loan commitments and (iii) exercise all other rights and remedies available to Fifth Third Bank or the lenders under the loan documents. Proceeds of $36.2 million for the 99 Term Loan were received at closing and primarily used to repay the remaining balance outstanding under the Intercompany Credit Facility. As of December 31, 2018, interest on the 99 Term Loan is payable every other month at a rate of 8.00% and we have $25.0 million available to borrow under the 99 Revolver and DLOC Loan.

On November 7, 2018, Cannae Funding, LLC (the "Borrower"), a wholly-owned special purpose subsidiary of the Company, entered into a Margin Loan Agreement (the "Loan Agreement"), and certain other related agreements, with Credit Suisse AG (in such capacity, "Administrative Agent") and other lenders thereto. Pursuant to the Loan Agreement, the Borrower may borrow up to $300.0 million (the "Margin Facility") in term loans at an interest rate of the three-month LIBOR plus an applicable margin. Interest on term loans under the Margin Facility is payable in-kind or cash at the Borrower's election. The Margin Facility is collateralized by 25.0 million shares of Ceridian held by the Company which will be contributed to the Borrower prior to any draws under the Margin Facility. The Margin Facility is subject to maintenance and margin LTV ratios pursuant to which the Borrower will be required to maintain a certain loan to value ratio (based on the value of Ceridian common stock held by Borrower). In the event that this ratio is not maintained, the Borrower must post additional cash collateral under the Loan Agreement and/or elect to repay a portion of the term loans thereunder. The Loan Agreement contains customary representations and warranties, covenants, event-of-default, and margin maintenance provisions for financings of this nature which, subject to certain terms and conditions, can result in the acceleration of the principal amount of, and accrued interest on, all outstanding term loans under the Margin Facility upon occurrence. As of December 31, 2018, there are no borrowings outstanding under the Margin Facility and $300 million available to borrow. On February 7, 2019, we borrowed $150 million under the Margin Facility and used the proceeds to fund, in part, the DNB Acquisition.

Concurrently with the Loan Agreement, Cannae entered into a Guaranty (the "Guaranty Agreement") in favor of the Administrative Agent and other lenders thereto pursuant to which Cannae absolutely, unconditionally and irrevocably guaranteed all of the Borrower's obligations under the Loan Agreement for a period of up to one year after the conditions to the effectiveness of the Loan Agreement have been met. During the period in which the Guaranty Agreement is enforceable, Cannae will be liable for all obligations payable by the Borrower under the Loan Agreement and other agreements entered into in connection therewith.

On January 29, 2016, FNF NV Brasada, LLC, an Oregon limited liability company and majority-owned subsidiary of Cannae ("NV Brasada"), entered into a credit agreement with an aggregate borrowing capacity of $17.0 million (the "Interstate Credit Agreement") originally with Bank of the Cascades, as lender. The Interstate Credit Agreement provides for (i) a $12.5 million acquisition loan (the "Acquisition Loan"), (ii) a $3.0 million development loan (the "Development Loan"), and (iii) a $1.5 million line of credit loan (the "Line of Credit Loan", and collectively with the Acquisition Loan and the Development Loan, the "Interstate Loans"). On June 13, 2018, the Interstate Credit agreement was modified to add an additional line of credit of $3.6 million and to assign the loan from the Bank of the Cascades to First Interstate Bank. Pursuant to the Acquisition Loan, NV Brasada executed a $6.25 million "A Note", which accrues interest at a rate of 4.51% per annum and matures on the tenth anniversary of the issuance thereof, and a $6.25 million "B Note", which accrues interest at the rate of LIBOR plus 225 basis points, adjusted monthly, and matures on the tenth anniversary of the issuance thereof. NV Brasada makes equal monthly payments of principal and interest under the Acquisition Loan. Each of the Development Loan and the Line of Credit Loan accrue interest at the rate of LIBOR plus 225 basis points, adjusted monthly, and mature on the second anniversary of the respective issuances thereof. NV Brasada makes equal monthly payments of interest under the Development Loan and the Line of Credit Loan. The Interstate Loans are secured by certain single-family residential lots that can be sold for construction, owned by NV Brasada, and certain other operating assets owned by NV Brasada. The Company does not provide any guaranty or stock pledge under the Interstate Credit Agreement. As of December 31, 2018, there was $11.7 million, net of debt issuance costs, outstanding under the Interstate Credit Agreement; the variable rate notes incurred interest at 4.55% and there was $4.4 million available to be drawn on the Line of Credit Loan.

On November 17, 2017, FNF issued to Cannae a revolver note in aggregate principal amount of up to $100.0 million (the "FNF Revolver"). Pursuant to the FNF Revolver, FNF may make one or more loans to us in increments of $1.0 million, with up to $100.0 million outstanding at any time. The FNF Revolver accrues interest at LIBOR plus 450 basis points and matures on the five-year anniversary of the date of the FNF Revolver. The maturity date is automatically extended for additional five-year terms unless notice of non-renewal is otherwise provided by either FNF or Cannae, in their sole discretion. As of December 31, 2018, we have not made any borrowings under the FNF Revolver. On February 7, 2019, we drew the entire $100 million available and used the proceeds to fund, in part, the DNB Acquisition.

On August 19, 2014, ABRH entered into a credit agreement (the “ABRH Credit Facility”) with Wells Fargo Bank, National Association as administrative agent, Swingline Lender and Issuing Lender, Bank of America, N.A. as syndication agent and the other financial institutions party thereto. In March 2018, the ABRH Credit Facility, including the ABRH Term Loan and ABRH Revolving Credit Facility outstanding thereunder, was assigned to Cannae and the outstanding balance was paid off in its entirety.

Gross principal maturities of notes payable at December 31, 2018 are as follows (in millions):

2019	$ 5.9
2020	6.6
2021	5.8
2022	5.8
2023	16.1
Thereafter	9.1
	$ 49.3

Note L. Income Taxes

Income tax expense (benefit) on continuing operations consists of the following:

	Year Ended December 31,		
	2018	2017	2016
		(In millions)	
Current	$ 24.4	$ (28.2)	$ 6.2
Deferred	(11.3)	11.6	(16.6)
	$ 13.1	$ (16.6)	$ (10.4)

A reconciliation of the federal statutory rate to our effective tax rate is as follows:

	Year Ended December 31,		
	2018	2017	2016
Federal statutory rate	21.0 %	35.0 %	35.0 %
State income taxes, net of federal benefit	3.5	3.1	4.4
Tax credits	(27.6)	8.6	(66.1)
Valuation allowance	—	5.9	—
Non-deductible expenses and other, net	4.2	(5.0)	9.1
Non-deductible executive compensation	82.1	—	—
Dividends received deduction	(41.4)	—	—
Noncontrolling interests	43.2	(7.6)	(2.3)
Tax Reform	(3.8)	(9.9)	—
Other	—	(3.7)	—
Effective tax rate excluding equity investments	81.2 %	26.4 %	(19.9)%
Equity investments	(10.8)	(4.4)	(184.4)
Effective tax rate	70.4 %	22.0 %	(204.3)%

The Company’s effective tax rate at December 31, 2018, 2017, and 2016 is 70.4%, 22.0%and (204.3)%, respectively. The increase in 2018 from 2017 primarily relates to executive compensation which increased from the prior year as a result of the Tax Reform Act. The increase was partially offset by a dividends received deduction. Additionally, the impact of the non-controlling interests, permanent items, and tax credits on pretax income had a greater impact in 2018 compared to 2017 on pretax losses. The increase from 2016 to 2017 primarily relates to earnings from the Company’s equity investments and the impact of permanent items and tax credits on 2016 pretax earnings compared to pretax losses.

The significant components of deferred tax assets and liabilities at December 31, 2018 and 2017 consist of the following:

	December 31,	
	2018	2017
	(In millions)	
Deferred tax assets:		
Employee benefit accruals	$ 0.3	$ 0.2
Net operating loss carryforwards	5.4	10.9
Equity investments	8.9	14.6
Investment securities	2.8	3.0
Partnerships	11.1	—
Accrued liabilities	1.8	3.3
Tax credit carryforwards	—	1.1
Other	0.5	—
Total gross deferred tax asset	30.8	33.1
Less: valuation allowance	—	0.7
Total deferred tax asset	$ 30.8	$ 32.4
Deferred tax liabilities:		
Amortization of goodwill and intangible assets	$ (10.9)	$ (16.8)
Partnerships	—	(4.4)
Depreciation	(0.2)	(0.6)
Other	(2.8)	—
Total deferred tax liability	$ (13.9)	$ (21.8)
Net deferred tax asset	$ 16.9	$ 10.6

The Company's net deferred tax asset was $16.9 million and $10.6 million at December 31, 2018, and 2017, respectively. The primary changes to the deferred taxes relate to changes in equity investments, partnership interests, and the utilization of net operating losses ("NOL") and tax credit carryforwards.

The decrease of $5.7 million in the Company’s deferred tax assets on equity investments was primarily related to various basis adjustments and current year pick up of equity in earnings of unconsolidated affiliates. The $15.5 million change in the deferred tax asset related to partnerships was primarily related to book losses within the restaurant group, which includes an impairment of goodwill. The $5.9 million decrease in the Company’s deferred tax liability for intangible assets was related to current year amortization and a reclassification between intangible assets and unbilled accounts receivable as part of the Company’s opening equity adjustment related to its adoption of ASC Topic 606.

The Company’s federal and state NOL carryforwards were $18.7 million and $36.2 million at December 31, 2018 and 2017, respectively. The Company had no tax credit carryforwards at December 31, 2018 and $1.1 million at December 31, 2017. The NOLs expire in various tax years through 2038. A portion of the NOL carryforwards are subject to a Section 382 limitation; however based on the section 382 limitation amount, all of the NOL carryovers are expected to be fully utilized before they expire.

ASC 740 requires that companies assess whether a valuation allowance should be established against their deferred tax assets based on the consideration of all of the available evidence using a “more likely than not” standard. A valuation allowance is established for deferred tax assets if, based on the weight of available evidence, it is more likely than not that some portion or all of the deferred tax assets may not be realized. Management evaluated the Company’s deferred tax assets for recoverability using a consistent approach which considers the relative impact of negative and positive evidence, in particular, the Company’s historical profitability and any projections of future taxable income or potential future tax planning strategies.

The Company did not have any unrecognized tax benefits as of December 31, 2018, 2017 or 2016.

The Company's federal and state income tax returns for the tax years ended December 31, 2018 and 2017 remain subject to examination.

Tax Reform

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the “Tax Reform Act”). SEC Staff Accounting Bulletin No. 118 ("SAB 118"), provided guidance for companies that had not completed their accounting for the income tax effects of the Tax Reform in the period of enactment, allowing for a measurement period of up to one year after the enactment date to finalize the recording of the related tax impacts. As of December 31, 2018, the Company has completed its accounting for the tax effects of the Tax Reform Act, and recorded an immaterial adjustment related to the revised December 31, 2017 ending deferred tax balances which changed as a result of the temporary provision to return adjustments.

Note M. Commitments and Contingencies

Legal Contingencies

In the ordinary course of business, we are involved in various pending and threatened litigation and regulatory matters related to our operations, some of which include claims for punitive or exemplary damages. Our ordinary course litigation includes purported class action lawsuits, which make allegations related to various aspects of our business. From time to time, we also receive requests for information from various state and federal regulatory authorities, some of which take the form of civil investigative demands or subpoenas. Some of these regulatory inquiries may result in the assessment of fines for violations of regulations or settlements with such authorities requiring a variety of remedies. We believe that no actions, other than those discussed below, depart from customary litigation or regulatory inquiries incidental to our business.

Our Restaurant Group companies are a defendant from time to time in various legal proceedings arising in the ordinary course of business, including claims relating to injury or wrongful death under “dram shop” laws that allow a person to sue us based on any injury caused by an intoxicated person who was wrongfully served alcoholic beverages at one of the restaurants; individual and purported class or collective action claims alleging violation of federal and state employment, franchise and other laws; and claims from guests or employees alleging illness, injury or other food quality, health or operational concerns. Our Restaurant Group companies are also subject to compliance with extensive government laws and regulations related to employment practices and policies and the manufacture, preparation, and sale of food and alcohol. We may also become subject to lawsuits and other proceedings, as well as card network fines and penalties, arising out of the actual or alleged theft of our customers' credit or debit card information.

We review lawsuits and other legal and regulatory matters (collectively “legal proceedings”) on an ongoing basis when making accrual and disclosure decisions. When assessing reasonably possible and probable outcomes, management bases its decision on its assessment of the ultimate outcome assuming all appeals have been exhausted. For legal proceedings in which it has been determined that a loss is both probable and reasonably estimable, a liability based on known facts and which represents our best estimate is recorded. As of December 31, 2018, we had $0.5 million accrued for legal proceedings. As of December 31, 2017, we had $0.2 million accrued for legal proceedings. Actual losses may materially differ from the amounts recorded and the ultimate outcome of our pending legal proceedings is generally not yet determinable. While some of these matters could be material to our operating results or cash flows for any particular period in the event of an unfavorable outcome, at present, we do not believe that the ultimate resolution of currently pending legal proceedings, either individually or in the aggregate, will have a material adverse effect on our financial condition, results of operations or cash flows.

O’Charley’s is the defendant in a lawsuit, Otis v. O’Charley’s, LLC, filed on July 13, 2016, in U.S. District Court, Central District of Illinois. The lawsuit purports to bring a national class action on behalf of all O’Charley’s servers and bartenders under the Fair Labor Standards Act and similar state laws. The complaint alleges that O'Charley's failed to pay plaintiffs the applicable minimum wage and overtime by requiring tipped employees to: (a) spend more than twenty percent of their time performing non-tipped duties, including dishwashing, food preparation, cleaning, maintenance, and other "back of the house" duties; and (b) perform “off the clock” work. Plaintiffs seek damages and declaratory relief. The named plaintiffs and members of the putative class are parties to employment agreements with O’Charley’s that provide, inter alia, for individual arbitration of potential claims and disputes. On October 25, 2016, the District Court entered an Order staying all proceedings in the Otis case pending the United States Supreme Court’s resolution of certain petitions for certiorari filed in several Circuit Courts of Appeals cases that address the issue of whether agreements between employers and employees to arbitrate disputes on an individual basis are enforceable under the Federal Arbitration Act. The Order provides that, if certiorari is granted in any of the Circuit Courts of Appeals cases, the stay of the Otis case will continue until the Supreme Court reaches a final decision on the merits in the cases. On January 13, 2017, the Supreme Court granted certiorari in three of the Circuit Courts of Appeals cases that address the enforceability of arbitration agreements. On May 21, 2018, the Supreme Court ruled on the issue, holding that class-action waivers in employment arbitration agreements are enforceable. The parties reached a settlement on January 2, 2019, whereby the plaintiffs agreed to a full and complete settlement and release of all claims that were asserted or that could have been asserted in the litigation. The settlement is not material to the Company's financial position, results of operations, or liquidity. The settlement was approved and the case was dismissed with prejudice by court order on February 15, 2019.

Operating Leases

We have operating leases for certain of our premises and equipment, primarily for real estate and equipment in our Restaurant Group segment.

Original terms of our operating lease agreements primarily range from one to thirty years. Most of our leases include one or more options to renew, with varying renewal terms that can extend the lease term. The exercise of lease renewal options is at our sole discretion.

Future minimum operating lease payments are as follows (in millions):

2019	$	62.0
2020		57.7
2021		51.3
2022		40.7
2023		34.1
Thereafter		133.2
Total future minimum operating lease payments	$	379.0

Rent expense incurred under operating leases during the years ended December 31, 2018, 2017 and 2016 was $61.5 million, $61.9 million, and $64.5 million, respectively. Rent expense in the year ended December 31, 2016 also included abandoned lease charges related to office closures of $6.9 million related to the termination of leases associated with the sale of the Max and Erma's restaurant concept. No abandoned lease charges were recorded in the years ended December 31, 2018 or 2017.

Unconditional Purchase Obligations

We have certain unconditional purchase obligations, primarily in our Restaurant Group segment. These purchase obligations are with various vendors and primarily related to food and beverage obligations with fixed commitments in regards to the time period of the contract and the quantities purchased with annual price adjustments that can fluctuate. We used both historical and projected volume and pricing as of December 31, 2018 to determine the amount of the obligations. Purchase obligations as of December 31, 2018 are as follows (in millions):

2019	$	194.4
2020		80.9
2021		46.7
2022		8.9
2023		3.4
Thereafter		7.3
Total purchase commitments	$	341.6

Note N. Discontinued Operations

OneDigital

On June 6, 2017, we completed the sale of OneDigital. As a result of the sale, the financial results of the businesses sold have been reclassified to discontinued operations for all periods presented in our Consolidated and Combined Statements of Operations. We retained no ownership in OneDigital and have no continuing involvement with OneDigital as of the date of the sale.

A reconciliation of the operations of OneDigital to the Consolidated and Combined Statement of Operations is shown below:

	Year Ended December 31,	
	2017	2016
	(in millions)	
Revenues:		
Other operating revenue	$ 80.9	$ 148.3
Total operating revenues	80.9	148.3
Operating expenses:		
Personnel costs	56.9	94.8
Depreciation and amortization	8.8	18.1
Other operating expenses	11.3	27.1
Total operating expenses	77.0	140.0
Operating income	3.9	8.3
Other income (expense):		
Interest expense	(2.9)	(4.8)
Realized gain	276.0	—
Total other income (expense)	273.1	(4.8)
Earnings from continuing operations before income taxes	277.0	3.5
Income tax expense	129.3	1.5
Net earnings from discontinued operations	$ 147.7	$ 2.0
Cash flow from discontinued operations data:		
Net cash provided by operations	$ 17.3	$ 27.6
Net cash used in investing activities	(27.3)	(51.9)

Other acquisitions/disposals of businesses, net of cash acquired, on the Consolidated and Combined Statements of Cash Flows for the years ended December 31, 2017 and 2016 includes $25.9 million and $48.3 million, respectively, related to acquisitions made by OneDigital. Borrowings on the Consolidated and Combined Statements of Cash Flows for the years ended December 31, 2017 and 2016 includes $23.0 million and $38.0 million, respectively, related to borrowings made by OneDigital. Debt service payments on the Consolidated and Combined Statements of Cash Flows for the years ended December 31, 2017 and 2016 includes $3.0 million and $7.5 million, respectively, related to debt principal payments made by OneDigital.

Note O. Employee Benefit Plans

Omnibus Plan

In 2017, we established the 2017 Omnibus Incentive Plan (the “Omnibus Plan”) authorizing the issuance of up to 3.9 million shares of common stock, subject to the terms of the Omnibus Plan. The 2017 Omnibus Plan provides for the grant of stock options, stock appreciation rights, restricted stock, restricted stock units and performance shares, performance units, other cash and stock-based awards and dividend equivalents. As of December 31, 2018, there were 575,655 shares of Cannae restricted stock outstanding (the "CNNE Awards") under the Omnibus Plan. Awards granted are approved by the Compensation Committee of the Board of Directors of the Company.

Restricted stock transactions under the Omnibus Plan in 2018 and 2017 are as follows:

	Shares	Weighted Average Grant Date Fair Value
Balance, December 31, 2016	—	$ —
Granted	287,059	18.45
Balance, December 31, 2017	287,059	$ 18.45
Granted	384,281	17.98
Vested	(95,685)	18.45
Balance, December 31, 2018	575,655	$ 18.13

Compensation cost relating to share-based payments is recognized in the Consolidated and Combined Statements of Operations based on the grant-date fair value of each award. Using the fair value method of accounting, compensation cost is measured based on the fair value of the award at the grant date and recognized over the service period of 3 years. Fair value of restricted stock awards and units is based on the grant date value of the underlying stock derived from quoted market prices. Net earnings attributable to Cannae reflects stock-based compensation expense for the CNNE Awards of $2.0 million and $0.2 million for the years ended December 31, 2018 and 2017, respectively, which are included in personnel costs on the Consolidated and Combined Statements of Operations. There was no expense related to CNNE Awards in 2016. The total fair value of restricted stock awards granted in the years ended December 31, 2018 and 2017 was $6.9 million and $5.3 million, respectively.

As of December 31, 2018, the unrecognized compensation cost related to the CNNE Awards is $10.0 million and is expected to be recognized over a period of 1.79 years.

On May 16, 2018, we issued 991,906 shares of our common stock (unrestricted) under the Omnibus Plan for the stock portion of bonuses paid in conjunction with the Ceridian IPO. See Note A.

FNFV Restricted Stock Awards

Prior to the Split-Off, we historically participated in FNF's Omnibus Incentive Plan (the “ FNF Omnibus Plan”) which provided for the grant of stock options, stock appreciation rights, restricted stock, restricted stock units and performance shares, performance units, other cash and stock-based awards and dividend equivalents in either of FNF's two former classes of common stock, FNF Group and FNFV Group. As of December 31, 2018 there were no shares of FNFV Group restricted stock outstanding (the "FNFV Awards") under the FNF Omnibus Plan.

Prior to the Split-Off, stock-based compensation related to FNFV Awards was allocated to us by FNF. Compensation cost relating to share-based payments is recognized in the Consolidated and Combined Financial Statements based on the fair value of each award. Using the fair value method of accounting, compensation cost is measured based on the fair value of the award at the grant date and recognized over the service period of 3 years. Fair value of restricted stock awards and units is based on the grant date value of the underlying stock derived from quoted market prices. Net earnings attributable to FNFV reflects the allocation of stock-based compensation expense for the FNFV Awards of $4.2 million and $4.7 million for the years ended December 31, 2017 and 2016, respectively which are included in personnel costs on the Consolidated and Combined Statements of Operations.

As of December 31, 2018, there was no remaining unrecognized compensation cost related to the FNFV Awards.

Note P. Concentration of Risk

Financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash equivalents and trade receivables.

We place cash equivalents with high credit quality financial institutions and, by policy, limit the amount of credit exposure with any one financial institution.

Concentrations of credit risk with respect to trade receivables are limited because a large number of geographically diverse customers make up our customer base, thus spreading the trade receivables credit risk. We control credit risk through monitoring procedures.

Our restaurant group companies obtain a majority of their restaurant food products and supplies from five distributors. Although we believe alternative vendors could be found in a timely manner, any disruption of these services could potentially have an adverse impact on operating results.

Note Q. Segment Information

Summarized financial information concerning our reportable segments is shown in the following tables. There are several intercompany corporate related arrangements between our various businesses. The effects of these arrangements including intercompany notes and related interest and any other non-operational intercompany revenues and expenses have been eliminated in the segment presentations below.

LifeWorks Corporation Ltd. ("LifeWorks"), a former subsidiary of Ceridian, was distributed pro-rata to Ceridian shareholders contemporaneously with the Ceridian IPO and on July 27, 2018, LifeWorks was sold. The results of Ceridian for the years ended December 31, 2017 and 2016 have been adjusted to remove the effects of the discontinued operations of LifeWorks.

As of and for the year ended December 31, 2018:

	Restaurant Group	T-System	Ceridian	Corporate and Other	Ceridian Elimination	**Total**
	(in millions)					
Restaurant revenues	$ 1,117.8	$ —	$ —	$ —	$ —	**$ 1,117.8**
Other revenues	—	57.9	746.4	29.7	(746.4)	**87.6**
Revenues from external customers	1,117.8	57.9	746.4	29.7	(746.4)	**1,205.4**
Interest and investment income, including realized gains and losses	(2.1)	—	—	175.2	—	**173.1**
Total revenues and other income	1,115.7	57.9	746.4	204.9	(746.4)	**1,378.5**
Depreciation and amortization	44.9	15.0	56.6	1.4	(56.6)	**61.3**
Interest expense	(16.0)	(4.3)	(83.2)	15.6	83.2	**(4.7)**
(Loss) earnings from continuing operations, before income taxes and equity in earnings (loss) of unconsolidated affiliates	(96.8)	(8.3)	(30.4)	123.7	30.4	**18.6**
Income tax expense (benefit)	0.6	(1.9)	7.7	14.4	(7.7)	**13.1**
(Loss) earnings from continuing operations, before equity in earnings (loss) of unconsolidated affiliates	(97.4)	(6.4)	(38.1)	109.3	38.1	**5.5**
Equity in earnings of unconsolidated affiliates	0.1	—	—	4.3	(20.5)	**(16.1)**
(Loss) earnings from continuing operations	$ (97.3)	$ (6.4)	$ (38.1)	$ 113.6	$ 17.6	**$ (10.6)**
Assets	$ 432.3	$ 206.3	$ 5,154.4	$ 820.9	$ (5,154.4)	**$ 1,459.5**
Goodwill	76.4	88.4	1,927.4	—	(1,927.4)	**164.8**

As of and for the year ended December 31, 2017:

	Restaurant Group	T-System	Ceridian	Corporate and Other	Ceridian Elimination	**Total**
	(in millions)					
Restaurant revenues	$ 1,129.0	$ —	$ —	$ —	$ —	**$ 1,129.0**
Other revenues	—	12.9	670.8	27.6	(670.8)	**40.5**
Revenues from external customers	1,129.0	12.9	670.8	27.6	(670.8)	**1,169.5**
Interest and investment income, including realized gains and losses	—	—	—	10.2	—	**10.2**
Total revenues and other income	1,129.0	12.9	670.8	37.8	(670.8)	**1,179.7**
Depreciation and amortization	43.6	3.1	53.8	2.6	(53.8)	**49.3**
Interest expense	(6.6)	—	(87.1)	(0.4)	87.1	**(7.0)**
(Loss) earnings from continuing operations, before income taxes and equity in earnings (loss) of unconsolidated affiliates	(36.1)	(0.9)	(54.1)	(38.2)	54.1	**(75.2)**
Income tax expense (benefit)	0.7	(2.4)	(49.6)	(14.9)	49.6	**(16.6)**
(Loss) earnings from continuing operations, before equity in earnings (loss) of unconsolidated affiliates	(36.8)	1.5	(4.5)	(23.3)	4.5	**(58.6)**
Equity in earnings of unconsolidated affiliates	0.1	—	—	1.4	1.9	**3.4**
(Loss) earnings from continuing operations	$ (36.7)	$ 1.5	$ (4.5)	$ (21.9)	$ 6.4	**$ (55.2)**
Assets	$ 501.0	$ 221.2	$6,729.9	$ 765.0	$ (6,729.9)	**$ 1,487.2**
Goodwill	103.1	99.6	1,961.0	—	(1,961.0)	**202.7**

As of and for the year ended December 31, 2016:

	Restaurant Group	Ceridian	Corporate and Other	Ceridian Elimination	Total
	(in millions)				
Restaurant revenues	$ 1,157.6	$ —	$ —	$ —	**$ 1,157.6**
Other revenues	—	623.4	20.8	(623.4)	**20.8**
Revenues from external customers	1,157.6	623.4	20.8	(623.4)	**1,178.4**
Interest and investment (loss) income, including realized gains and losses	(2.5)	—	15.1	—	**12.6**
Total revenues and other income	1,155.1	623.4	35.9	(623.4)	**1,191.0**
Depreciation and amortization	42.4	53.2	2.3	(53.2)	**44.7**
Interest expense	(4.7)	(87.4)	(0.5)	87.4	**(5.2)**
Earnings (loss) from continuing operations, before income taxes and equity in losses of unconsolidated affiliates	0.8	(98.6)	4.4	98.6	**5.2**
Income tax expense (benefit)	0.4	6.7	(10.8)	(6.7)	**(10.4)**
Earnings (loss) from continuing operations, before equity in losses of unconsolidated affiliates	0.4	(105.3)	15.2	105.3	**15.6**
Equity in losses of unconsolidated affiliates	—	—	(0.4)	(29.1)	**(29.5)**
Earnings (loss) from continuing operations	$ 0.4	$ (105.3)	$ 14.8	$ 76.2	**$ (13.9)**
Assets	$ 497.2	$ 6,426.5	$ 976.1	$ (6,426.5)	**$ 1,473.3**
Goodwill	103.1	1,933.1	—	(1,933.1)	**103.1**

The activities in our segments include the following:

- *Restaurant Group.* This segment consists of the operations of ABRH and 99 Restaurants, in which we have 65.4% and 88.5% ownership interests, respectively. ABRH and its affiliates are the owners and operators of the O'Charley's, Village Inn and Bakers Square food service and restaurant concepts, as well as the Legendary Baking bakery operation. 99 Restaurants and its affiliates are the owners and operators of Ninety Nine Restaurants restaurant concept. This segment also included the results of operations of the Max & Erma's restaurant concept, which was sold on January 25, 2016.

- *Ceridian.* This segment consists of our 23.5% ownership interest in Ceridian. Ceridian, through its operating subsidiary, is a global company that offers a broad range of services and software designed to help employers more effectively manage employment processes, such as payroll, payroll related tax filing, human resource information systems, employee self-service, time and labor management, employee assistance and work-life programs, and recruitment and applicant screening. Ceridian's cloud offering, Dayforce, is a cloud solution that meets HCM needs with one employee record and one user experience throughout the application. Dayforce enables organizations to process payroll, maintain human resources records, manage benefits enrollment, schedule staff, and find and hire personnel, while monitoring compliance throughout the employee life cycle. Our chief operating decision maker reviews the full financial results of Ceridian for purposes of assessing performance and allocating resources. Thus, we have included the full financial results of Ceridian in the table above. We account for our investment in Ceridian under the equity method of accounting and therefore its results of operations do not consolidate into ours. Accordingly, we have presented the elimination of Ceridian's results in the *Ceridian Elimination* section of the segment presentation above.

- *T-System.* This segment consists of the operations of our 97%-owned subsidiary, T-System, acquired on October 16, 2017. T-System is a provider of clinical documentation and coding solutions to hospital-based and free-standing emergency departments and urgent care facilities. T-System organizes itself into two businesses. The Clinical Documentation business offers software solutions providing clinical staff with full workflow operations that drive documentation completeness and revenue optimization to more than 240 customers at more than 450 customer sites. Additionally, the patented T-Sheet is the industry standard for emergency department documentation, with more than 200 customers at more than 475 customer sites. The Coding Software & Outsourced Solutions business provides a full-service outsourced coding solution as well as a cloud-based software-as-a-service solution for self-service coding. These offerings help more than 75 customers at over 400 sites optimize their revenue cycle workflow and customer revenue reimbursement through improved coding accuracy and compliance and coder productivity compared to in-house coding.

- *Corporate and Other.* This segment consists of our share in the operations of certain controlled portfolio companies and other equity investments as well as certain intercompany eliminations and taxes. Total assets for this segment as of December 31, 2016 also include the assets of One Digital. See Note N *Discontinued Operations* for further details.

Note R. Related Party Transactions

FNF

As a former wholly-owned subsidiary of FNF, we have incurred payables related to historical intercompany transactions, taxes and cost allocations between us and FNF. FNF forgave these historical intercompany receivables due from us which amounted to $4.5 million and $9.5 million in the years ended December 31, 2017 and 2016, respectively.

The Company is allocated certain corporate overhead and management services expenses from FNF based on the terms of the CSA and our proportionate share of the expense determined on actual usage and our best estimate of management's allocation of time. Total operating expenses allocated from FNF to us was $1.3 million, $9.5 million and $9.3 million in the years ended December 31, 2018, 2017 and 2016, respectively.

On November 16, 2017, certain subsidiaries of FNF contributed an aggregate of $100.0 million to us (the "FNF Investment") in exchange for 5,706,134 shares of Cannae common stock.

We have a $100.0 million Revolver Note with FNF. As of December 31, 2018 and 2017, there is no outstanding balance under the FNF Revolver or Revolver Note. On February 7, 2019, we drew the entire $100 million available and used the proceeds to fund, in part, the DNB Acquisition. Refer to Note K *Notes Payable* for further discussion.

Sale of Max & Erma's

On January 25, 2016, ABRH completed the sale of its Max & Erma's restaurant concept for $6.5 million pursuant to an APA. The buyer was a joint venture formed by Newport Global Opportunities Fund 1-A AIV LP and Glacier Restaurant Group ("GRG"), a restaurant owner and operator majority-owned by William P. Foley II, the Chairman of FNF's Boards of Directors. The transaction included the sale of 26 restaurants to GRG along with all Max & Erma's tradenames/trademarks and franchise operations, and other assets and liabilities. While the real estate leases for 25 leased restaurants were assigned to the buyer, ABRH was not released from liability under the leases and remains liable in the event the buyer fails to pay amounts due thereunder. As of December 31, 2018, there are 21 such leases still in force and the maximum amount of this guarantee is $18.2 million.

Note S. Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, Revenue from Contracts with Customers (Topic 606). This ASU provides a new comprehensive revenue recognition model that requires companies to recognize revenue to depict the transfer of goods or services to a customer at an amount that reflects the consideration it expects to receive in exchange for those goods or services. This update also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts. This update permits the use of either the retrospective or cumulative effect transition method. ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations was issued by FASB in March 2016 to clarify the principal versus agent considerations within ASU 2014-09. ASU 2016-10 Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing was issued by the FASB in April 2016 to clarify how to determine whether goods and services are separately identifiable and thus accounted for as separate performance obligations. ASU 2016-12 Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients was issued by the FASB in May 2016 to clarify certain terms from the aforementioned updates and to add practical expedients for contracts at various stages of completion. ASU 2016-20, Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers, was issued by the FASB in December 2016 which includes thirteen technical corrections and improvements affecting narrow aspects of the guidance issued in ASU 2014-09.

We adopted Accounting Standards Codification ("ASC") Topic 606 Revenue from Contracts with Customers ("ASC Topic 606") on January 1, 2018 using a modified retrospective approach with a cumulative-effect adjustment to the opening balance of retained earnings. We applied the standard to all contracts existing at the date of initial application. Results for reporting periods beginning after January 1, 2018 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported under the accounting standards in effect for the prior period. The adoption of ASC Topic 606 did not have a significant impact on the timing or amount of recognition of revenue for our primary sources of revenue. As a result of the adoption of ASC Topic 606, we recorded a cumulative-effect adjustment of $1.9 million which increased Retained earnings. As a result of errors identified in our adjustment for the cumulative effect of the adoption of ASC Topic 606 as of the date of adoption (January 1, 2018), as further discussed in Note A, the cumulative effect adjustment decreased by $2.4 million from the $4.3 million (net of tax), as reported, to $1.9 million (net of tax), as corrected. See Note U for further discussion of our revenue.

In February 2016, the FASB issued ASU No. 2016-02 Leases (Topic 842). The amendments in this ASU introduce broad changes to the accounting and reporting for leases by lessees. The main provisions of the new standard include: clarifications to the definitions of a lease, components of leases, and criteria for determining lease classification; requiring virtually all leased assets, including operating leases and related liabilities, to be reflected on the lessee's balance sheet; and expanding and adding to the required disclosures for lessees. This update is effective for annual and interim periods beginning after December 15, 2018, including interim periods within those fiscal years. Early application of the standard is permitted. The ASU allows for a modified retrospective approach to transitioning which allows for the use of practical expedients to effectively account for leases commenced prior to the effective date in accordance with previous GAAP, except that lessees were required to recognize a right-of-use asset and a lease liability for all operating leases at each reporting date based on the present value of the remaining minimum rental payments that were tracked and disclosed under previous GAAP. In July 2018, the FASB issued ASU 2018-11 Leases (Topic 842): Targeted Improvements which allows entities the option to adopt this standard using a modified retrospective approach with a cumulative-effect adjustment to opening equity and only include required disclosures for prior periods.

We have identified a vendor with software suited to track and account for leases under the new standard and have transitioned our lease accounting within the software. We anticipate this standard will have a material impact on our consolidated balance sheets. However, while we are still completing our analysis, we do not anticipate that adoption of this ASU will have a material impact on our consolidated statements of operations. The most significant impact of the adoption of this standard relates to our accounting for leased real estate for our Restaurant Group. We plan to adopt this standard using a modified retrospective approach in the first quarter of 2019 and to use the package of practical expedients available upon adoption.

In June 2016, the FASB issued ASU No. 2016-13 Financial Instruments—Credit Losses: Measurement of Credit Losses on Financial Instruments. The amendments in this ASU introduce broad changes to accounting for credit impairment of financial instruments. The primary updates include the introduction of a new current expected credit loss ("CECL") model that is based on expected rather than incurred losses and amendments to the accounting for impairment of debt securities available for sale. This update is effective for annual periods beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted for annual periods beginning after December 15, 2018, including interim periods within those fiscal years. We are currently evaluating the effect this new guidance will have on our financial statements and related disclosures and have not yet concluded on its effects. We do not expect to early adopt the standard.

In January 2017, the FASB issued ASU 2017-04, Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment. The guidance simplifies the measurement of goodwill impairment by removing step 2 of the goodwill impairment test, which requires the determination of the fair value of individual assets and liabilities of a reporting unit. The new guidance requires goodwill impairment to be measured as the amount by which a reporting unit's carrying value exceeds its fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The amendments should be applied on a prospective basis. The new standard is effective for fiscal years beginning after December 15, 2019 with early adoption permitted for interim or annual goodwill impairment tests performed after January 1, 2017. We adopted this new guidance in the year ended December 31, 2018 and assessed our goodwill for impairment under the new standard. See Note A.

In February 2018, the FASB issued ASU 2018-02, Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income. The guidance allows for a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Reform Act. The new standard is effective for fiscal years beginning after December 15, 2018 and interim periods in those fiscal years with early adoption permitted. We adopted this standard on April 1, 2018 resulting in a reclassification of $16.1 million of deferred taxes from Accumulated other comprehensive loss to Retained earnings. Our policy is to release income tax effects from accumulated other comprehensive income at such time as the earnings or loss of the related activity are recognized in earnings (e.g., upon sale of an investment security).

Note T. Supplementary Cash Flow Information

The following supplemental cash flow information is provided with respect to interest and tax payments, as well as certain non-cash investing and financing activities.

	Year Ended December 31,		
	2018	2017	2016
		(In millions)	
Cash paid during the year:			
Interest	$ 3.3	$ 8.7	$ 8.7
Income taxes	0.2	117.7	4.0
Non-cash investing activities:			
Acquisition of Ceridian HCM common shares through non-cash private placement investment - see Note A	$ (33.4)	—	—
Non-cash distribution of LifeWorks from Ceridian - see Note A	32.5	—	—
Non-cash financing activities:			
Liabilities and noncontrolling interests assumed in connection with acquisitions (1):			
Fair value of net assets acquired	$ —	$ 252.5	$ 92.0
Less: Total cash purchase price	—	222.7	75.8
Liabilities and noncontrolling interests assumed	$ —	$ 29.8	$ 16.2
Debt extinguished through the sale of OneDigital	$ —	$ 151.1	$ —

(1) See Note B for further discussion of assets and liabilities acquired in business combinations in the years ended December 31, 2017 and 2016.

Note U — Revenue Recognition

On January 1, 2018, we adopted ASC Topic 606 by applying the modified retrospective method. Results for reporting periods beginning after January 1, 2018 are presented under ASC Topic 606, while prior period amounts are not adjusted and continue to be reported under the accounting standards in effect for the prior period. The adoption of ASC Topic 606 did not have a significant impact on the timing or amount of recognition of revenue for our primary sources of revenue. Differences between our historical revenue recognition and revenue which would have been recorded had we retrospectively restated prior periods to conform with ASC Topic 606 are not considered material. We recorded a cumulative effect adjustment to opening equity as of January 1, 2018 of $1.9 million as a result of adoption of ASC Topic 606. See Note A for discussion of immaterial corrections to our previously reported cumulative effect adjustment for ASC Topic 606.

Disaggregation of Revenue

Our revenue consists of:

Revenue Stream	Segment	Year ended December 31, 2018 Total Revenue
		(in millions)
Restaurant revenue:		
Restaurant sales	Restaurant Group	$ 1,023.0
Bakery sales	Restaurant Group	88.8
Franchise and other	Restaurant Group	6.0
Total restaurant revenue		1,117.8
Other operating revenue:		
T-System, point-in-time	T-System	24.5
T-System, over time	T-System	33.4
Real estate and resort	Corporate and other	23.2
Other	Corporate and other	6.5
Total other operating revenue		87.6
Total operating revenues		1,205.4

Restaurant revenue consists of restaurant sales, bakery operations, and, to a lesser extent, franchise revenue and other revenue. Restaurant sales include food and beverage sales and gift card breakage, are net of applicable state and local sales taxes and discounts, and are recognized at a point in time as services are performed and goods are provided. Revenue from bakery operations is recognized at a point in time in the period during which the products are shipped and control transfers to the customer. Franchise revenue and other revenue consist of development fees and royalties on sales by franchised units. Initial franchise fees are recognized as income upon commencement of the franchise operation and completion of all material services and conditions by the Company. Royalties are calculated as a percentage of the franchisee sales and recognized in the period in which the sales are generated. Revenue resulting from the sale of gift cards is recognized in the period in which the gift card is redeemed and is recorded as deferred revenue until recognized.

T-System recognizes revenue when a customer obtains control of the promised goods or services. The amount of revenue recognized is determined by the consideration that T-System expects to be entitled to in exchange for the goods and services. T-System's contracts with customers typically do not include variable consideration such as right of return or refund or other form of incentives or considerations payable to customers.

T-System offers a software as a service solution with full-service coding ("RevCycle+") available, through contracts with customers to either provide access to its proprietary coding software platform or provide medical chart coding services. Billing for both services occurs monthly as services are provided. Billing for medical chart coding services is based on a fixed monthly fee. Revenue for RevCycle+ is recognized ratably over the term of the contract as services are consumed by the customer. Revenue for implementation and upfront training services provided to the customer, if any, are billed separately and recognized at a point in time upon completion of such services as T-System's performance obligation is considered complete.

T-System sells an electronic version of the medical documentation system (“EV”), provided in the form of a non-exclusive license to use the software at the sites under the agreement when the software is made available to the customer. EV contracts with customers can include various combinations of products and services which are generally capable of being distinct and accounted for as separate performance obligations such as software licenses, implementation services, third party interface licenses or subscriptions, hardware, and maintenance (software updates and technical support services). T-System sells software licenses through recurring fixed-term or subscription fee arrangements and one-time perpetual license arrangements (perpetual licenses), and as software as a service solution (cloud solutions). EV term license and perpetual license contracts include performance obligations that are both satisfied at a point in time and over a period of time as goods and services are transferred. T-System also sells legacy medical documentation templates ("T-Sheets") to emergency care providers to be used for documentation of patient care. T-Sheets includes various optional recurring fixed-term or subscription licenses which are recognized over time after access to the template has been delivered to the customer. EV software as a service contracts typically include one stand ready performance obligation to provide subscription services which are satisfied over time. Judgment is required to determine whether the software license is considered distinct and accounted for separately, or not distinct and accounted for together with the cloud service and recognized over time. Judgment is required to determine the standalone selling price ("SSP") for each distinct performance obligation. In instances where SSP is not directly observable, such as when we do not sell the product or service separately, we determine the SSP using information that may include our pricing strategy and other observable inputs.

T-System typically bills its customers on a monthly or other frequent periodic basis in accordance with the underlying contracts with its customers. We have determined our contracts generally do not include a significant financing component. The primary purpose of our invoicing terms is to provide customers with simplified and predictable ways of purchasing our products and services, not to receive financing from our customers. Revenue is recognized net of any taxes collected from customers.

Other operating revenue consists of income generated by our resort operations which includes sales of real estate, lodging rentals, food and beverage sales, and other income from various resort services offered. Revenue is recognized upon closing of the sale of real estate or once goods and services have been provided and billed to the customer.

Contract Balances

The following table provides information about receivables and deferred revenue:

	December 31, 2018 (In millions)
Trade receivables, billed (1)	$ 40.3
Unbilled accounts receivable, current (1)	9.5
Unbilled accounts receivable, long term (2)	10.6
Deferred revenue (contract liabilities)	31.7

(1) Included in Trade receivables on the Consolidated and Combined Balance Sheets
(2) Included in Other noncurrent assets on the Consolidated and Combined Balance Sheets

Unbilled accounts receivable is recorded primarily for our T-System EV and RevCycle+ revenue related to software, licenses, license implementation (including upfront training) and other performance obligations which are recognized in revenue at a point-in-time upon satisfaction of performance obligations, but collected in cash ratably over the term of the underlying contract.

Deferred revenue is recorded primarily for restaurant gift card sales and certain T-System revenue. The unrecognized portion of such revenue is recorded as Deferred revenue in the Consolidated and Combined Balance Sheets. Revenue of $20.7 million was recognized in the year ended December 31, 2018 that was included in Deferred revenue at the beginning of the period.

There was no impairment related to contract balances.

Transaction Price Allocated to the Remaining Performance Obligations

As of December 31, 2018, $14.1 million of revenue is estimated to be recognized in the future from the Company’s remaining unfulfilled performance obligations, which are primarily comprised of recurring, long-term contracts of one to five years associated with T-System's RevCycle+ and EV contracts. This excludes the amount of anticipated recurring renewals not yet contractually obligated. The Company expects to recognize approximately 55% of our remaining performance obligations over the next 12 months, approximately another 28% over the next 13 to 24 months, and the balance thereafter.

Item 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure*

None.

Item 9A. *Controls and Procedures*

Evaluation of Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures, as such term is defined in Exchange Act Rules 13a-15(e) and 15d-15(e), that are designed to ensure that information required to be disclosed in the Company's reports under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms, and that such information is accumulated and communicated to the Company’s management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosures. We carried out an evaluation, under the supervision and with the participation of our principal executive officer and principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2018. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Based on such evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were not effective as of December 31, 2018 solely because of the material weaknesses in our internal control over financial reporting identified in relation to our accounting for revenue at T-System as further described below.

However, giving full consideration to the deficiencies identified and discussed below, we have concluded that the Consolidated and Combined Financial Statements included in this Annual Report for the year ended December 31, 2018 and in our Quarterly Reports for the periods ended March 31, June 30 and September 30, 2018, present fairly, in all material respects, the Company's financial position, results of operations and cash flows for the periods disclosed in conformity with U.S. generally accepted accounting principles.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f) or 15d-15(f). Because of its inherent limitations, internal control over financial reporting may not prevent or detect all misstatements. Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting using the criteria set forth under the framework in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our evaluation under this framework, our management concluded that our internal control over financial reporting was not effective as of December 31, 2018.

A material weakness, as defined in Rule 12b-2 under the Exchange Act, is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim consolidated financial statements will not be prevented or detected on a timely basis.

On October 16, 2017, the Company completed its acquisition of T-System, a provider of clinical documentation and coding solutions to hospital-based and free-standing emergency departments and urgent care facilities. During the quarter ended March 31, 2018, the Company adopted Accounting Standard Codification, Revenue from Contracts with Customers (“ASC 606”) using a modified retrospective approach and recorded a cumulative-effect adjustment (the "ASC 606 Adjustment") through opening equity. The ASC 606 Adjustment recorded is related solely to the change in accounting for certain revenue streams of T-System. T-System revenue represents approximately 5% of consolidated total revenue of the Company for the year ended December 31, 2018. As discussed in Notes A and S to our Consolidated and Combined Financial Statements included in this Annual Report, during our reporting process for the year and quarter ended December 31, 2018, it was determined that the ASC 606 Adjustment related to T-System revenue previously recorded in the first quarter of fiscal year of 2018, and also included in the Consolidated and Combined Statements of Equity in the second and third quarters of 2018, was misstated.

Management concluded that material weaknesses exist related to the control activities, information and communication, and monitoring activities around the Company’s adoption and application of ASC 606 at T-System and are attributable to the failure of management to (1) design and implement control activities over the accuracy and completeness of the underlying information used to derive the revenue related accounting entries for the adoption and application of ASC 606 at T-System; (2) design and implement control activities, including the related supporting documentation, around the determination of the ongoing revenue accounting at T-System; and (3) monitor related revenue control activities at T-System in order to prevent or detect material misstatements.

The effectiveness of our internal control over financial reporting as of December 31, 2018 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which is included herein.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the quarter ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

We expect to remediate the material weaknesses identified during the year ended December 31, 2019. Remediation efforts will include improving the design and implementation of our controls around the application of ASC 606 at T-System to include more detailed reviews of underlying data used to derive the revenue related accounting entries, enhancing communication between the Company and T-System management to include emphasis of the importance of validation of underlying data used, improving supporting documentation around the determination of the ongoing revenue accounting, including utilizing external resources to assist with accounting and reporting for ASC 606 at T-System, and improving our monitoring of these activities related to the accounting and reporting for revenue at T-System.

Item 9B. ***Other Information***

None.

PART III

Items 10-14.

Within 120 days after the close of our fiscal year, we intend to file with the Securities and Exchange Commission the matters required by these items.

PART IV

Item 15. ***Exhibits, Financial Statement Schedules and Reports on Form 8-K***

(a) (1) *Financial Statements.* The following is a list of the Consolidated and Combined Financial Statements of Cannae Holdings, Inc. and its subsidiaries included in Item 8 of Part II:

All other schedules are omitted because they are not applicable or not required, or because the required information is included in the Consolidated and Combined Financial Statements or notes thereto.

(a) (2) The following exhibits are incorporated by reference or are set forth on pages to this Form 10-K:

Exhibit Number	Description
2.1	Reorganization Agreement, dated as of November 17, 2017, between Cannae Holdings, Inc. and Fidelity National Financial, Inc. (filed as Exhibit 2.1 to the Company's Current Report on Form 8-K, filed November 20, 2017)
3.1	Restated Certificate of Incorporation of Cannae Holdings, Inc. (filed as Exhibit 3.1 to the Company's Current Report on Form 8-K, filed November 20, 2017)
3.2	Restated Bylaws of Cannae Holdings, Inc. (filed as Exhibit 3.2 to the Company's Current Report on Form 8-K, filed November 20, 2017)
10.1	Revolver Note, dated as of November 17, 2017, by and between Cannae Holdings, Inc. and Fidelity National Financial, Inc. (filed as Exhibit 10.1 to the Company's Current Report on Form 8-K, filed November 20, 2017)
10.2	Tax Matters Agreement, dated as of November 17, 2017, by and between Cannae Holdings, Inc. and Fidelity National Financial, Inc. (filed as Exhibit 10.2 to the Company's Current Report on Form 8-K, filed November 20, 2017)
10.3	Corporate Services Agreement, dated as of November 17, 2017, by and between Cannae Holdings, Inc. and Fidelity National Financial, Inc. (filed as Exhibit 10.3 to the Company's Current Report on Form 8-K, filed November 20, 2017)
10.4	Voting Agreement, dated as of November 17, 2017, by and between Cannae Holdings, Inc. and Fidelity National Financial, Inc. (filed as Exhibit 10.4 to the Company's Current Report on Form 8-K, filed November 20, 2017)
10.5	Registration Rights Agreement, dated as of November 17, 2017, by and between Cannae Holdings, Inc. and Chicago Title Insurance Company. (filed as Exhibit 10.5 to the Company's Current Report on Form 8-K, filed November 20, 2017)
10.6	Registration Rights Agreement, dated as of November 17, 2017, by and between Cannae Holdings, Inc. and Fidelity National Title Insurance Company (filed as Exhibit 10.6 to the Company's Current Report on Form 8-K, filed November 20, 2017)
10.7	Registration Rights Agreement, dated as of November 17, 2017, by and between Cannae Holdings, Inc. and Commonwealth Land Title Insurance Company (filed as Exhibit 10.7 to the Company's Current Report on Form 8-K, filed November 20, 2017)
10.8	First Amendment to Credit Agreement, dated as of February 24, 2017, by and among ABRH, LLC, a Delaware limited liability company, and Fidelity Holdings, LLC, as the borrowers, and Wells Fargo Bank, N.A. as administrative agent (incorporated by reference to Exhibit 10.1 to FNF's Current Report on Form 8-K (File No. 001-32630), filed with the SEC on March 2, 2017).
10.9	Master Assignment and Assumption, dated as of March 13, 2018, by and between Cannae Holdings, LLC as the assignee, Wells Fargo Bank, N.A. as assignor, and other assignors party thereto (incorporated by reference to Exhibit 10.9 to the Company's Annual Report on Form 10-K for the year ended December 31, 2017, filed March 26, 2018)
10.10	Agency Succession Agreement, dated as of March 13, 2018, by and between Cannae Holdings, LLC and Wells Fargo Bank, N.A. (incorporated by reference to Exhibit 10.10 to the Company's Annual Report on Form 10-K for the year ended December 31, 2017, filed March 26, 2018).
10.11	Form of Notice of Restricted Stock Grant and Restricted Stock Award Agreement under Cannae Holdings, Inc. 2017 Omnibus Incentive Plan (time-based vesting) for November 2017 Awards (incorporated by reference to Exhibit 10.11 to the Company's Annual Report on Form 10-K for the year ended December 31, 2017, filed March 26, 2018). (1)
10.12	Second Amendment to Credit Agreement, dated as of March 15, 2018, by and among ABRH, LLC, a Delaware limited liability company, and Fidelity Holdings, LLC, as the borrowers, and Cannae Holdings, LLC as administrative agent (incorporated by reference to Exhibit 10.12 to the Company's Annual Report on Form 10-K for the year ended December 31, 2017, filed March 26, 2018).
10.13	Voting Agreement dated April 30, 2018 by and among Ceridian HCM Holding Inc., Cannae Holdings, LLC and certain affiliates of Thomas H. Lee Partners L.P. (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q for the period ended June 30, 2018, filed August 13, 2018).
10.14	Margin Loan Agreement, dated as of November 7, 2018, among Cannae Funding, LLC, as Borrower, the lenders party thereto, Credit Suisse AG, Cayman Islands Branch, as administrative agent and Credit Suisse Securities (USA) LLC, as calculation agent. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed November 8, 2018).
10.15	Guarantee Agreement, dated as of November 7, 2018, of Cannae Holdings, Inc. (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K, filed November 8, 2018).
10.16	Form of Notice of Restricted Stock Grant and Restricted Stock Award Agreement under Cannae Holdings, Inc. 2017 Omnibus Incentive Plan (time-based vesting) for November 2018 Awards (1)

Exhibit Number	Description
21.1	List of Subsidiaries
23.1	Consent of Deloitte & Touche LLP.
23.2	Consent of KPMG LLP with respect to reports related to Ceridian HCM Holding, Inc.
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification by Chief Executive Officer of Periodic Financial Reports pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350
32.2	Certification by Chief Financial Officer of Periodic Financial Reports pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350.
99.1	Audited Financial Statements of Ceridian HCM Holding Inc. as of and for the year ended December 31, 2018
101	The following materials from Cannae Holdings, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2018, formatted in Extensible Business Reporting Language (XBRL): (i) the Consolidated and Combined Balance Sheets, (ii) the Consolidated and Combined Statements of Operations, (iii) the Consolidated and Combined Statements of Comprehensive Earnings (Loss), (iv) the Consolidated and Combined Statements of Stockholders' Equity, (v) the Consolidated and Combined Statements of Cash Flows, and (vi) the Notes to Consolidated and Combined Financial Statements.

(1) A management or compensatory plan or arrangement required to be filed as an exhibit to this report pursuant to Item 15(c) of Form 10-K

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.

Cannae Holdings, Inc.

By: */s/ Brent B. Bickett*

Brent B. Bickett

President (Principal Executive Officer)

Date: March 18, 2019

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 and on the dates indicated.

Signature	Title	Date
/s/ Brent B. Bickett Brent B. Bickett	President (Principal Executive Officer)	March 18, 2019
/s/ Richard L. Cox Richard L. Cox	Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	March 18, 2019
/s/ William P. Foley, II William P. Foley, II	Director	March 18, 2019
/s/ Hugh R. Harris Hugh R. Harris	Director	March 18, 2019
/s/ C. Malcolm Holland C. Malcolm Holland	Director	March 18, 2019
/s/ Frank R. Martire Frank R. Martire	Director	March 18, 2019
/s/ Richard N. Massey Richard N. Massey	Director	March 18, 2019
/s/ Erika Meinhardt Erika Meinhardt	Director	March 18, 2019
/s/ James B. Stallings, Jr. James B. Stallings, Jr.	Director	March 18, 2019
/s/ Frank P. Willey Frank P. Willey	Director	March 18, 2019

EXHIBIT 10.16

Cannae Holdings, Inc.
2017 Omnibus Incentive Plan

Notice of Restricted Stock Grant (Time-Based)

You (the “Grantee”) have been granted the following award of restricted Shares of Cannae Holdings, Inc. Common Stock (the “Restricted Stock”), par value $0.0001 per share (the “Shares”), by Cannae Holdings, Inc. (the “Company”), pursuant to the Cannae Holdings, Inc. 2017 Omnibus Incentive Plan (the “Plan”) and the terms set forth in the attached Restricted Stock Award Agreement:

Name of Grantee:	
Number of Shares of Restricted Stock Granted:	
Effective Date of Grant:	November 15, 2018
Vesting and Period of Restriction:	Subject to the terms of the Plan and the Restricted Stock Award Agreement attached hereto, the Period of Restriction shall lapse, and the Shares shall vest and become free of the forfeiture provisions contained in the Restricted Stock Award Agreement, with respect to one-third (1/3) of the shares on each of the first three anniversaries of the Effective Date of Grant, as more specifically described on Exhibit A hereto.

By your electronic acceptance/signature below, you agree and acknowledge that the Restricted Stock is granted under and governed by the terms and conditions of the Plan and the attached Restricted Stock Award Agreement, which are incorporated herein by reference, and that you have been provided with a copy of the Plan and Restricted Stock Award Agreement. If you have not accepted or declined this Restricted Stock Grant, including the terms of this Notice and Restricted Stock Award Agreement, prior to the first anniversary of the Effective Date of Grant, you are hereby advised and acknowledge that you shall be deemed to have accepted the terms of this Notice and Restricted Stock Award Agreement on such first anniversary of the Effective Date of Grant.

<u>Electronic Signature</u>   <u>Acceptance Date</u>
Electronic Signature   Acceptance Date

Cannae Holdings, Inc.
2017 Omnibus Incentive Plan

Restricted Stock Award Agreement

Section 1. GRANT OF RESTRICTED STOCK

(a) **Restricted Stock**. On the terms and conditions set forth in the Notice of Restricted Stock Grant and this Restricted Stock Award Agreement (the "Agreement"), the Company grants to the Grantee on the Effective Date of Grant the Shares of Restricted Stock (the "Restricted Stock") set forth in the Notice of Restricted Stock Grant.

(b) **Plan and Defined Terms**. The Restricted Stock is granted pursuant to the Plan. All terms, provisions, and conditions applicable to the Restricted Stock set forth in the Plan and not set forth herein are hereby incorporated by reference herein. To the extent any provision hereof is inconsistent with a provision of the Plan, the provisions of the Plan will govern. All capitalized terms that are used in the Notice of Restricted Stock Grant or this Agreement and not otherwise defined therein or herein shall have the meanings ascribed to them in the Plan.

Section 2. FORFEITURE AND TRANSFER RESTRICTIONS

(a) **Forfeiture**. Except as otherwise provided in Grantee's employment, director services or similar agreement in effect at the time of the employment termination:

(i) If the Grantee's employment or service as a Director or Consultant is terminated for any reason other than death, or Disability (as defined below), the Grantee shall, for no consideration, forfeit to the Company the Shares of Restricted Stock to the extent such Shares are subject to a Period of Restriction at the time of such termination.

(ii) If the Grantee's employment or service as a Director or Consultant is terminated due to the Grantee's death or Disability, a portion of the Shares which on the date of termination of employment remain subject to a Period of Restriction (as defined in Exhibit A) shall vest and become free of the forfeiture and transfer restrictions contained in the Agreement (except as otherwise provided in Section 2(b) of this Agreement). The portion which shall vest shall be determined by the following formula (rounded to the nearest whole Share):

(A x B) - C, where

A = the total number of Shares granted under this Agreement,

B = the number of completed months to the date of termination of employment since the Effective Date of Grant divided by 36, and

C = the number of Shares granted under this Agreement which vested on or prior to the date of termination of employment.

All Shares that are subject to a Period of Restriction on the date of termination of employment or service as a Director or Consultant and which will not be vested pursuant to Section 2(a)(ii) above, shall be forfeited to the Company, for no consideration.

(iii) The term “Disability” shall have the meaning ascribed to such term in the Grantee’s employment, director services or similar agreement with the Company. If the Grantee’s employment, director services or similar agreement does not define the term “Disability,” or if the Grantee has not entered into an employment, director services or similar agreement with the Company or any Subsidiary, the term “Disability” shall mean the Grantee’s entitlement to long-term disability benefits pursuant to the long-term disability plan maintained by the Company or in which the Company’s employees participate.

(b) **Transfer Restrictions**. During the Period of Restriction, the Restricted Stock may not be sold, assigned, pledged, exchanged, hypothecated or otherwise transferred, encumbered or disposed of, to the extent such Shares are subject to a Period of Restriction.

(c) **Holding Period**. If and when (i) the Grantee is an Officer (as defined in Rule 16a-1(f) of the Exchange Act), and (ii) Grantee does not hold Shares with a value sufficient to satisfy the applicable stock ownership guidelines of the Company in place at that time, then Grantee must retain 50% of the Shares acquired by Grantee as a result of the lapse of a Period of Restriction (excluding from the calculation any Shares withheld for purposes of satisfying Grantee’s tax obligations in connection with such lapse of a Period of Restriction) until such time as the value of the Shares remaining in Grantee’s possession following any sale, assignment, pledge, exchange, gift or other transfer of the Shares shall be sufficient to meet any applicable stock ownership guidelines of the Company in place at that time. For the avoidance of doubt, at any time when Grantee holds, in the aggregate, Shares with a value sufficient to satisfy the applicable stock ownership guidelines of the Company in place at that time, Grantee may enter into a transaction with respect to any Shares acquired by Grantee as a result of the lapse of a Period of Restriction without regard to the holding period requirement contained in this Section 2(b) so long as Grantee shall continue to satisfy such stock ownership guidelines following such transaction.

(d) **Lapse of Restrictions**. The Period of Restriction shall lapse as to the Restricted Stock in accordance with the Notice of Restricted Stock Grant and the terms of this Agreement. Subject to the terms of the Plan and Section 6(a) hereof, upon lapse of the Period of Restriction, the Grantee shall own the Shares that are subject to this Agreement free of all restrictions other than the holding period described in Section 2(c) above. Upon the occurrence of a Change in Control, unless otherwise specifically prohibited under applicable laws, or by the rules and regulations of any governing governmental agencies or national securities exchanges, any Period of Restriction or other restriction imposed on the Restricted Stock that has not previously lapsed, including the holding period described in Section 2(c) above, shall lapse.

Section 3. STOCK CERTIFICATES

As soon as practicable following the grant of Restricted Stock, the Shares of Restricted Stock shall be registered in the Grantee's name in certificate or book-entry form. If a certificate is issued, it shall bear an appropriate legend referring to the restrictions and it shall be held by the Company, or its agent, on behalf of the Grantee until the Period of Restriction has lapsed. If the Shares are registered in book-entry form, the restrictions shall be placed on the book-entry registration. The Grantee may be required to execute and return to the Company a blank stock power for each Restricted Stock certificate (or instruction letter, with respect to Shares registered in book-entry form), which will permit transfer to the Company, without further action, of all or any portion of the Restricted Stock that is forfeited in accordance with this Agreement.

Section 4. SHAREHOLDER RIGHTS

Except for the transfer and dividend restrictions, and subject to such other restrictions, if any, as determined by the Committee, the Grantee shall have all other rights of a holder of Shares, including the right to vote (or to execute proxies for voting) such Shares. Unless otherwise determined by the Committee, if all or part of a dividend in respect of the Restricted Stock is paid in Shares or any other security issued by the Company, such Shares or other securities shall be held by the Company subject to the same restrictions as the Restricted Stock in respect of which the dividend was paid.

Section 5. DIVIDENDS

(a) Any dividends paid with respect to Shares which remain subject to a Period of Restriction shall not be paid to the Grantee but shall be held by the Company.

(b) Such held dividends shall be subject to the same Period of Restriction as the Shares to which they relate.

(c) Any dividends held pursuant to this Section 5 which are attributable to Shares which vest pursuant to this Agreement shall be paid to the Grantee within 30 days of the applicable vesting date.

(d) Dividends attributable to Shares forfeited pursuant to Section 2 of this Agreement shall be forfeited to the Company on the date such Shares are forfeited.

Section 6. MISCELLANEOUS PROVISIONS

(a) **Tax Withholding**. Pursuant to Article 20 of the Plan, the Committee shall have the power and right to deduct or withhold, or require the Grantee to remit to the Company, an amount sufficient to satisfy any federal, state and local taxes (including the Grantee's FICA obligations) required by law to be withheld with respect to this Award. The Committee may condition the delivery of Shares upon the Grantee's satisfaction of such withholding obligations. The Grantee may elect to satisfy all or part of such withholding requirement by tendering previously-owned Shares or by having the Company withhold Shares having a Fair Market Value equal to the minimum statutory withholding (based on minimum statutory withholding rates for federal, state and local tax purposes, as applicable, including the Grantee's FICA taxes) that could be imposed on the transaction, and, to the extent the Committee so permits, amounts in excess of the minimum statutory withholding to the extent it would not result in additional accounting expense. Such election shall be irrevocable, made in writing, signed by the Grantee, and shall be subject to any restrictions or limitations that the Committee, in its sole discretion, deems appropriate.

(b) **Ratification of Actions**. By accepting this Agreement, the Grantee and each person claiming under or through the Grantee shall be conclusively deemed to have indicated the Grantee's acceptance and ratification of, and consent to, any action taken under the Plan or this Agreement and Notice of Restricted Stock Grant by the Company, the Board or the Committee.

(c) **Notice**. Any notice required by the terms of this Agreement shall be given in writing and shall be deemed effective upon personal delivery or upon deposit with the United States Postal Service, by registered or certified mail, with postage and fees prepaid. Notice shall be addressed to the Company at its principal executive office and to the Grantee at the address that he or she most recently provided in writing to the Company.

(d) **Choice of Law**. This Agreement and the Notice of Restricted Stock Grant shall be governed by, and construed in accordance with, the laws of the State of Delaware, without regard to any conflicts of law or choice of law rule or principle that might otherwise cause the Plan, this Agreement or the Notice of Restricted Stock Grant to be governed by or construed in accordance with the substantive law of another jurisdiction.

(e) **Arbitration**. Subject to, and in accordance with the provisions of Article 3 of the Plan, any dispute or claim arising out of or relating to the Plan, this Agreement or the Notice of Restricted Stock Grant shall be settled by binding arbitration before a single arbitrator in the State of Delaware and in accordance with the Commercial Arbitration Rules of the American Arbitration Association. The arbitrator shall decide any issues submitted in accordance with the provisions and commercial purposes of the Plan, this Agreement and the Notice of Restricted Stock Grant, provided that all substantive questions of law shall be determined in accordance with the state and federal laws applicable in the State of Delaware, without regard to internal principles relating to conflict of laws.

(f) **Modification or Amendment**. This Agreement may only be modified or amended by written agreement executed by the parties hereto; provided, however, that the adjustments permitted pursuant to Section 4.3 of the Plan may be made without such written agreement.

(g) **Severability**. In the event any provision of this Agreement shall be held illegal or invalid for any reason, the illegality or invalidity shall not affect the remaining provisions of this Agreement, and this Agreement shall be construed and enforced as if such illegal or invalid provision had not been included.

(h) **References to Plan**. All references to the Plan shall be deemed references to the Plan as may be amended from time to time.

(i) **Section 409A Compliance**. To the extent applicable, it is intended that the Plan and this Agreement comply with the requirements of Code Section 409A and any related regulations or other guidance promulgated with respect to such Section by the U.S. Department of the Treasury or the Internal Revenue Service and the Plan and the Award Agreement shall be interpreted accordingly.

EXHIBIT A
Vesting and Restrictions

This grant is subject to a Time-Based Restriction, as described below (the "Period of Restriction").

Time-Based Restrictions

Anniversary Date	% of Restricted Stock to Vest
November 15, 2019	**33 1/3%**
November 15, 2020	**33 1/3%**
November 15, 2021	**33 1/3%**

EXHIBIT 21.1

CANNAE HOLDINGS, INC.
List of Subsidiaries December 31, 2018
Significant Subsidiaries

COMPANY	INCORPORATION
Cannae Holdings, LLC	Delaware
Ceridian HCM Holding Inc.	Delaware
Fidelity Newport Holdings, LLC	Delaware
American Blue Ribbon Holdings, LLC	Delaware
Legendary Baking of California, LLC	Delaware
O' Charley's LLC	Tennessee
99 Restaurants Holdings, LLC	Delaware
T-System Holding, LLC	Delaware

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-221694 on Form S-8 of Cannae Holdings, Inc. (the “Company”) our reports dated March 18, 2019 relating to the consolidated and combined financial statements of the Company (which report expresses an unqualified opinion and includes an explanatory paragraph related to a change in accounting principle for revenue due to the adoption of FASB ASC 606, *Revenue from Contracts with Customers*, on January 1, 2018 using a modified retrospective method) and the effectiveness of the Company’s internal control over financial reporting (which report expresses an adverse opinion on the effectiveness of the Company's internal control over financial reporting because of material weaknesses) appearing in the Annual Report on Form 10-K of the Company for the year ended December 31, 2018.

/s/ Deloitte & Touche LLP

Las Vegas, Nevada
March 18, 2019

Exhibit 23.2

Consent of Independent Registered Public Accounting Firm

The Stockholders and Board of Directors
Ceridian HCM Holding Inc.:

We consent to the incorporation by reference in the registration statement (No. 333-221694) on Form S-8 of Cannae Holdings, Inc. of our report dated February 28, 2019, with respect to the consolidated balance sheets of Ceridian HCM Holding Inc. and subsidiaries as of December 31, 2018 and 2017, and the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes (collectively, the "consolidated financial statements"), which report appears in the December 31, 2018 annual report on Form 10-K of Cannae Holdings, Inc.

/s/ KPMG LLP

Minneapolis, Minnesota
March 18, 2019

Exhibit 31.1

CERTIFICATIONS

I, Brent B. Bickett, certify that:

1. I have reviewed this annual report on Form 10-K of Cannae Holdings, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: March 18, 2019

By: */s/ Brent B. Bickett*

Brent B. Bickett
President

Exhibit 31.2

CERTIFICATIONS

I, Richard L. Cox, certify that:

1. I have reviewed this annual report on Form 10-K of Cannae Holdings, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: March 18, 2019

By: */s/ Richard L. Cox*
Richard L. Cox
Chief Financial Officer

Exhibit 32.1

CERTIFICATION OF PERIODIC FINANCIAL REPORTS PURSUANT TO 18 U.S.C. §1350

The undersigned hereby certifies that he is the duly appointed and acting Chief Executive Officer of Cannae Holdings, Inc., a Delaware corporation (the "Company"), and hereby further certifies as follows.

1. The periodic report containing financial statements to which this certificate is an exhibit fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934.

2. The information contained in the periodic report to which this certificate is an exhibit fairly presents, in all material respects, the financial condition and results of operations of the Company.

In witness whereof, the undersigned has executed and delivered this certificate as of the date set forth opposite his signature below.

Date: March 18, 2019

By: */s/ Brent B. Bickett*
Brent B. Bickett
President

Exhibit 32.2

CERTIFICATION OF PERIODIC FINANCIAL REPORTS PURSUANT TO 18 U.S.C. §1350

The undersigned hereby certifies that he is the duly appointed and acting Chief Financial Officer of Cannae Holdings, Inc., a Delaware corporation (the "Company"), and hereby further certifies as follows.

1. The periodic report containing financial statements to which this certificate is an exhibit fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934.

2. The information contained in the periodic report to which this certificate is an exhibit fairly presents, in all material respects, the financial condition and results of operations of the Company.

In witness whereof, the undersigned has executed and delivered this certificate as of the date set forth opposite his signature below.

Date: March 18, 2019

By: */s/ Richard L. Cox*
Richard L. Cox
Chief Financial Officer

INDEX TO FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

The Stockholders and Board of Directors
Ceridian HCM Holding Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Ceridian HCM Holding Inc. and its subsidiaries (the Company) as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income (loss), stockholders' equity, and cash flows for each of the years in the three year period ended December 31, 2018, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three year period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 consolidated 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 consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditor since 1958.

Minneapolis, Minnesota

February 28, 2019

Ceridian HCM Holding Inc.
Consolidated Balance Sheets
(Dollars in millions, except share data)

	December 31,	
	2018	**2017**
ASSETS		
Current assets:		
Cash and equivalents	$ 217.8	$ 94.2
Trade and other receivables, net	69.9	66.6
Prepaid expenses	40.3	36.4
Assets of discontinued operations	—	156.2
Other current assets	2.0	5.3
Total current assets before customer trust funds	330.0	358.7
Customer trust funds	2,603.5	4,099.7
Total current assets	2,933.5	4,458.4
Property, plant, and equipment, net	104.4	102.0
Goodwill	1,927.4	1,961.0
Other intangible assets, net	187.5	206.5
Other assets	1.6	2.0
Total assets	$ 5,154.4	$ 6,729.9
LIABILITIES AND EQUITY		
Current liabilities:		
Current portion of long-term debt	$ 6.8	$ —
Accounts payable	41.5	44.4
Accrued interest	0.1	15.9
Deferred revenue	17.2	14.0
Employee compensation and benefits	54.5	68.8
Liabilities of discontinued operations	0.2	19.6
Other accrued expenses	23.6	15.0
Total current liabilities before customer trust funds obligations	143.9	177.7
Customer trust funds obligations	2,619.7	4,105.5
Total current liabilities	2,763.6	4,283.2
Long-term debt, less current portion	663.5	1,119.8
Employee benefit plans	153.3	152.4
Other liabilities	42.0	45.5
Total liabilities	3,622.4	5,600.9
Commitments and contingencies (Note 15)		
Stockholders' equity:		
Senior preferred stock, $0.01 par, 70,000,000 shares authorized, 16,802,144 shares issued and outstanding as of December 31, 2017	—	184.8
Junior preferred stock, $0.01 par, 70,000,000 shares authorized, 58,244,308 shares issued and outstanding as of December 31, 2017	—	0.6
Common stock, $0.01 par, 500,000,000 shares authorized, 139,453,710 shares issued and outstanding as of December 31, 2018, and 150,000,000 shares authorized, 65,285,962 shares issued and outstanding as of December 31, 2017	1.4	0.7
Additional paid in capital	2,325.6	1,565.4
Accumulated deficit	(419.3)	(348.2)
Accumulated other comprehensive loss	(375.7)	(312.1)
Total stockholders' equity	1,532.0	1,091.2
Noncontrolling interest	—	37.8
Total equity	1,532.0	1,129.0
Total liabilities and equity	$ 5,154.4	$ 6,729.9

See accompanying notes to consolidated financial statements.

Ceridian HCM Holding Inc.
Consolidated Statements of Operations
(Dollars in millions, except share and per share data)

	Year Ended December 31,		
	2018	2017	2016
Revenue:			
Recurring services	$ 652.5	$ 598.5	$ 558.5
Professional services and other	93.9	72.3	64.9
Total revenue	746.4	670.8	623.4
Cost of revenue:			
Recurring services	200.3	196.8	214.4
Professional services and other	132.2	135.8	115.6
Product development and management	59.0	43.6	43.3
Depreciation and amortization	34.3	31.3	23.1
Total cost of revenue	425.8	407.5	396.4
Gross profit	320.6	263.3	227.0
Costs and expenses:			
Selling, general and administrative	270.7	223.0	225.3
Other (income) expense, net	(2.9)	7.3	12.9
Operating profit (loss)	52.8	33.0	(11.2)
Interest expense, net	83.2	87.1	87.4
Loss from continuing operations before income taxes	(30.4)	(54.1)	(98.6)
Income tax expense (benefit)	7.7	(49.6)	6.7
Loss from continuing operations	(38.1)	(4.5)	(105.3)
(Loss) income from discontinued operations	(25.8)	(6.0)	12.5
Net loss	(63.9)	(10.5)	(92.8)
Net (loss) income attributable to noncontrolling interest	(0.5)	(1.3)	0.1
Net loss attributable to Ceridian	$ (63.4)	$ (9.2)	$ (92.9)
Net loss per share attributable to Ceridian-basic and diluted (Note 19)	$ (0.62)	$ (0.46)	$ (1.65)
Weighted-average shares used to compute net loss per share attributable to Ceridian-basic and diluted (Note 19)	114,049,682	65,204,960	64,988,338

See accompanying notes to consolidated financial statements.

Ceridian HCM Holding Inc.
Consolidated Statements of Comprehensive Income (Loss)
(Dollars in millions)

	Year Ended December 31,		
	2018	2017	2016
Net loss	$ (63.9)	$ (10.5)	$ (92.8)
Items of other comprehensive income (loss) before income taxes:			
Change in foreign currency translation adjustment	(47.4)	39.7	24.4
Change in unrealized gain from invested customer trust funds	(10.5)	(17.3)	(10.2)
Change in pension liability adjustment (1)	(7.6)	13.8	13.6
Other comprehensive (loss) income before income taxes	(65.5)	36.2	27.8
Income tax (benefit) expense, net	(1.2)	(3.6)	0.6
Other comprehensive (loss) income after income taxes	(64.3)	39.8	27.2
Comprehensive (loss) income	(128.2)	29.3	(65.6)
Comprehensive loss attributable to noncontrolling interest	(0.5)	(0.9)	(0.5)
Comprehensive (loss) income attributable to the Ceridian	$ (127.7)	$ 30.2	$ (65.1)

(1) The amount of the pension liability adjustment recognized in the Consolidated Statements of Operations within selling, general, and administrative expense was $11.7, $10.1 and $9.9 during the years ended December 31, 2018, 2017, and 2016, respectively.

See accompanying notes to consolidated financial statements.

Ceridian HCM Holding Inc.
Consolidated Statements of Stockholders' Equity
(Dollars in millions, except share data)

	Senior Preferred Stock		Junior Preferred Stock		Common Stock								
	Shares	$	Shares	$	Shares	$	Additional Paid In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Receivable from Stockholder	Total Stockholders Equity	Non-controlling Interest	Total Equity
Balance as of December 31, 2015	—	$ —	58,244,308	$0.6	64,924,845	$0.7	$ 1,531.5	$ (211.5)	$ (379.2)	$ —	$ 942.1	$ —	$ 942.1
Net (loss) income	—	—	—	—	—	—	—	(92.9)	—	—	(92.9)	0.1	(92.8)
Issuance of Common Stock upon vesting of restricted stock units	—	—	—	—	76,192	—	—	—	—	—	—	—	—
Issuance of Senior Preferred Stock	16,802,144	150.2	—	—	—	—	—	—	—	(75.2)	75.0	—	75.0
Addition of noncontrolling interest	—	—	—	—	—	—	—	—	—	—	—	39.2	39.2
Sale of the UK Business, net of tax $2.5	—	—	—	—	—	—	—	—	25.9	—	25.9	—	25.9
Senior preferred dividends declared	—	14.1	—	—	—	—	—	(14.1)	—	—	—	—	—
Share-based compensation	—	—	—	—	—	—	15.3	—	—	—	15.3	—	15.3
Foreign currency translation	—	—	—	—	—	—	—	—	8.0	—	8.0	(0.6)	7.4
Change in unrealized loss, net of tax of ($2.0)	—	—	—	—	—	—	—	—	(8.2)	—	(8.2)	—	(8.2)
Change in minimum pension & postretirement liability, net of tax of $0.1	—	—	—	—	—	—	—	—	2.0	—	2.0	—	2.0
Balance as of December 31, 2016	16,802,144	$164.3	58,244,308	$0.6	65,001,037	$0.7	$ 1,546.8	$ (318.5)	$ (351.5)	$ (75.2)	$ 967.2	$ 38.7	$1,005.9
Net loss	—	—	—	—	—	—	—	(9.2)	—	—	(9.2)	(1.3)	(10.5)
Issuance of common stock	—	—	—	—	183,425	—	3.2	—	—	—	3.2	—	3.2
Issuance of common stock upon exercise of options	—	—	—	—	653,214	—	—	—	—	—	—	—	—
Issuance of common stock upon vesting of restricted stock units	—	—	—	—	76,190	—	—	—	—	—	—	—	—
Share repurchase	—	—	—	—	(627,904)	—	(1.8)	—	—	—	(1.8)	—	(1.8)
Payment for Issuance of Senior Preferred Stock	—	—	—	—	—	—	—	—	—	75.2	75.2	—	75.2
Senior preferred dividends declared	—	20.5	—	—	—	—	—	(20.5)	—	—	—	—	—
Share-based compensation	—	—	—	—	—	—	17.2	—	—	—	17.2	—	17.2
Foreign currency translation	—	—	—	—	—	—	—	—	39.3	—	39.3	0.4	39.7
Change in unrealized loss, net of tax ($3.6)	—	—	—	—	—	—	—	—	(13.7)	—	(13.7)	—	(13.7)
Change in minimum pension & postretirement liability, net of tax of $0.0	—	—	—	—	—	—	—	—	13.8	—	13.8	—	13.8
Balance as of December 31, 2017	16,802,144	$184.8	58,244,308	$0.6	65,285,962	$0.7	$ 1,565.4	$ (348.2)	$ (312.1)	$ —	$ 1,091.2	$ 37.8	$1,129.0
Net loss	—	—	—	—	—	—	—	(63.4)	—	—	(63.4)	(0.5)	(63.9)
Issuance of common stock	—	—	—	—	28,695,455	0.3	594.7	—	—	—	595.0	—	595.0
Issuance of common stock upon exercise of options	—	—	—	—	3,119,653	—	45.0	—	—	—	45.0	—	45.0
Issuance of common stock upon vesting of	—	—	—	—	105,990	—	—	—	—	—	—	—	—

restricted stock units													
Senior preferred dividends declared	—	7.7	—	—	—	—	—	(7.7)	—	—	—	—	—
Conversion of senior and junior preferred shares	(16,802,144)	(192.5)	(58,244,308)	(0.6)	42,246,650	0.4	192.7	—	—	—	—	—	—
LifeWorks Disposition	—	—	—	—	—	—	(95.7)	—	0.7	—	(95.0)	(37.3)	(132.3)
Share-based compensation	—	—	—	—	—	—	23.5	—	—	—	23.5	—	23.5
Foreign currency translation	—	—	—	—	—	—	—	—	(47.4)	—	(47.4)	—	(47.4)
Change in unrealized loss, net of tax ($1.2)	—	—	—	—	—	—	—	—	(9.3)	—	(9.3)	—	(9.3)
Change in minimum pension & postretirement liability, net of tax of $0.0	—	—	—	—	—	—	—	—	(7.6)	—	(7.6)	—	(7.6)
Balance as of December 31, 2018	—	$ —	—	$ —	139,453,710	$1.4	$ 2,325.6	$ (419.3)	$ (375.7)	$ —	$ 1,532.0	$ —	$1,532.0

See accompanying notes to consolidated financial statements**.**

Ceridian HCM Holding Inc.
Consolidated Statements of Cash Flows
(Dollars in millions)

	Year Ended December 31,		
	2018	2017	2016
Net loss	$ (63.9)	$ (10.5)	$ (92.8)
Loss (income) from discontinued operations	25.8	6.0	(12.5)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Deferred income tax benefit	(16.8)	(62.3)	(8.3)
Depreciation and amortization	56.6	53.8	53.2
Asset impairment	—	—	10.4
Amortization of debt issuance costs and debt discount	2.1	3.7	3.5
Loss on debt extinguishment	25.7	—	—
Net periodic pension and postretirement cost	2.7	1.5	3.0
Share-based compensation	23.2	16.1	12.5
Environmental reserve	—	—	5.9
Other	0.3	(0.5)	1.2
Changes in operating assets and liabilities excluding effects of acquisitions and divestitures:			
Trade and other receivables	(5.3)	5.3	(5.8)
Prepaid expenses and other current assets	(4.6)	(6.9)	1.1
Accounts payable and other accrued expenses	(6.4)	0.1	(4.4)
Deferred revenue	3.5	2.6	(1.8)
Employee compensation and benefits	(22.1)	(26.1)	(49.1)
Accrued interest	(15.7)	(4.8)	(0.2)
Accrued taxes	8.4	(6.7)	14.7
Other assets and liabilities	(2.8)	(0.7)	(3.8)
Net cash provided by (used in) operating activities-continuing operations	10.7	(29.4)	(73.2)
Net cash used in operating activities-discontinued operations	(1.2)	(10.4)	(2.3)
Net cash provided by (used in) operating activities	9.5	(39.8)	(75.5)
Cash Flows from Investing Activities			
Purchase of customer trust funds marketable securities	(855.2)	(598.5)	(699.7)
Proceeds from sale and maturity of customer trust funds marketable securities	844.3	610.2	677.6
Net change in restricted cash and other restricted assets held to satisfy customer trust funds obligations	1,430.3	(367.8)	677.8
Expenditures for property, plant, and equipment	(8.0)	(17.5)	(7.4)
Expenditures for software and technology	(32.2)	(33.1)	(25.5)
Net proceeds from divestitures	—	(0.5)	101.6
Net cash provided by (used in) investing activities-continuing operations	1,379.2	(407.2)	724.4
Net cash (used in) provided by investing activities-discontinued operations	—	(0.2)	38.6
Net cash provided by (used in) investing activities	1,379.2	(407.4)	763.0
Cash Flows from Financing Activities			
(Decrease) increase in customer trust funds obligations, net	(1,419.4)	356.1	(655.7)
Net proceeds from issuance of stock	595.0	78.4	75.0
Proceeds from issuance of common stock upon exercise of stock options	45.8	—	—
Repurchase of stock	—	(1.8)	—
Proceeds from debt issuance	680.0	—	—
Repayment of long-term debt obligations	(1,134.0)	(25.9)	(11.8)
Payment of debt refinancing costs	(23.3)	—	—
Net cash (used in) provided by financing activities-continuing operations	(1,255.9)	406.8	(592.5)
Net cash used in financing activities-discontinued operations	—	—	(38.2)
Net cash (used in) provided by financing activities	(1,255.9)	406.8	(630.7)
Effect of Exchange Rate Changes on Cash	(9.7)	8.6	1.3
Net increase (decrease) in cash and equivalents	123.1	(31.8)	58.1
Elimination of cash from discontinued operations	0.5	5.2	(0.5)
Cash and equivalents at beginning of year	94.2	120.8	63.2
Cash and equivalents at end of year	$ 217.8	$ 94.2	$ 120.8
Supplemental Cash Flow Information:			
Cash paid for interest	$ 74.5	$ 89.7	$ 84.9
Cash paid for income taxes	$ 21.1	$ 21.3	$ 14.8
Cash received from income tax refunds	$ 4.4	$ 1.9	$ 0.2

See accompanying notes to consolidated financial statements.

Ceridian HCM Holding Inc.
Notes to Consolidated Financial Statements
(Dollars in millions, except share and per share data)

1. Organization

Ceridian HCM Holding Inc. and its subsidiaries (also referred to in this report as "Ceridian," "we," "our," and "us") offer a broad range of services and software designed to help employers more effectively manage employment processes, such as payroll, payroll-related tax filing, human resource information systems, employee self-service, time and labor management, and recruitment and applicant screening. Our technology-based services are typically provided through long-term customer relationships that result in a high level of recurring revenue. Our operations are primarily located in the United States and Canada.

On April 30, 2018, we completed our initial public offering ("IPO"), in which we issued and sold 21,000,000 shares of common stock at a public offering price of $22.00 per share. We granted the underwriters a 30-day option to purchase an additional 3,150,000 shares of common stock at the offering price, which was exercised in full. A total of 24,150,000 shares of common stock were issued in our IPO. Concurrently with our IPO, we issued an additional 4,545,455 shares of our common stock in a private placement at $22.00 per share. We received gross proceeds of $631.3 from the IPO and concurrent private placement before deducting underwriting discounts, commissions, and other offering related expenses.

The use of the proceeds from the IPO were as follows:

Gross proceeds	$	631.3
Less:		
Underwriters' discount and commissions		29.2
IPO-related expenses		11.8
Redemption of 11% Senior Notes due 2021 (Note 9)		475.0
Call premium on redemption of 11% Senior Notes due 2021		13.1
Interest on redemption of 11% Senior Notes due 2021		10.9
Sponsor management fee		11.3
Debt refinancing expenses		11.4
Cash to balance sheet	$	68.6

On November 16, 2018, we completed a secondary offering, in which certain of our stockholders (the "Selling Stockholders") sold 11,000,000 shares of common stock, in an underwritten public offering at $36.00 per share. The Selling Stockholders granted the underwriters a 30-day option to purchase an additional 1,650,000 shares of common stock at the offering price, which was exercised in full. A total of 12,650,000 shares of common stock were sold by the Selling Stockholders on November 16, 2018, with all proceeds going to the Selling Stockholders. We incurred expenses of $1.3 during the year ended December 31, 2018, related to the secondary offering within selling, general and administrative expense.

Prior to our IPO, Ceridian HCM Holding Inc. was primarily owned by Ceridian LLC (the "Parent") and Ceridian Holding II LLC ("Ceridian Holding II"). The Parent was 100% owned by Foundation Holding LLC, which in turn was 100% owned by Ceridian Holding LLC ("Ceridian Holding"). The owners of Ceridian Holding and Ceridian Holding II included (i) affiliates and co-investors of Thomas H. Lee Partners, L.P. ("THL Partners") and Cannae Holdings, LLC ("Cannae") (THL Partners and Cannae are together referred to as the "Sponsors"), who collectively owned approximately 96% of the outstanding interests of both Ceridian Holding and Ceridian Holding II, and (ii) other individuals, who collectively owned approximately 4% of the outstanding interests of each holding company.

Subsequent to the IPO and concurrent private placement, we completed an internal corporate reorganization, pursuant to which the limited liability companies that held shares in us were merged with and into Ceridian HCM Holding Inc. At the time of these transactions, these limited liability companies had no assets other than equity interests in us or the other limited liability companies. As a result of these transactions, our previous, pre-IPO stockholders now hold shares of our common stock directly, rather than through a series of limited liability companies. These transactions had no impact on our assets, liabilities, or operations.

Our History

Ceridian was acquired in 2007 by affiliates and co-investors of the Sponsors (the "2007 Merger"). In April 2012, Ceridian acquired Dayforce Corporation, which had built Dayforce, a cloud HCM solution. In the months following the acquisition, Dayforce founder, David D. Ossip, was named Chief Executive Officer of Ceridian HCM, and shortly thereafter, we generally stopped actively selling our Bureau solutions to new customers in the United States to focus our resources on expanding the Dayforce platform and growing Cloud solutions.

As part of our strategy to focus on the growth of our Cloud solutions business, we undertook the following initiatives to simplify our business model:

(i) sold our consumer-directed benefit services business in 2013,

(ii) merged Comdata, our payment systems business unit, with FleetCor Technologies in 2014,

(iii) sold our benefits administration and post-employment compliance business in 2015,

(iv) sold our United Kingdom and Ireland Bureau businesses and a portion of our operations that supported such businesses in Mauritius in 2016, and

(v) contributed our LifeWorks employee assistance program business to a joint venture, LifeWorks, in 2016, then distributed our ownership in this joint venture to a holding company owned by our stockholders in April 2018.

As a result of these transactions, we only actively sell Dayforce and Powerpay, which we believe simplifies our business model and positions us well for continued growth. Please refer to Note 3, "Discontinued Operations," for further discussion of these transactions.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP"). The accompanying consolidated financial statements include the operations and accounts of Ceridian and all subsidiaries, as well as any variable interest entity ("VIE") in which we have controlling financial interest. All intercompany balances and transactions have been eliminated from our consolidated financial statements.

We consolidate the grantor trusts that hold funds provided by our payroll and tax filing customers pending remittance to employees of those customers or tax authorities in the United States and Canada, although Ceridian does not own the grantor trusts. Under consolidation accounting, the enterprise with a controlling financial interest consolidates a VIE. A controlling financial interest in an entity is determined through analysis that identifies the primary beneficiary which has (1) the power to direct the activities of a VIE that most significantly impact the entity's economic performance and (2) the obligation to absorb losses of the entity that could potentially be significant to the VIE or the right to receive benefits from the entity that could potentially be significant to the VIE. In addition, ongoing reassessments must be performed to confirm whether an enterprise is the primary beneficiary of a VIE. The grantor trusts are VIEs, and we are deemed to have a controlling financial interest as the primary beneficiary. Please refer to Note 5, "Customer Trust Funds," for further information on our accounting for these funds.

Reverse Stock Split

On April 10, 2018, we effected a 1-for-2 reverse stock split of our common stock. All of the common share and per share information referenced throughout the consolidated financial statements and accompanying notes thereto have been retroactively adjusted to reflect this reverse stock split.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of our financial statements and our reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Estimates that could significantly affect our results of operations or financial condition include the assignment of fair values to goodwill and other intangible assets and testing for impairment; the testing of impairment of long-lived assets; the determination of our liability for pensions and postretirement benefits; the determination of fair value of stock options granted; and the resolution of tax matters and legal contingencies. Further discussion on these estimates can be found in related disclosures elsewhere in our notes to the consolidated financial statements.

Cash and Equivalents

As of December 31, 2018, and 2017, cash and equivalents were comprised of cash held in bank accounts and investments with an original maturity of three months or less.

Concentrations

Cash deposits of client and corporate funds are maintained primarily in large credit-worthy financial institutions in the countries in which we operate. These deposits may exceed the amount of any deposit insurance that may be available through government agencies. All deliverable securities are held in custody with large credit-worthy financial institutions, which bear the risk of custodial loss. Non-deliverable securities, primarily money market securities, are held in custody by large, credit-worthy broker-dealers and financial institutions.

Trade and Other Receivables, Net

Trade and other receivables balances are presented on the consolidated balance sheets net of the allowance for doubtful accounts of $1.3 and $1.3 and the reserve for sales adjustments of $3.8 and $4.7 as of December 31, 2018 and 2017, respectively. We experience credit losses on accounts receivable and, accordingly, must make estimates related to the ultimate collection of the receivables. Specifically, management analyzes accounts receivable, historical bad debt experience, customer concentrations, customer creditworthiness, and current economic trends when evaluating the adequacy of the allowance for doubtful accounts. We estimate the reserve for sales adjustment based on historical sales adjustment experience. We write off accounts receivable when we determine that the accounts are uncollectible, generally upon customer bankruptcy or the customer’s nonresponse to continued collection efforts.

Property, Plant, and Equipment

Our property, plant, and equipment assets are stated at cost less depreciation. Depreciation is calculated on a straight-line basis over the shorter of the remaining lease term or estimated useful life of the related assets, which are generally as follows:

Buildings	40 years
Building improvements	5 years
Machinery and equipment	4-6 years
Computer equipment	3-4 years

Repairs and maintenance costs are expensed as incurred. We capitalized interest of $0.5 and $0.6 in property, plant, and equipment during the years ended December 31, 2018 and 2017, respectively. Property, plant, and equipment assets are assessed for impairment as described under the heading "Impairment of Long-Lived Assets" below.

Assignment of Fair Values Upon Acquisition of Goodwill and Other Intangible Assets

In the event of a business combination where we are the acquiring party, we are required to assign fair values to all identifiable assets and liabilities acquired, including intangible assets, such as customer lists, identifiable intangible trademarks, technology and non-compete agreement. We are also required to determine the useful life for definite-lived identifiable intangible assets acquired. These determinations require significant judgments, estimates, and assumptions; and, when material amounts are involved, we generally utilize the assistance of third-party valuation consultants. The remainder of the purchase price of the acquired business not assigned to identifiable assets or liabilities is then recorded as goodwill.

In conjunction with the 2007 Merger, affiliates of the Sponsors completed the acquisition of all outstanding equity of the Ceridian entities. Although Parent continued as the same legal entity after the 2007 Merger, the application of push down accounting representing the termination of the old accounting entity and the creation of a new one resulted in the adjustment of all net assets to their respective fair values as of the 2007 Merger. Net assets of the Parent were adjusted to their respective fair values, which included goodwill, trademarks, customer lists, and other intangible assets.

Goodwill and Intangible Assets

Goodwill, which represents the excess purchase price over the fair value of net assets of businesses acquired, is assigned to reporting units based on the benefits derived from the acquisition. Goodwill and indefinite-lived intangibles are not amortized against earnings, but instead are subject to impairment review on at least an annual basis. We perform our annual assessment of goodwill and indefinite-lived intangible balances as of October 1 of each year. There was no indication of impairment at October 1, 2018.

We assess goodwill impairment risk by first performing a qualitative review of entity-specific, industry, market, and general economic factors for each reporting unit. If significant potential goodwill impairment risk exists for a specific reporting unit, we apply a quantitative test. The quantitative test compares the reporting unit's estimated fair value with its carrying amount. In estimating fair value of our reporting units, we use a combination of the income approach and the market-based approach. A number of significant assumptions and estimates are involved in determining the current fair value of the reporting units, including operating cash flows, markets and market share, sales volumes and prices, and working capital changes. We consider historical experience and all available information at the time the fair values of our reporting units are estimated. However, fair values that could be realized in an actual transaction may differ from those used to evaluate the goodwill for impairment. The evaluation of impairment involves comparing the current fair value of the reporting unit to the carrying amount. To the extent that the carrying amount of goodwill of the reporting unit exceeds the fair value of the reporting unit, an impairment loss is recognized.

Intangible assets represent amounts assigned to specifically identifiable intangible assets at the time of an acquisition. Definite-lived assets are amortized on a straight-line basis generally over the following periods:

Customer lists and relationships	5-15 years
Technology	3-4 years

Indefinite-lived intangible assets, which consist of trade names, are tested for impairment on an annual basis, or more frequently if certain events or circumstances occur that could indicate impairment. When evaluating whether the indefinite-lived intangible assets are impaired, the carrying amount is compared to its estimated fair value. The estimate of fair value is based on a relief from royalty method which calculates the cost savings associated with owning rather than licensing the trademark. An estimated royalty rate is applied to forecasted revenue and the resulting cash flows are discounted. Definite-lived assets are assessed for impairment as described under the heading "Impairment of Long-Lived Assets" below.

Internally Developed Software Costs

In accordance with Accounting Standards Codification ("ASC") Topic 350, we capitalize costs associated with software developed or obtained for internal use when both the preliminary project stage is completed and our management has authorized further funding for the project, which it deems probable of completion. Capitalized software costs include only: (1) external direct costs of materials and services consumed in developing or obtaining the software; (2) payroll and payroll-related costs for employees who are directly associated with and who devote time to the project; and (3) interest costs incurred while developing the software. Capitalization of these costs ceases no later than the point at which the project is substantially complete and ready for its intended purpose. We do not include general and administrative costs and overhead costs in capitalizable costs. We charge research and development costs, product management, and other software maintenance costs related to software development to earnings as incurred.

We had capitalized software costs, net of accumulated amortization, of $61.9 and $56.4 as of December 31, 2018 and 2017, respectively, included in property, plant, and equipment in the accompanying consolidated balance sheets. We amortize software costs on a straight-line basis over the expected life of the software, generally a range of two to seven years. Amortization of software costs totaled $26.2, $23.6, and $20.9 for the years ended December 31, 2018, 2017, and 2016, respectively.

Impairment of Long-Lived Assets

Long-lived assets, such as property, plant, and equipment, capitalized software, and definite-lived intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset group may not be recoverable. Recoverability of asset groups to be held and used is measured by a comparison of the carrying amount of an asset group to the estimated undiscounted future cash flows expected to be generated by the asset group. If the carrying amount of an asset group exceeds its estimated future cash flows, an impairment charge is recognized for the amount by which the carrying amount of the asset group exceeds the fair value of the asset group.

Revenue Recognition

We recognize revenue from the sale of our services, net of applicable sales taxes, when the following criteria are met: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services have been rendered; (3) the seller's price to the buyer is fixed or determinable; and (4) collectability is reasonably assured. We rely on a signed contract with the customer as the persuasive evidence of a sales arrangement.

We enter into revenue arrangements that may consist of multiple deliverables based on the needs of our customers. For example, our services address a broad range of employment process needs, such as payroll, payroll-related tax filing, human resource information, employee self-service capabilities, time and labor management, and recruitment and applicant screening. A customer arrangement may contain any of these elements with different elements delivered across multiple reporting periods.

We have a single unit of accounting for each deliverable in a contract based on the use of estimated selling price ("ESP") in those cases where vendor-specific objective evidence of selling price ("VSOE") or third party evidence ("TPE") cannot be established. Our determination of ESP involves the consideration of several factors based on the specific facts and circumstances of each contract. Specifically, we consider the cost to produce or to provide the deliverable, the anticipated margin on that deliverable, the selling price and profit margin for similar services, the value of any enhancements that have been built into the deliverable and the characteristics of the varying markets in which the deliverable will be sold.

When we are unable to establish a selling price using VSOE or TPE, we use ESP in the allocation of arrangement consideration. The objective of ESP is to determine the price at which we would transact a sale if the service were sold on a stand-alone basis.

We regularly review VSOE, TPE, and ESP and maintain internal controls over the establishment and updates of these estimates. There were no material impacts during the period nor do we currently expect a material impact in the near term from changes in VSOE, TPE, or ESP.

Deferred revenue primarily consists of customer billings in advance of revenues being recognized from our contracts. Deferred revenue also includes certain deferred professional services fees that are accounted for as a single unit of accounting with subscription fees and are recognized as revenues over the same period as the related customer contract. Deferred revenue that is anticipated to be recognized during the succeeding twelve-month period is recorded as current deferred revenue and the remaining portion is recorded as noncurrent.

Recurring Services Revenues

Revenues are presented within the consolidated statements of operations in two categories: recurring services, and professional services and other. Recurring services revenues consist of monthly fees that we charge for our Cloud and Bureau solutions. For our Dayforce solutions, we primarily charge monthly recurring fees on a per employee, per month (“PEPM”) basis, generally one-month in advance of service, based on the number and type of solutions provided to the customer and the number of employees at the customer. We charge Powerpay customers monthly recurring fees on a per-employee, per-process basis. For our Bureau solutions, we typically charge monthly recurring fees on a per-process basis. The typical recurring services customer contract has an initial term of three years. The initial recurring services contracts have general acceptance criteria that consist of the completion of user acceptance testing. Any credits related to service level commitments are recognized as incurred, as service level failures are not anticipated at contract signing. Should a customer cancel the initial contract, an early termination fee may be applicable, and revenue is recognized upon collection. We also generate recurring services revenue from investment income on our Cloud and Bureau customer funds held in trust before such funds are remitted to taxing authorities, customer employees, or other third parties. We refer to this investment income as float revenue. Please refer to Note 17, “Financial Data by Segment and Geographic Area,” for a full description of our sources of revenue.

Professional Services and Other Revenues

Professional services and other revenues consist primarily of charges relating to the work performed to assist customers with the planning, design, implementation, and staging of their solutions. Also included in professional services are any related training services, post-implementation professional services, and purchased time clocks. We also generate professional services and other revenues from custom professional services and consulting services that we provide and for certain third-party services that we arrange for our Bureau customers. Professional services revenue is primarily recognized as hours are incurred.

Costs and Expenses

Cost of Revenue

Cost of revenue consists of costs to deliver our revenue-producing services. Most of these costs are recognized as incurred, that is, as we become obligated to pay for them. Some costs of revenue are recognized in the period that a service is sold and delivered. Other costs of revenue are recognized over the period of use or in proportion to the related revenue.

The costs recognized as incurred consist primarily of customer service staff costs, customer technical support costs, implementation personnel costs, costs of hosting applications, consulting and purchased services, delivery services, and royalties. The costs of revenue recognized over the period of use are depreciation and amortization, rentals of facilities and equipment, and direct and incremental costs associated with deferred implementation service revenue.

Cost of recurring services revenues primarily consists of costs to provide maintenance and technical support to our customers, and the costs of hosting our applications. The cost of recurring services revenues includes compensation and other employee-related expenses for data center staff, payments to outside service providers, data center, and networking expenses.

Cost of professional services and other revenues primarily consists of costs to provide implementation consulting services and training to our customers, as well as the cost of time clocks. Costs to provide implementation consulting services include compensation and other employee-related expenses for professional services staff, costs of subcontractors, and travel.

Product development and management expense includes costs related to software development activities that do not qualify for capitalization, such as development, quality assurance, testing of new technologies, and enhancements to our existing solutions that do not result in additional functionality. Product development and management expense also includes costs related to the management of our service offerings. Research and development expense, which is included within product development and management expense, was $29.6, $19.0, and $13.0 for the years ended December 31, 2018, 2017, and 2016, respectively.

Depreciation and amortization related to cost of revenue primarily consists of amortization of capitalized software.

Selling, General, and Administrative Expense

Selling expense includes costs related to maintaining a direct marketing infrastructure and sales force and other direct marketing efforts, such as marketing events, advertising, telemarketing, direct mail, and trade shows. Advertising costs are expensed as incurred. Advertising expense was $5.8, $5.6, and $5.9 for the years ended December 31, 2018, 2017, and 2016, respectively.

General and administrative expense includes costs that are not directly related to delivery of services, selling efforts, or product development, primarily consisting of corporate-level costs, such as administration, finance, legal and human resources. Also included in this category are depreciation, and amortization of other intangible assets not reflected in cost of revenue, the provision for doubtful accounts receivable, and net periodic pension costs.

Other (Income) Expense, Net

Other (income) expense, net includes the results of transactions that are not appropriately classified in another category. These items are primarily foreign currency translation gains and losses resulting mainly from intercompany receivables and payables denominated in currencies other than the subsidiary's functional currency, environmental reserve charges, and charges related to the impairment of asset values.

Income Taxes

Income taxes have been provided for using the asset and liability method. The asset and liability method requires an asset and liability based approach in accounting for income taxes. Deferred tax assets and liabilities are recorded for temporary differences between the financial reporting basis and the tax basis of assets and liabilities as adjusted for the expected benefits of utilizing net operating loss carryforwards. The impact on deferred taxes of changes in tax rates and laws, if any, applied to the years during which temporary differences are expected to be settled, is reflected in the consolidated financial statements in the period of enactment.

We classify interest and penalties related to income taxes as a component of the income tax provision.

Fair Value of Financial Instruments

The carrying amounts of cash and equivalents, trade and other receivables, net, customer trust funds, customer trust funds obligations, customer advance payments, and accounts payable approximate fair value because of the short-term nature of these items.

Share-Based Compensation

Our employees participate in share-based compensation plans. Under the fair value recognition provisions of share-based compensation accounting, we measure share-based compensation cost at the grant date based on the fair value of the award and recognize the compensation expense over the requisite service period, which is the period during which an employee is required to provide services in exchange for the award.

We use the Black-Scholes standard option pricing model ("Black-Scholes model") to determine the fair value of stock options with term-based vesting conditions. The determination of the fair value of the awards on the date of grant using the Black-Scholes model is affected by the value of our common stock as well as other inputs and assumptions described below. Prior to our IPO, the value of our common stock was determined by the Board of Directors with assistance from a third-party valuation expert.

If factors change and we employ different assumptions for estimating share-based compensation expense in future periods or if we adopt a different valuation model, the future periods may differ significantly from what we have recorded in the current period and could materially affect our operating results.

To determine the fair value of both term- and performance-based stock options, the risk-free interest rate used was based on the implied yield currently available on U.S. Treasury zero coupon issues with remaining term equal to the contractual term of the performance-based options and the expected term of the term-based options. Given our limited history as a public company, the estimated volatility of our common stock is based on volatility data for selected comparable public companies over the expected term of our stock options. Because we do not anticipate paying any cash dividends in the foreseeable future, we use an expected dividend yield of zero. The amount of share-based compensation expense we recognize during a period is based on the portion of the awards that are ultimately expected to vest.

We estimate option forfeitures at the time of grant and revise those estimates in subsequent periods if actual forfeitures differ from those estimates. We analyze historical data to estimate pre-vesting forfeitures and record share-based compensation expense for those awards expected to vest. We recognize term-based stock compensation expense using the straight-line method.

Pension and Other Postretirement Benefits Liability

We present information about our pension and postretirement benefit plans in Note 10 to our consolidated financial statements, “Employee Benefit Plans.” Liabilities and expenses for pensions and other postretirement benefits are determined with the assistance of third-party actuaries, using actuarial methodologies and incorporating significant assumptions, including the rate used to discount the future estimated liability, the long-term rate of return on plan assets, and several assumptions relating to the employee workforce (medical costs, retirement age and mortality). The discount rate assumption utilizes a full yield curve approach by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. The impact of a change in the discount rate of 25 basis points would be approximately $12 million on the liabilities and $0.1 million on pre-tax earnings in the following year. The long-term rate of return is estimated by considering historical returns and expected returns on current and projected asset allocations and is generally applied to a five-year average market value of assets. A change in the assumption for the long-term rate of return on plan assets of 25 basis points would impact pre-tax earnings by approximately $1 million. At December 31, 2017, we updated our mortality assumptions utilizing an improvement scale issued by the Society of Actuaries in October 2017, which resulted in a $6.0 million reduction in the projected benefit obligation. At December 31, 2018, we updated our mortality assumptions utilizing an improvement scale issued by the Society of Actuaries in October 2018, which resulted in a $1.5 million reduction in the projected benefit obligation.

Foreign Currency Translation

We have international operations whereby the local currencies serve as functional currencies. We translate foreign currency denominated assets and liabilities at the end-of-period exchange rates and foreign currency denominated statements of operations at the weighted-average exchange rates for each period. We report the effect of changes in the U.S. dollar carrying values of assets and liabilities of our international subsidiaries that are due to changes in exchange rates between the U.S. dollar and the subsidiaries’ functional currency as foreign currency translation within accumulated other comprehensive income (loss) in the accompanying consolidated statements of stockholders’ equity and comprehensive income (loss). Gains and losses from transactions and translation of assets and liabilities denominated in currencies other than the functional currency of the subsidiaries are recorded in the consolidated statements of operations within other (income) expense, net.

Recently Issued and Adopted Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2014-09, “Revenue from Contracts with Customers,” which replaced all existing revenue guidance created by ASC Topic 605, including prescriptive industry-specific guidance, and created ASC Topic 606 for revenue and ASC Subtopic 340-40 for incremental costs of obtaining a contract with customers. This standard’s core principle is that an entity will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Entities will need to apply more judgment and make more estimates than under the previous guidance. In July 2015 the FASB deferred the effective date for all entities by one year, making the guidance for non-public companies effective for annual reporting periods beginning after December 15, 2018. As an emerging growth company, we have elected to follow the non-public company timeline for adopting this guidance. The standard permits the use of either the retrospective transition method or modified retrospective approach with a cumulative effect recognized at the date of initial application. Management has decided to adopt the new standard effective in the first quarter of 2019, using the retrospective transition method for adoption.

In preparation for this adoption, we have evaluated the impact of the new standard to our financial statements and accompanying disclosures in the notes to our consolidated financial statements. Our assessment of the impact included an evaluation of the five-step process set forth in the new standard along with the enhancement of disclosures that will be required. We executed a plan for implementing the standard, which included identifying customer contracts within the scope of the new standard, identifying performance obligations within those customer contracts, and evaluating the impact of incremental variable consideration paid to obtain those customer contracts. We also undertook a comprehensive review of all contracts that fall under the scope of the new standard; and, as of the date of this report, we have completed our review of in-scope contracts.

Based on our analysis, the adoption of the new standard will result in changes to the classification and timing of our revenue recognition. Specifically, revenue classified as professional services and other revenue will increase and revenue classified as recurring services revenue will be reduced under the new standard, compared to current GAAP. Further, the new standard will result in changes to the timing of our revenue recognition compared to current GAAP. In compliance with the new standard, a contract asset will be reflected on the consolidated balance sheets and will be amortized over the contract period, which is generally three years. We also will have changes to the timing of certain selling, general, and administrative expenses, as the new standard requires capitalizing and amortizing certain selling expenses, such as commissions and bonuses paid to the sales force. These sales expenses will be amortized over the period of benefit, generally five years. Additionally, the adoption of the new standard will have an immaterial impact on cost of revenue for the year ended December 31, 2017, as a small number of customer contracts had previously been recognized under revenue guidance prior to ASC Topic 605.

In periods of revenue growth, the changes above will result in higher overall earnings before income taxes and net income when compared to current GAAP.

The following tables present the impacts that the adoption of ASC 606 would have on the years ended December 31, 2018 and 2017:

	Year Ended December 31, 2018		
	As Reported	**Under ASC 606**	**Impact**
Revenue:			
Recurring services	$ 652.5	$ 625.0	$ (27.5)
Professional services and other	93.9	115.7	21.8
Total revenue	$ 746.4	$ 740.7	$ (5.7)
Operating profit	$ 52.8	$ 56.3	$ 3.5

	Year Ended December 31, 2017		
	As Reported	**Under ASC 606**	**Impact**
Revenue:			
Recurring services	$ 598.5	$ 573.9	$ (24.6)
Professional services and other	72.3	102.3	30.0
Total revenue	$ 670.8	$ 676.2	$ 5.4
Operating profit	$ 33.0	$ 46.6	$ 13.6

In February 2016, the FASB issued ASU No. 2016-02, “Leases,” which created ASC Topic 842 and is intended to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and by disclosing key information about leasing arrangements. This standard requires balance sheet recognition for both finance leases and operating leases. This guidance is effective for public companies for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. An entity will, in effect, continue to account for leases that commence before the effective date in accordance with previous GAAP unless the lease is modified, except that lessees are required to recognize a right-of-use asset and a lease liability for all operating leases at each reporting date based on the present value of the remaining minimum rental payments that were tracked and disclosed under previous GAAP. Management will adopt this guidance beginning in the first quarter of 2019, and has chosen to take advantage of the additional transition method in ASU No. 2018-11 discussed below, in which a cumulative-effect adjustment will be made to the opening balance of retained earnings in the period of adoption. Currently, based on management’s implementation efforts, we will recognize a right-of-use asset and a lease liability on the consolidated balance sheets as of January 1, 2019, in the range of $35.0 to $45.0.

In August 2016, the FASB issued ASU No. 2016-15, “Statement of Cash Flows-Classification of Certain Cash Receipts and Cash Payments,” which addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice of certain cash receipts and cash payments. This guidance is effective for non-public companies for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. We have chosen to early adopt this guidance as of January 1, 2018, and have applied this guidance to the presentation of our debt refinancing transactions that occurred during 2018.

In February 2018, the FASB issued ASU No. 2018-02, “Income Statement-Reporting Comprehensive Income,” which is in response to a narrow-scope financial reporting issue that arose because of the Tax Cuts and Jobs Act. The amendment in this update allows a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act. This amendment is intended to improve the usefulness of information reported to financial statement users by requiring certain disclosures about stranded tax effects. The amendment in this update is effective for all entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Management will adopt this guidance beginning in the first quarter of 2019. We anticipate the adoption of this guidance will not have a significant impact on our consolidated balance sheets.

In July 2018, the FASB issued ASU No. 2018-10, “Codification Improvements to Topic 842, Leases” and 2018-11, “Leases (Topic 842): Targeted Improvements.” The amendments in ASU No. 2018-10 affect narrow aspects of the guidance issued in ASU No. 2016-02. For non-early adopters, this amendment is effective under the same timelines as ASU No. 2016-02. The amendments in ASU No. 2018-11 provide entities with an additional (and optional) transition method to adopt the new lease requirements. Under the additional transition method, entities may initially apply the requirements by recognizing a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. The amendments in this update also provide lessors with a practical alternative to separate non-lease components from the associated lease component. Under this alternative, lessors may account for those components as a single component if the non-lease components otherwise would be accounted for under the new revenue guidance (Topic 606) and certain other criteria are met. For entities that have not adopted Topic 842 before the issuance of this update, the effective date and transition requirements are the same as the effective date and transition requirements in ASU No. 2016-02. As discussed above, management has chosen to take advantage of the additional transition method created by this guidance and will record a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption, which will be the first quarter of 2019.

3. Discontinued Operations

Life Works Disposition

On March 1, 2016, we entered into a strategic joint venture with WorkAngel Technology Limited (“WorkAngel”) in which we contributed our existing LifeWorks employee assistance program business to WorkAngel Organisation Limited, a newly formed English limited company. On January 20, 2017, WorkAngel Organisation Limited changed its name to LifeWorks Corporation Ltd (“LifeWorks”). We had a controlling interest in LifeWorks, including certain preferential distribution rights; therefore, LifeWorks was consolidated within our financial statements, and the other joint venture ownership interest component was presented as a noncontrolling interest. During the years ended December 31, 2018, and 2017, there were losses attributable to the noncontrolling interest of $0.5 and $1.3, respectively. During the year ended December 31, 2016, there was income attributable to the noncontrolling interest of $0.1.

In the second quarter of 2018, contemporaneously with our IPO and concurrent private placement, we distributed our controlling financial interest in LifeWorks to our stockholders of record prior to the IPO on a pro rata basis in accordance with their pro rata interest in us (the “LifeWorks Disposition”).

The LifeWorks Disposition represented a strategic shift in our overall business and had a significant impact on the financial statement results. Therefore, the LifeWorks business has been presented as discontinued operations in our consolidated financial statements and accompanying notes for all periods presented. Ceridian’s net book value related to LifeWorks of $95.7 was recorded as a distribution through additional paid in capital within our consolidated balance sheet during the second quarter of 2018.

The amounts in the table below reflect the operating results of LifeWorks reported as discontinued operations, as well as supplemental disclosures of the discontinued operations:

	Year Ended December 31, 2018	2017	2016
Net revenues	$ 28.3	$ 79.9	$ 80.8
(Loss) income from operations before income taxes	(0.9)	(0.4)	7.1
Income tax expense	(24.9)	(4.9)	(11.1)
Loss from discontinued operations, net of income taxes	$ (25.8)	$ (5.3)	$ (4.0)
Depreciation and amortization	$ 1.4	$ 4.1	$ 4.1
Capital expenditures	$ —	$ 0.2	$ 0.3

The amounts in the table below reflect the assets and liabilities reported as discontinued operations for LifeWorks:

	December 31, 2017
Assets:	
Cash and equivalents	$ 5.4
Trade and other receivables, net	13.3
Prepaid expenses	1.5
Property, plant, and equipment, net	1.8
Other intangible assets, net	5.9
Goodwill	126.3
Other assets	2.0
Assets of discontinued operations	$ 156.2
Liabilities:	
Accounts payable	$ 4.4
Deferred revenue	2.8
Employee compensation and benefits	1.2
Other liabilities	10.9
Liabilities of discontinued operations	$ 19.3

Sale of UK Business

On June 15, 2016, we completed the stock sale of our United Kingdom and Ireland businesses, along with the portion of our Mauritius operations that supported these businesses (the “UK Business”). We received $93.2 in connection with this transaction. Concurrent with this transaction, we entered into a strategic partnership with the acquirer, SD Worx, a leading European provider of payroll and HCM services, to deliver cloud human capital management (“HCM”) services across Europe.

This transaction represented a strategic shift in our overall business and had a significant impact on our financial statement results. Therefore, the UK Business has been presented as discontinued operations in the consolidated financial statements and accompanying notes for all periods presented. The sale of the UK Business, which made up the International reporting unit, was considered a sale of a business, and as such, the entire goodwill balance assigned to the International reporting unit of $23.8 was included in the carrying amount used in determining the gain on sale of the UK Business. During the year ended December 31, 2017, there was a settlement payment made to SD Worx.

The amounts in the table below reflect the operating results of the UK Business reported as discontinued operations, as well as supplemental disclosures of the discontinued operations:

	Year Ended December 31,	
	2017	2016
Net revenues	$ —	$ 37.0
Income from operations before income taxes	—	0.5
(Loss) gain on sale of businesses	(1.0)	5.9
Income tax benefit	—	0.2
(Loss) income from discontinued operations, net of income taxes	$ (1.0)	$ 6.6
Depreciation and amortization	$ —	$ 1.3
Capital expenditures	$ —	$ 0.7

Sale of Divested Benefits Continuation Businesses

In the third quarter of 2013, we entered into an agreement for the sale of certain of our customer contracts for consumer-directed benefit services, including flexible spending accounts, health reimbursement accounts, health savings accounts, commuter (parking or transit) premium-only plans, and tuition reimbursement plans (collectively, the “Consumer-Directed Benefit Services”). During the third quarter of 2015, we completed two separate transactions that resulted in the sale of our benefits administration and post-employment health insurance portability compliance businesses (the “Divested Benefits Continuation Businesses”).

These three transactions represented a strategic shift in our overall business and had a significant impact on our financial statement results. Accordingly, the Divested Benefits Continuation Businesses, as well as the Consumer-Directed Benefit Services, have been presented as discontinued operations in the consolidated financial statements and accompanying notes for all periods presented. The amounts in the table below reflect the operating results and gain on sale of the Divested Benefits Continuation Businesses reported as discontinued operations, as well as supplemental disclosures of the discontinued operations:

The purchase price of the Consumer-Directed Benefit Services was subject to adjustment, dependent upon which customers transitioned to the acquirer. Since a portion of the customer contracts were assigned to the acquirer on the sale date, that portion of the purchase price was recognized upon the sale date. For the remaining contracts that required transition, the purchase price was deferred and recognized as each contract transferred.

	Year Ended December 31,	
	2017	2016
Net revenues	$ —	$ 4.8
Loss from operations before income taxes	—	(0.8)
Gain on sale of businesses	0.5	21.0
Income tax expense	(0.2)	(10.3)
Income from discontinued operations, net of income taxes	$ 0.3	$ 9.9
Depreciation and amortization	$ —	$ —
Capital expenditures	$ —	$ —

For both sales of the Divested Benefits Continuation Businesses, consideration received was contingent upon the number and dollar value of successful customer transitions and was recorded when earned. Proceeds of $21.0 were received and earned based on the customers transitioned during the years ended December 31, 2016. The proceeds received during the year ended December 31, 2017, were for a final purchase price true-up related to one of the transactions.

The remaining liabilities related to discontinued operations for the Divested Benefits Continuation Businesses as of December 31, 2018, and 2017, were $0.2 and $0.3 of other accrued expenses.

4. Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). GAAP outlines a valuation framework and creates a fair value hierarchy intended to increase the consistency and comparability of fair value measurements and the related disclosures. Certain assets and liabilities must be measured at fair value, and disclosures are required for items measured at fair value.

We measure our financial instruments using inputs from the following three levels of the fair value hierarchy. The three levels are as follows:

Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities that we have the ability to access at the measurement date.

Level 2 inputs include quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (that is, interest rates, yield curves, etc.), and inputs that are derived principally from or corroborated by observable market data by correlation or other means (market corroborated inputs).

Level 3 inputs include unobservable inputs that reflect our assumptions about the assumptions that market participants would use in pricing the asset or liability. These inputs are developed based on the best information available, including internal data.

Financial Assets and Liabilities Measured at Fair Value on a Recurring Basis

As of December 31, 2018, our financial assets and liabilities measured at fair value on a recurring basis were categorized as follows:

	Total	Level 1	Level 2	Level 3
Assets				
Available for sale customer trust funds assets	$ 1,719.6	$ —	$ 1,719.6 (a)	$ —
Total assets measured at fair value	$ 1,719.6	$ —	$ 1,719.6	$ —

As of December 31, 2017, our financial assets and liabilities measured at fair value on a recurring basis were categorized as follows:

	Total	Level 1	Level 2	Level 3
Assets				
Available for sale customer trust funds assets	$ 1,782.1	$ —	$ 1,782.1 (a)	$ —
Total assets measured at fair value	$ 1,782.1	$ —	$ 1,782.1	$ —

(a) Fair value is based on inputs that are observable for the asset or liability, other than quoted prices.

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

During the years ended December 31, 2018 and 2017, we did not re-measure any financial assets or liabilities at fair value on a nonrecurring basis.

5. Customer Trust Funds

Overview

In connection with our U.S. and Canadian payroll and tax filing services, we collect funds for payment of payroll and taxes; temporarily hold such funds in trust until payment is due; remit the funds to the clients' employees and appropriate taxing authorities; file federal, state and local tax returns; and handle related regulatory correspondence and amendments. The assets held in trust are intended for the specific purpose of satisfying client fund obligations and therefore are not freely available for our general business use.

Our customer trust funds are held and invested with the primary objectives being to protect the principal balance and to ensure adequate liquidity to meet cash flow requirements. Accordingly, we maintain on average approximately 46% of customer trust funds in liquidity portfolios with maturities ranging from one to 120 days, consisting of high-quality bank deposits, money market mutual funds, commercial paper, or collateralized short-term investments; and we maintain on average approximately 54% of customer trust funds in fixed income portfolios with maturities ranging from 120 days to 10 years, consisting of U.S. Treasury and agency securities, Canada government and provincial securities, as well as highly rated asset-backed, mortgage-backed, municipal, corporate and bank securities. To maintain sufficient liquidity in the trust to meet payment obligations, we also have financing arrangements and may pledge fixed income securities for short-term financing.

Financial Statement Presentation

Investment income from invested customer trust funds constitutes a component of our compensation for providing services under agreements with our customers. Investment income from invested customer trust funds included in revenue amounted to $67.0, $46.5, and $39.1 for the years ended December 31, 2018, 2017, and 2016, respectively. Investment income includes interest income, realized gains and losses from sales of customer trust funds' investments, and unrealized credit losses determined to be other-than-temporary.

The amortized cost of customer trust funds as of December 31, 2018 and 2017, is comprised of the original cost of assets acquired. The amortized cost and fair values of investments of customer trust funds available for sale at December 31, 2018 and 2017, were as follows:

Investments of Customer Trust Funds at December 31, 2018

	Amortized	Gross Unrealized		Fair
	Cost	Gain	Loss	Value
Money market securities, investments carried at cost and other cash equivalents	$ 872.3	$ —	$ —	$ 872.3
Available for sale investments:				
U.S. government and agency securities	573.4	0.2	(11.4)	562.2
Canadian and provincial government securities	392.5	3.4	(1.4)	394.5
Corporate debt securities	499.5	0.5	(4.7)	495.3
Asset-backed securities	247.1	0.2	(2.7)	244.6
Mortgage-backed securities	8.5	—	(0.2)	8.3
Other securities	14.8	—	(0.1)	14.7
Total available for sale investments	1,735.8	4.3	(20.5)	1,719.6
Invested customer trust funds	2,608.1	$ 4.3	$ (20.5)	2,591.9
Trust receivables	11.6			11.6
Total customer trust funds	$ 2,619.7			$ 2,603.5

Investments of Customer Trust Funds at December 31, 2017

	Amortized Cost	Gross Unrealized Gain	Gross Unrealized Loss	Fair Value
Money market securities, investments carried at cost and other cash equivalents	$ 2,309.3	$ —	$ —	$ 2,309.3
Available for sale investments:				
U.S. government and agency securities	584.6	0.1	(7.1)	577.6
Canadian and provincial government securities	418.2	6.6	(1.5)	423.3
Corporate debt securities	472.3	0.8	(2.5)	470.6
Asset-backed securities	280.8	—	(1.8)	279.0
Mortgage-backed securities	15.0	—	(0.2)	14.8
Other securities	17.0	—	(0.2)	16.8
Total available for sale investments	1,787.9	7.5	(13.3)	1,782.1
Invested customer trust funds	4,097.2	$ 7.5	$ (13.3)	4,091.4
Trust receivables	8.3			8.3
Total customer trust funds	$ 4,105.5			$ 4,099.7

The following represents the gross unrealized losses and the related fair value of the investments of customer trust funds available for sale, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position at December 31, 2018.

	Less than 12 months		12 months or more		Total	
	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value
U.S. government and agency securities	$ (1.0)	$ 100.1	$ (10.4)	$ 419.1	$ (11.4)	$ 519.2
Canadian and provincial government securities	(0.1)	14.5	(1.3)	130.5	(1.4)	145.0
Corporate debt securities	(1.1)	136.6	(3.6)	204.6	(4.7)	341.2
Asset-backed securities	(0.2)	40.7	(2.5)	169.1	(2.7)	209.8
Mortgage-backed securities	—	—	(0.2)	8.2	(0.2)	8.2
Other securities	(a)	1.7	(0.1)	12.8	(0.1)	14.5
Total available for sale investments	$ (2.4)	$ 293.6	$ (18.1)	$ 944.3	$ (20.5)	$ 1,237.9

(a) These investments have been in an unrealized loss position; however, the amount of unrealized loss is less than $0.05.

Management does not believe that any individual unrealized loss as of December 31, 2018, represents an other-than-temporary impairment. The unrealized losses are primarily attributable to changes in interest rates and not to credit deterioration. We currently do not intend to sell or expect to be required to sell the securities before the time required to recover the amortized cost.

The amortized cost and fair value of investment securities available for sale at December 31, 2018, by contractual maturity are shown below. Expected maturities will differ from contractual maturities because borrowers may have the right to call or to prepay obligations with or without call or prepayment penalties.

	December 31, 2018	
	Cost	Fair Value
Due in one year or less	$ 1,139.4	$ 1,139.4
Due in one to three years	599.9	593.8
Due in three to five years	651.3	646.9
Due after five years	217.5	211.8
Invested customer trust funds	$ 2,608.1	$ 2,591.9

6. Trade and Other Receivables, Net

The balance in trade and other receivables, net, is comprised of the following:

	December 31, 2018	December 31, 2017
Trade receivables from customers	$ 68.6	$ 67.2
Interest receivable from invested customer trust funds	0.9	1.7
Other	5.5	3.7
Total gross receivables	75.0	72.6
Less: reserve for sales adjustments	(3.8)	(4.7)
Less: allowance for doubtful accounts	(1.3)	(1.3)
Trade and other receivables, net	$ 69.9	$ 66.6

The activity related to the allowance for doubtful accounts is as follows for each of the periods:

	Year Ended December 31, 2018	2017	2016
Balance at beginning of year	$ 1.3	$ 1.8	$ 1.1
Provision for doubtful accounts	0.7	0.2	1.1
Charge-offs, net of recoveries	(0.7)	(0.7)	(0.4)
Balance at end of year	$ 1.3	$ 1.3	$ 1.8

7. Property, Plant, and Equipment

Property, plant, and equipment consist of the following:

	December 31, 2018	December 31, 2017
Land	$ 7.5	$ 7.5
Software	225.0	197.4
Machinery and equipment	117.5	120.3
Buildings and improvements	40.5	36.3
Total property, plant and equipment	390.5	361.5
Accumulated depreciation	(286.1)	(259.5)
Property, plant and equipment, net	$ 104.4	$ 102.0

Depreciation expense of property, plant, and equipment totaled $38.1, $35.3, and $34.8 for the years ended December 31, 2018, 2017, and 2016, respectively.

8. Goodwill and Intangible Assets

Goodwill

Goodwill and changes therein were as follows for the years ended December 31, 2018, and 2017:

Balance at December 31, 2016	$ 1,933.1
Translation	27.9
Balance at December 31, 2017	1,961.0
Translation	(33.6)
Balance at December 31, 2018	$ 1,927.4
Tax-deductible goodwill at December 31, 2018	$ 10.6

We perform an impairment assessment of our goodwill balances as of October 1 of each year. Goodwill impairment testing is performed at the reporting unit level, which is the operating segment level or one level below. After consideration of the LifeWorks Disposition, management has concluded that we have one reporting unit. Please refer to Note 3, “Discontinued Operations,” for further discussion of the LifeWorks Disposition.

We performed a qualitative impairment test as of October 1, 2018, and concluded that it is not more likely than not that the fair value of our reporting unit is less than its carrying amount.

Intangible Assets

Other intangible assets consist of the following as of December 31, 2018:

	Gross Carrying Amount	Accumulated Amortization	Net	Estimated Life Range (Years)
Customer lists and relationships	$ 205.4	$ (190.2)	$ 15.2	5-15
Tradename	173.5	(1.9)	171.6	—
Technology	152.2	(151.5)	0.7	3-4
Total other intangible assets	$ 531.1	$ (343.6)	$ 187.5	

We perform an impairment assessment of our trade name intangible assets as of October 1 of each year. We performed the relief from royalty method impairment test as of October 1, 2018, and concluded that the fair value of our trade name intangible assets exceeded their respective carrying amount. We continue to evaluate the use of our trade names and branding in our sales and marketing efforts. If there is a fundamental shift in the method of our branding in the future, we will assess the impact on the carrying amount of our trade name intangible assets and to determine whether an impairment exists. If it is determined that an impairment has occurred, a non-cash expense would be recognized during the period in which the decision was made to make the fundamental shift.

Other intangible assets consist of the following as of December 31, 2017:

	Gross Carrying Amount	Accumulated Amortization	Net	Estimated Life Range (Years)
Customer lists and relationships	$ 210.1	$ (177.0)	$ 33.1	5-15
Tradename	174.1	(2.1)	172.0	—
Technology	155.6	(154.2)	1.4	2-7
Total other intangible assets	$ 539.8	$ (333.3)	$ 206.5	

Amortization expense related to definite-lived intangible assets was $18.5, $18.5, and $18.4 for the years ended December 31, 2018, 2017, and 2016, respectively. We estimate the future amortization of other intangible assets held at December 31, 2018, will be:

Years Ending December 31,	Amount
2019	$ 15.2
2020	0.2
2021	0.2
2022	0.2
2023	$ 0.1

9. Debt

Overview

Set forth below is a description of certain debt facilities for which Ceridian was obligated during the periods covered by these consolidated financial statements. Our debt obligations consist of the following:

	December 31, 2018	December 31, 2017
Term Debt, interest rate of 5.8% and 5.1% as of December 31, 2018 and 2017, respectively	$ 678.3	$ 657.3
Senior Notes, interest rate of 11.0% as of December 31, 2017	—	475.0
Revolving Credit Facility ($300.0 available capacity less amounts reserved for letters of credit, which were $2.7 as of December 31, 2018, and $130.0 available capacity less amounts reserved for letters of credit, which were $2.9 as of December 31, 2017)	—	—
Canada Line of Credit (CDN $7.0 available capacity as of December 31, 2018 and 2017; USD $5.1 as of December 31, 2018 and USD $5.6 as of December 31, 2017)	—	—
Total debt	678.3	1,132.3
Less unamortized discount on Term Debt	1.7	0.9
Less unamortized debt issuance costs on Senior Notes and Term Debt	6.3	11.6
Less current portion of long-term debt	6.8	—
Long-term debt, less current portion	$ 663.5	$ 1,119.8

Senior Secured Credit Facilities

Principal Amounts and Maturity Dates

On November 14, 2014, the 2014 Senior Secured Credit Facility was put into place, consisting of (i) a $702.0 term loan debt facility (the “2014 Term Debt”) and (ii) a $130.0 revolving credit facility (the “2014 Revolving Credit Facility”). As of December 31, 2017, the 2014 Term Debt had a maturity date of September 2020, and the 2014 Revolving Credit Facility had a maturity date of September 2019. The 2014 Term Debt required quarterly principal payments of 0.25% of the original principal amount. Ceridian made mandatory pre-payments towards the principal balance of the 2014 Term Debt with the proceeds received from the sale of the UK Business during the years ended December 31, 2018, and 2017, of $0.3 and $25.9, respectively. These pre-payments were applied against the scheduled quarterly principal payments.

On April 30, 2018, Ceridian completed the refinancing of the remaining debt under the 2014 Senior Secured Credit Facility by entering into a new credit agreement. Pursuant to the terms of the new credit agreement, Ceridian became borrower of (i) a $680.0 term loan debt facility (the “2018 Term Debt”) and (ii) a $300.0 revolving credit facility (the “2018 Revolving Credit Facility”) (collectively, the “2018 Senior Secured Credit Facility”). The 2018 Senior Secured Credit Facility is secured by all assets of Ceridian.

In connection with the refinancing of the 2014 Senior Secured Credit Facility, we recognized a loss on debt extinguishment of $7.1 within interest expense, net on our consolidated statement of operations during the year ended December 31, 2018.

Interest

The effective interest rate on the 2014 Term Debt at December 31, 2017 was 5.1%. The 2014 Term Debt had an interest rate of LIBOR plus 3.5%, subject to a 1.0% LIBOR floor.

The effective interest rate on the 2018 Term Debt at December 31, 2018 was 5.8%. The 2018 Term Debt is currently subject to an interest rate of LIBOR plus 3.25%. In the event our corporate rating from Moody’s Investors Service, Inc. is B2 or better, the interest rate is reduced to LIBOR plus 3.00%, so long as the rating is maintained.

Financing Costs and Issuance Discounts

The 2014 Term Debt had associated unamortized deferred financing costs of $5.4 at December 31, 2017 which were being amortized at the effective interest rate of 4.8%.

In connection with the refinancing of the 2014 Senior Secured Credit Facility, we capitalized $3.6 of additional financing costs and wrote off $0.5 of existing unamortized deferred financing costs, which was included in the loss on extinguishment of debt. The 2018 Term Debt had associated unamortized deferred financing costs of $8.0 at December 31, 2018, which are being amortized at an effective interest rate of 5.3%.

Collateral and Guarantees

The 2018 Senior Secured Credit Facility names Ceridian as the sole borrower and is unconditionally guaranteed by Ceridian’s domestic, wholly-owned financially material restricted subsidiaries, subject to certain customary exceptions. The 2018 Senior Secured Credit Facility is secured by a perfected first priority security interest, subject to certain exceptions (including customer trust funds), in substantially all of Ceridian’s and the subsidiary guarantors’ tangible and intangible assets. The security interest includes a pledge of the capital stock of certain of Ceridian’s direct and indirect material restricted subsidiaries.

Representations, Warranties and Covenants

The documents governing the 2018 Senior Secured Credit Facility contain certain customary representations and warranties. In addition, those documents contain customary covenants restricting Ceridian’s ability and certain of its subsidiaries’ ability to, among other things: incur additional indebtedness, issue disqualified stock and preferred stock; create liens; declare dividends; redeem capital stock; make investments; engage in a materially different line of business; engage in certain mergers, consolidations, acquisitions, asset sales or other fundamental changes; engage in certain transactions with affiliates; enter into certain restrictive agreements; make prepayments on any subordinated indebtedness; modify junior financing documentation; and make changes to our fiscal year.

The 2018 Senior Secured Credit Facility documents contain a requirement that Ceridian maintain a ratio of adjusted first lien debt to Credit Facility EBITDA below specified levels on a quarterly basis; however, such requirement is applicable only if more than 35% of the 2018 Revolving Credit Facility is drawn. As of December 31, 2018, no portion of the 2018 Revolving Credit Facility was drawn.

Events of Default

Events of default under the 2018 Senior Secured Credit Facility documents include, but are not limited to: failure to pay interest, principal and fees or other amounts when due; material breach of any representation or warranty; covenant defaults; cross defaults to other material indebtedness; events of bankruptcy, invalidity of security interests; a change of control; material judgments for payment of money; involuntary acceleration of any debt; and other customary events of default. There were no events of default as of December 31, 2018.

Senior Notes

General Description

On October 1, 2013, Ceridian issued the Senior Notes due 2021 in the principal amount of $475.0.

Using the net proceeds received from the IPO and concurrent private placement, we satisfied and discharged the indenture governing the Senior Notes on April 30, 2018, and the Senior Notes were redeemed on May 30, 2018. In connection with the redemption of the Senior Notes, we recognized a loss on extinguishment of debt of $18.6 within interest expense, net on our consolidated statement of operations during the year ended December 31, 2018.

Interest

The interest rate on the Senior Notes was fixed at 11.0% as of December 31, 2017.

Financing Costs and Issuance Discounts

The Senior Notes had unamortized deferred financing costs of $6.2 at December 31, 2017, which were being amortized at an effective interest rate of 11.45%. On May 30, 2018, the redemption date, the Senior Notes had unamortized deferred financing costs of $5.5, which were written off and included in the loss on extinguishment of debt.

Other Information Relating to Indebtedness

Future Payments and Maturities of Debt

The future principal payments and maturities of our indebtedness are as follows:

Years Ending December 31,	Amount
2019	$ 6.8
2020	6.8
2021	6.8
2022	6.8
2023	6.8
Thereafter	644.3
	$ 678.3

Ceridian may be required to make additional payments on the 2018 Term Debt from various sources, including proceeds of certain indebtedness which may be incurred from time to time, certain asset sales and a certain percentage of cash flow. There is an excess cash flow calculation associated with the 2018 Term Debt commencing with the year ending December 31, 2019.

Fair Value of Debt

Our debt does not trade in active markets. Based on the borrowing rates currently available to us for bank loans with similar terms and average maturities and the limited trades of our debt, the fair value of our indebtedness was estimated to be $649.5 and $1,154.1 as of December 31, 2018, and 2017, respectively.

Other Debt Financing

Ceridian Canada had available at December 31, 2018, and 2017, a committed bank credit facility that provides up to CDN $7.0, for issuance of letters of credit, and it is a discretionary line at the option of the bank. The amounts of letters of credit outstanding under this facility were CDN $7.0 (USD $5.1) and CDN $7.0 (USD $5.6) at December 31, 2018, and 2017, respectively.

10. Employee Benefit Plans

Ceridian maintains numerous benefit plans for current and former employees. As of December 31, 2018, our current active benefit plans include defined contributions plans for substantially all employees. All defined benefit plans have been frozen.

Defined Contribution Plans

Ceridian maintains defined contribution plans that provide retirement benefits to substantially all of our employees. Contributions are based upon the contractual obligations of each respective plan. We recognized expense of $8.4, $7.5, and $7.0 for the years ended December 31, 2018, 2017, and 2016, respectively, with regard to employer contributions to these plans.

Defined Benefit Plans

Ceridian maintains defined benefit pension plans covering certain of our current and former U.S. employees (the U.S. defined benefit plan and nonqualified defined benefit plan, collectively referred to as our “defined benefit plans”), as well as other postretirement benefit plans for certain U.S. retired employees that include heath care and life insurance benefits.

Pension Benefits

The largest defined benefit pension plan (the “U.S. defined benefit plan”) is a defined benefit plan for certain current and former U.S. employees that closed to new participants on January 2, 1995. In 2007, the U.S. defined benefit plan was amended (1) to exclude from further participation any participant or former participant who was not employed by the Parent or another participating employer on January 1, 2008, (2) to discontinue participant contributions, and (3) to freeze the accrual of additional benefits as of December 31, 2007. The measurement date for pension benefit plans is December 31.

Assets of the U.S. defined benefit plan are held in an irrevocable trust and do not include any Ceridian securities. Benefits under this plan are generally calculated on final or career average earnings and years of participation in the plan. Most participating employees were required to permit salary reduction contributions to the plan on their behalf by the employer as a condition of active participation. Retirees and other former employees are inactive participants in this plan and constitute approximately 99% of the plan participants. This plan is funded in accordance with funding requirements under the Employee Retirement Income Security Act of 1974, based on determinations of a third-party consulting actuary. Investment of the U.S. defined benefit plan assets in Ceridian securities is prohibited by the investment policy. We made contributions amounting to $18.5 in 2018 to the U.S. defined benefit plan. The required minimum contributions to the U.S. benefit plan are expected to be $6.4 during 2019.

Ceridian also sponsors a nonqualified supplemental defined benefit plan (the “nonqualified defined benefit plan”), which is unfunded and provides benefits to selected U.S. employees in addition to the U.S. defined benefit plan. We made contributions to the nonqualified defined benefit plan amounting to $1.9 in 2018 and expect to make contributions of $1.7 during 2019.

We account for our defined benefit plans using actuarial models. These models use an attribution approach that generally spreads the effect of individual events over the estimated life expectancy of the employees in such plans. These events include plan amendments and changes in actuarial assumptions such as the expected long-term rate of return on plan assets, discount rate related to the benefit obligation, and mortality rates.

One of the principal components of the net periodic pension calculation is the expected long-term rate of return on plan assets. The required use of expected long-term rate of return on plan assets may result in recognized pension income that is greater or less than the actual returns of those plan assets in any given year. Over time, however, the expected long-term returns are designed to approximate the actual long-term returns that contribute to the settlement of the liability. Differences between actual and expected returns are recognized in the net periodic pension calculation over three years. We use long-term historical actual return information, the mix of investments that comprise plan assets, and future estimates of long-term investment returns by reference to external sources to develop our expected return on plan assets.

The discount rate assumption is used to determine the benefit obligation and the interest portion of the net periodic pension cost (credit) for the following year. We utilize a full yield curve approach for our discount rate assumption by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. As of December 31, 2018, a 25 basis point decrease in the discount rate would result in a $0.1 decrease to expense for all pension plans.

At December 31, 2017, we updated our mortality assumptions utilizing an improvement scale issued by the Society of Actuaries in October 2017, which resulted in a $6.0 reduction in the projected benefit obligation. At December 31, 2018, we updated our mortality assumptions utilizing an improvement scale issued by the Society of Actuaries in October 2018, which resulted in a $1.5 reduction in the projected benefit obligation.

The funded status of defined benefit plans represents the difference between the projected benefit obligation and the plan assets at fair value. The projected benefit obligation of defined benefit plans exceeded the fair value of plan assets by $145.8 and $154.4 at December 31, 2018 and 2017, respectively. We are required to record the unfunded status as a liability in our consolidated balance sheets and recognize the change in the funded status in comprehensive income, net of deferred income taxes.

The projected future payments to participants from defined benefit plans are included in the table below.

Years Ending December 31,	Amount
2019	$ 46.0
2020	45.0
2021	44.0
2022	42.7
2023	41.5
Next five years	$ 183.5

The accompanying tables reflect the combined funded status and net periodic pension cost and combined supporting assumptions for the defined benefit elements of our defined benefit plans.

	Year Ended December 31,	
	2018	2017
Funded Status of Defined Benefit Retirement Plans at Measurement Date		
Change in Projected Benefit Obligation During the Year:		
Projected benefit obligation at beginning of year	$ 593.0	$ 605.9
Service cost	—	—
Interest cost	16.3	17.2
Actuarial (gain) loss	(31.6)	20.3
Benefits paid and plan expenses	(50.3)	(50.4)
Projected benefit obligation at end of year	$ 527.4	$ 593.0
Change in Fair Value of Plan Assets During the Year:		
Plan assets at fair value at beginning of year	438.6	416.4
Actual return on plan assets	(27.1)	49.6
Employer contributions	20.4	23.0
Benefits paid and plan expenses	(50.3)	(50.4)
Plan assets at fair value at end of year	381.6	438.6
Funded status of plans	$ (145.8)	$ (154.4)

	December 31,	
	2018	2017
Amounts recognized in Consolidated Balance Sheets		
Current liability	$ 8.1	$ 20.3
Noncurrent liability	137.7	134.1
Amounts recognized in Accumulated Other Comprehensive Loss		
Accumulated other comprehensive loss, net of tax of $91.5 and $91.5, respectively	$ 158.6	$ 151.4

The other comprehensive (income) loss related to pension benefit plans is as follows:

	Year Ended December 31,		
	2018	2017	2016
Net actuarial loss (gain)	$ 21.4	$ (3.0)	$ 9.5
Amortization of net actuarial loss	(14.2)	(12.8)	(12.5)
Tax expense	—	—	0.1
Other comprehensive income, net of tax	$ 7.2	$ (15.8)	$ (2.9)

	Year Ended December 31,		
	2018	2017	2016
Assumptions Used in Calculations			
Discount rate used to determine net benefit cost	3.25 %	3.63 %	3.76 %
Expected return on plan assets	6.30 %	6.30 %	6.30 %
Discount rate used to determine benefit obligations%	3.92 %	3.25 %	3.63 %

	Year Ended December 31,		
	2018	2017	2016
Net Periodic Pension Cost			
Interest cost	$ 16.3	$ 17.2	$ 18.2
Actuarial loss amortization	14.2	12.8	12.5
Less: Expected return on plan assets	(25.8)	(26.3)	(25.7)
Net periodic pension cost	$ 4.7	$ 3.7	$ 5.0

The accumulated benefit obligation of defined benefit plans was $527.4 and $593.0 as of December 31, 2018 and 2017, respectively.

The amount in accumulated other comprehensive loss that is expected to be recognized as a component of net periodic pension cost during 2019 is a net actuarial loss of $12.7.

Our overall investment strategy for the U.S. defined benefit plan is to achieve a mix of approximately 70% of investments for long term growth, 28% for liability hedging purposes and 2% for near-term benefit payments. Target asset allocations are based upon actuarial and capital market studies performed by experienced outside consultants. The target allocations for the growth assets are 41% fixed income, 26% international equities, 23% domestic equities and 10% hedge funds. Specifically, the target allocation is managed through investments in fixed income securities, equity funds, collective investment funds, partnerships and other investment types. The underlying domestic equity securities include exposure to large/mid-cap companies and small-cap companies. Fixed income securities include corporate debt, mortgage-backed securities, U.S. Treasury and U.S. agency debt, emerging market debt and high yield debt securities. The alternative investment strategy is allocated to investments in hedge funds. The liability hedging portfolio fair value is intended to move in a direction that partially offsets the increase or decrease in the liabilities resulting from changes in interest rates. To achieve this objective, the portfolio will invest in U.S. Treasury strips and various interest rate derivatives contracts. We hire outside managers to manage all assets of the U.S. defined benefit plan.

In determining the fair values of the defined benefit plan’s assets, we calculate the fair value of certain investments using net asset value ("NAV") per share. Collective investment funds are valued at the NAV, which is based on the readily determinable fair value of the underlying securities owned by the fund. The NAV unit price is quoted on a private market or one that is not active. Partnerships consist primarily of a bond fund partnership valued at the NAV as reported by the fund manager and an investment in a venture capital fund valued by an independent appraisal. The NAV represents the value at which the defined benefit plan initiates a transaction. These investments do not have any significant unfunded commitments, conditions or restrictions on redemption, or any other significant restriction on their sale. The hedge fund of funds investment has a quarterly redemption restriction with a 65 day notice period. Plan investments with estimated fair value using NAV were $212.6 and $280.6 as of December 31, 2018 and 2017, respectively.

The fair values of the defined benefit plan's assets at December 31, 2018, by asset category are as follows:

	Total	Level 1	Level 2	Level 3
Investments, at fair value:				
Short-term investments	$ 57.9	$ 57.9	$ —	$ —
Derivatives (a)	—	—	—	—
Government securities	92.4	—	92.4	—
Corporate debt securities	18.7	—	18.7	—
Collective investment funds:				
Domestic equity (b)	80.1	—	80.1	—
Foreign equity (b)	48.5	—	48.5	—
Foreign bond (c)	23.8	—	23.8	—
Partnerships (d)	32.1	—	32.1	—
Hedge fund of funds (e)	28.1	—	28.1	—
Total investments, at fair value	$ 381.6	$ 57.9	$ 323.7	$ —

The fair values of our defined benefit plan's assets at December 31, 2017, by asset category are as follows:

	Total	Level 1	Level 2	Level 3
Investments, at fair value:				
Short-term investments	$ 36.8	$ 36.8	$ —	$ —
Derivatives (a)	14.8	—	14.8	—
Government securities	88.1	—	88.1	—
Corporate debt securities	18.3	—	18.3	—
Collective investment funds:				
Domestic equity (b)	144.4	—	144.4	—
Foreign equity (b)	57.5	—	57.5	—
Foreign bond (c)	41.8	—	41.8	—
Partnerships (d)	35.3	—	35.3	—
Hedge fund of funds (e)	1.6	—	1.6	—
Total investments, at fair value	$ 438.6	$ 36.8	$ 401.8	$ —

(a) Funds in this category invest in futures (2018) and interest rate swaps (2017) to reduce exposure to long-term interest rate risk and to achieve overall investment portfolio objectives. The future derivatives are marked to market and settled in cash on a daily basis.
(b) Funds in this category invest in a diversified portfolio of domestic and/or foreign stocks to achieve a long-term rate of return.
(c) Funds in this category invest in various types of domestic and/or foreign debt securities to achieve a long-term rate of return while preserving capital.
(d) Funds within this category invest in a bond fund partnership which holds various types of domestic debt securities to achieve a long-term rate of return while preserving capital.
(e) Funds within this category invest in various underlying hedge funds and are designed to provide superior risk adjusted returns as well as portfolio diversification relative to traditional asset classes.

Postretirement Benefits

Ceridian provides health care and life insurance benefits for eligible retired employees, including individuals who retired from operations we subsequently sold or discontinued. Ceridian sponsors several health care plans in the United States for both pre- and post-age 65 retirees. The contributions to these plans differ for various groups of retirees and future retirees. Most retirees outside of the United States are covered by governmental health care programs, and our cost is not significant. The measurement date for postretirement benefit plans is December 31.

The discount rate assumption is used to determine the benefit obligation and the interest portion of the net periodic postretirement cost (credit) for the following year. We utilize a full yield curve approach for our discount rate assumption by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. As of December 31, 2018, a 25 basis point decrease in the discount rate would result in an immaterial impact on expense for the postretirement plan.

The accompanying tables present the amounts and changes in the aggregate benefit obligation and the components of net periodic postretirement benefit cost for U.S. plans. We fund these costs as they become due.

	Year Ended December 31,	
	2018	2017
Funded Status of Postretirement Health Care and Life Insurance Plans		
Change in Benefit Obligation:		
At beginning of year	$ 19.6	$ 21.0
Interest cost	0.5	0.5
Participant contributions	0.5	1.1
Actuarial gain	(2.1)	(0.7)
Benefits paid	(1.7)	(2.3)
At end of year	$ 16.8	$ 19.6
Change in Plan Assets:		
At beginning of year	$ —	$ —
Company contributions	1.2	1.2
Participant contributions	0.5	1.1
Benefits paid	(1.7)	(2.3)
At end of year	—	—
Funded Status	$ (16.8)	$ (19.6)

	December 31,	
	2018	2017
Amounts recognized in Consolidated Balance Sheets		
Current liability	$ 2.2	$ 2.4
Noncurrent liability	14.6	17.2
Amounts recognized in Accumulated Other Comprehensive Loss		
Accumulated other comprehensive income, net of tax of $(9.9) and $(9.9), respectively	$ (8.5)	$ (8.9)

The other comprehensive (income) loss related to postretirement benefits is as follows:

	Year Ended December 31,		
	2018	2017	2016
Net actuarial gain	$ (2.1)	$ (0.7)	$ (1.4)
Amortization of net actuarial gain	2.5	2.7	2.6
Tax expense	—	—	—
Other comprehensive loss (income), net of tax	$ 0.4	$ 2.0	$ 1.2

	Year Ended December 31,		
	2018	2017	2016
Net Periodic Postretirement Benefit			
Service cost	$ —	$ —	$ —
Interest cost	0.5	0.5	0.6
Actuarial gain amortization	(2.2)	(2.4)	(2.3)
Prior service credit amortization	(0.3)	(0.3)	(0.3)
Net periodic postretirement benefit gain	$ (2.0)	$ (2.2)	$ (2.0)

The amount in accumulated other comprehensive loss that is expected to be recognized as a component of net periodic postretirement benefit cost during 2019 is a $2.6 gain, comprised of $2.3 of actuarial gain and $0.3 of prior service credit.

The assumed health care cost trend rate represents the rate at which health care costs are assumed to increase. The assumed health care cost trend rate used in measuring the benefit obligation in 2018 is 6.90% for pre-age 65 retirees and 7.70% for post-age 65 retirees. These rates are assumed to decrease gradually to the ultimate health care cost trend rate of 4.5% in 2028 for both groups. A one percent increase in this rate would increase the benefit obligation at December 31, 2018, by $0.7 and would have an immaterial impact on the interest cost for 2018. A one percent decrease in this rate would decrease the benefit obligation at December 31, 2018, by $0.6 and would have an immaterial impact on the interest cost for 2018.

	Year Ended December 31,		
	2018	2017	2016
Assumptions Used in Calculations			
Weighted average discount rate used to determine net periodic postretirement cost (credit)	3.01 %	3.26 %	3.38 %
Weighted average discount rate used to determine benefit obligation at measurement date	3.70 %	3.01 %	3.26 %

The projected future postretirement benefit payments and future receipts from the federal subsidy for each of the next five years and the five-year period following are included in the table below.

Years Ending December 31,	Payments	Receipts
2019	$ 2.2	$ 0.1
2020	1.9	0.1
2021	1.9	—
2022	1.8	—
2023	1.6	0.1
Next five years	$ 6.2	$ 0.1

11. Share-Based Compensation

Prior to November 1, 2013, Ceridian employees participated in a share-based compensation plan of the ultimate parent of Ceridian. The 2007 Stock Incentive Plan (“2007 SIP”) authorized the issuance of up to 10,540,540 shares of common stock of Parent to eligible participants through stock options and stock awards. Eligible participants in the 2007 SIP included the Parent’s directors, employees and consultants.

Effective November 1, 2013, most participants who held stock options under the 2007 SIP converted their options to a newly created option plan, the 2013 Ceridian HCM Holding Inc. Stock Incentive Plan (“2013 SIP”). A small number of participants maintained their stock options in the 2007 SIP. As of December 31, 2018, there were 5,000 stock options outstanding under the 2007 SIP.

The 2013 SIP authorized the issuance of up to 12,500,000 shares of common stock of Ceridian to eligible participants through stock options and other stock awards, which was increased to 15,000,000 on March 20, 2017, by the Board of Directors. Eligible participants in the 2013 HCM SIP include Ceridian’s directors, employees, and consultants.

As part of the 2013 SIP, the Board of Directors approved a stock appreciation rights program that authorized the issuance of up to 600,000 stock appreciation rights. The performance criteria for all stock appreciation rights was met on April 30, 2018, resulting in the vesting and cash settlement of all outstanding stock appreciation rights. We recognized $1.5 of share-based compensation expense related to the vesting of these stock appreciation rights during the year ended December 31, 2018. As of December 31, 2018, there were no remaining outstanding stock appreciation rights.

Stock options awarded under the 2013 SIP vest either annually on a pro rata basis over a four- or five-year period or on a specific date if certain performance criteria are satisfied and certain equity values are attained. In addition, upon termination of service, all vested options must be exercised generally within 90 days after termination, or these awards will be forfeited. The stock option awards have a 10-year contractual term and have an exercise price that is not less than the fair market value of the underlying stock on the date of grant. As of December 31, 2018, there were 9,356,904 stock options and restricted stock units outstanding under the 2013 SIP. We do not intend to grant any additional awards under the 2007 SIP or the 2013 SIP following our IPO.

On April 24, 2018, in connection with the IPO, the Board of Directors approved the Ceridian HCM Holding Inc. 2018 Equity Incentive Plan ("2018 EIP"), which authorizes the issuance of up to 13,500,000 shares of common stock to eligible participants through equity awards. Equity awards under the 2018 EIP vest annually on a pro rata basis, generally over a four-year period. In addition, upon termination of service, all vested awards must be exercised within 90 days after termination, or these awards will be forfeited. The equity awards have a 10-year contractual term and have an exercise price that is not less than the fair market value of the underlying stock on the date of the grant. As of December 31, 2018, there were 5,218,315 stock options and restricted stock units outstanding and 8,281,685 shares available for future grants of equity awards under the 2018 EIP.

On November 9, 2018, the Compensation Committee of the Board of Directors approved the Ceridian HCM Holding Inc. Global Employee Stock Purchase Plan (the "GESPP"), which authorizes the issuance of up to 2,500,000 shares of common stock to eligible participants through purchases via payroll deductions at a discount to the fair market value of our common stock. The GESPP has a 10-year contractual term, and purchases will commence in 2019, subject to approval by the Company's stockholders.

Share-based compensation expense was $24.7, $16.1, and $12.5 for the years ended December 31, 2018, 2017, and 2016, respectively.

Performance-Based Stock Options

Performance-based option activity under the 2007 SIP and the 2013 SIP for the periods presented was as follows:

	Shares	Weighted Average Exercise Price (per share)	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Options outstanding at December 31, 2015	1,283,368	$ 13.46	5.2	$ —
Granted	—	—	—	—
Exercised	—	—	—	—
Forfeited or expired	(52,942)	(13.46)	—	—
Options outstanding at December 31, 2016	1,230,426	$ 13.46	4.2	$ —
Granted	—	—	—	—
Exercised	(167,202) (a)	(13.46)	—	—
Forfeited or expired	(25,077)	(13.46)	—	—
Options outstanding at December 31, 2017	1,038,147	$ 13.46	3.5	$ —
Granted	—	—	—	—
Exercised	(663,412)	(13.46)	—	—
Forfeited or expired	(8,358)	(13.46)	—	—
Options outstanding at December 31, 2018	366,377	$ 13.50	3.1	$ 7.7
Options exercisable at December 31, 2018	366,377	$ 13.50	3.1	$ 7.7

(a) During the year ended December 31, 2017, certain performance-based options were modified and exercised.

The performance criteria for all outstanding performance-based stock options was met on June 7, 2018, resulting in the vesting of all outstanding performance-based stock options on this date. We recognized $4.8 of share-based compensation expense related to the vesting of these performance-based stock options during the year ended December 31, 2018. As of December 31, 2018, there was no share-based compensation expense related to unvested performance-based stock options not yet recognized.

Term-Based Stock Options

Term-based option activity, including stock options under the 2007 SIP, the 2013 SIP and the 2018 EIP, for the periods presented was as follows:

	Shares	Weighted Average Exercise Price (per share)	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in millions)
Options outstanding at December 31, 2015	7,609,658	$ 16.02	7.3	$ 14.1
Granted	2,339,238	16.80	—	—
Exercised	—	—	—	—
Forfeited or expired	(176,626)	(16.54)	—	—
Options outstanding at December 31, 2016	9,772,270	$ 16.20	7.1	$ 9.9
Granted	2,285,981	17.46	—	—
Exercised	(595,464)	(15.14)	—	—
Forfeited or expired	(468,606)	(16.10)	—	—
Options outstanding at December 31, 2017	10,994,181	$ 16.52	6.9	$ 48.8
Granted	5,236,037	23.07	—	—
Exercised	(2,501,983)	(15.26)	—	—
Forfeited or expired	(178,466)	(17.30)	—	—
Options outstanding at December 31, 2018	13,549,769	$ 19.28	7.5	$ 206.8
Options exercisable at December 31, 2018	5,731,295	$ 16.75	5.7	$ 101.7

Other information pertaining to term-based options is as follows:

	Year Ended December 31,		
	2018	2017	2016
Weighted average grant date fair value per share	$ 7.80	$ 5.88	$ 5.74

The fair value of the term-based stock options was estimated at the date of grant using the Black-Scholes option pricing model with the following weighted-average assumptions:

	Year Ended December 31,		
	2018	2017	2016
Expected volatility	25.0 %	30.0 %	30.0 %
Expected dividend rate	—	—	—
Risk-free interest rate	2.9 %	2.3 %	1.9 %

For stock options granted under the 2007 SIP, we used the simplified method to estimate the expected term of the stock options. For stock options granted under the 2013 SIP and 2018 EIP, we estimated an expected term of 7.0 years, based on the vesting period and contractual life. As of December 31, 2018, there was $46.6 of share-based compensation expense related to unvested term-based awards not yet recognized, which is expected to be recognized over a weighted average period of 1.8 years. As of December 31, 2018, there were 5,731,295 vested term-based stock options.

Restricted Stock Units

Restricted stock units ("RSUs") activity, including RSUs under the 2013 SIP and the 2018 EIP, for the periods presented was as follows:

	Shares
RSUs outstanding at December 31, 2015	228,572
Granted	29,800
Shares issued upon vesting of RSUs	(76,192)
Forfeited or canceled	—
RSUs outstanding at December 31, 2016	182,180
Granted	500,000
Shares issued upon vesting of RSUs	(76,190)
Forfeited or canceled	—
RSUs outstanding at December 31, 2017	605,990
Granted	164,073
Shares issued upon vesting of RSUs	(105,990)
Forfeited or canceled	—
RSUs outstanding at December 31, 2018	664,073
RSUs releasable at December 31, 2018	125,000

Other information pertaining to restricted stock units is as follows:

	Year Ended December 31,		
	2018	2017	2016
Weighted average grant date fair value per share	$ 35.55	$ 17.26	$ 17.40

During the year ended December 31, 2018, 230,990 RSUs vested, of which 105,990 shares of common stock were issued, and 125,000 RSUs remained vested and releasable. Restricted stock units generally vest annually over a three- or four-year period. As of December 31, 2018, there was $9.9 of share-based compensation expense related to unvested restricted stock units not yet recognized, which is expected to be recognized over a weighted average period of 2.9 years.

12. Supplementary Data to Statements of Operations

	Year Ended December 31,		
	2018	2017	2016
Other (Income) Expense, Net			
Asset impairment	$ —	$ —	$ 10.4
Environmental reserve	—	—	5.9
Foreign currency translation (income) expense	(2.9)	7.3	(3.4)
Total other (income) expense, net	$ (2.9)	$ 7.3	$ 12.9

Asset Impairment

The sale of the UK Business in 2016 was considered a triggering event to test the trade name intangible asset for impairment. Given the reduction in future revenues of the UK Business previously included in the relief from royalty models used to support the trade name value, we recorded an impairment charge during the year ended December 31, 2016, of $10.2 to the trade name intangible asset. The remaining impairment amount is related to immaterial asset write-offs.

Environmental Reserve

In September 1989, Parent's predecessor entered into an Environmental Matters Agreement ("EMA") with Seagate Technology plc ("Seagate") related to groundwater contamination on a parcel of real estate sold by Parent's predecessor to Seagate. Ceridian is now responsible for the EMA. The EMA requires expense sharing between Ceridian and Seagate for the remediation of groundwater contamination up to a certain limit. Based on additional information obtained with respect to more stringent remediation requirements, we updated our estimate of the potential liability related to the EMA, resulting in an increase to the environmental reserve of $5.9 during the year ended December 31, 2016, which represented the limit under the EMA. Please refer to Note 15, "Commitments and Contingencies," for further discussion of our environmental liabilities.

Foreign Currency Translation (Income) Expense

We had foreign currency translation income of $2.9 for the year ended December 31, 2018. The foreign currency translation income for the year ended December 31, 2018, was primarily related to foreign currency remeasurement gains resulting from an intercompany payable of a U.S. operating subsidiary which is repaid in Canadian dollars. This intercompany payable was repaid in the second quarter of 2018.

We incurred foreign currency translation expense of $7.3 for the year ended December 31, 2017. The foreign currency translation expense for the year ended December 31, 2017, was primarily related to foreign currency remeasurement losses resulting from an intercompany payable of a U.S. operating subsidiary which is repaid in Canadian dollars.

We had foreign currency translation income of $3.4 for the year ended December 31, 2016. The foreign currency translation income for the year ended December 31, 2016, was primarily related to foreign currency remeasurement gains on intercompany receivables and payables between international subsidiaries that were settled in early 2017.

13. Accumulated Other Comprehensive Income (Loss)

The components of accumulated other comprehensive income (loss) were as follows:

	Foreign Currency Translation Adjustment	Unrealized Gain (Loss) from Invested Customer Trust Funds	Pension Liability Adjustment	Total
Balance as of December 31, 2016	$ (199.9)	$ 4.7	$ (156.3)	$ (351.5)
Other comprehensive income (loss) before income taxes and reclassifications	39.3	(17.3)	3.7	25.7
Income tax benefit	—	3.6	—	3.6
Reclassifications to earnings	—	—	10.1	10.1
Other comprehensive income (loss) attributable to Ceridian	39.3	(13.7)	13.8	39.4
Balance as of December 31, 2017	(160.6)	(9.0)	(142.5)	(312.1)
Other comprehensive loss before income taxes and reclassifications	(47.4)	(10.5)	(19.3)	(77.2)
Income tax benefit	—	1.2	—	1.2
Reclassifications to earnings	—	—	11.7	11.7
Other comprehensive (loss) income attributable to Ceridian	(47.4)	(9.3)	(7.6)	(64.3)
LifeWorks Disposition	0.7	—	—	0.7
Balance as of December 31, 2018	$ (207.3)	$ (18.3)	$ (150.1)	$ (375.7)

14. Income Taxes

	Year Ended December 31,		
	2018	2017	2016
Components of Earnings and Taxes from Operations			
(Loss) Income Before Income Taxes:			
U.S.	$ (73.2)	$ (83.4)	$ (163.4)
International	42.8	29.3	64.8
Total	$ (30.4)	$ (54.1)	$ (98.6)
Income Tax Expense (Benefit):			
Current:			
U.S.	$ 3.8	$ (0.3)	$ (0.4)
State and local	0.3	0.1	0.2
International	20.4	12.9	15.2
Total current income tax expense	24.5	12.7	15.0
Deferred:			
U.S.	(14.4)	(60.3)	(15.7)
State and local	(2.2)	0.8	(0.1)
International	(0.2)	(2.8)	7.5
Total deferred income tax (benefit) expense	(16.8)	(62.3)	(8.3)
Total income tax expense (benefit)	$ 7.7	$ (49.6)	$ 6.7

	Year Ended December 31,		
	2018	2017	2016
Effective Rate Reconciliation			
U.S. statutory rate%	(21.0) %	(35.0) %	(35.0) %
Change in valuation allowance	10.5	(116.9)	(5.4)
State income taxes, net of federal benefit	(27.9)	(5.2)	(1.2)
Share-based compensation	(8.8)	8.3	2.6
International tax rate differential	11.5	(6.7)	(6.4)
Foreign dividend income	17.8	48.1	1.0
Foreign capital gain income	6.3	—	—
Unremitted foreign earnings	3.6	(35.6)	22.0
Global intangible low-taxed income	20.4	—	—
Base erosion tax	12.5	—	—
Reserve for tax contingencies	0.3	—	(0.2)
Expiration of un-utilized tax credits	—	1.5	—
Unrealized gain on investments	—	—	30.7
Change in tax rate	(5.2)	52.4	—
Other	5.3	(2.6)	(1.5)
Income tax provision%	25.3 %	(91.7) %	6.6 %

Our income tax provision represents federal, state, and international taxes on our income recognized for financial statement purposes and includes the effects of temporary differences between financial statement income and income recognized for tax return purposes. Deferred tax assets and liabilities are recorded for temporary differences between the financial reporting basis and the tax basis of assets and liabilities as adjusted for the expected benefits of utilizing net operating loss carryforwards. We record a valuation allowance to reduce our deferred tax assets to reflect the net deferred tax assets that we believe will be realized. In assessing the likelihood that we will be able to recover our deferred tax assets and the need for a valuation allowance, we consider all available evidence, both positive and negative, including historical levels of pre-tax book income, expiration of net operating losses, expectations and risks associated with estimates of future taxable income and ongoing prudent and feasible tax planning strategies, as well as current tax laws. As of December 31, 2018, and December 31, 2017, we continue to record a full valuation allowance against our domestic deferred tax assets that are not offset by the reversal of deferred tax liabilities. In the future, if it is determined that we no longer have a requirement to record a valuation allowance against all or a portion of our deferred tax assets, the release of the valuation allowance would have a positive impact on our income tax provision.

On December 22, 2017, the Tax Cut and Jobs Act legislation (the "Tax Act") was signed into law. The Tax Act made broad and complex changes to the U.S. tax code including: (a) lower U.S. federal corporate income tax rate from 35% to 21% effective January 1, 2018, (b) accelerated expensing of qualified capital investments for a specific period, and (c) a transition from a worldwide tax system to a territorial tax system.

ASC 740, Income Taxes, requires a company to record the effects of a tax law change in the period of enactment; however, shortly after enactment of the Tax Act, the SEC staff issued Staff Accounting Bulletin ("SAB") 118, which allows a company to record a provisional amount when it does not have the necessary information available to complete its accounting for the change in the tax law. The FASB subsequently issued ASU No. 2018-05 to codify SAB 118 by amending ASC 740. ASU No. 2018-05 continues to allow a company to record a provisional amount when it does not have the necessary information available, prepared, or analyzed in reasonable detail to complete its accounting for the change in the tax law. The measurement period ends when the company has obtained, prepared, and analyzed the information necessary to finalize its accounting, but cannot extend beyond one year.

We have completed our analysis of the income tax effects of the Tax Act. In January and April of 2018, the Internal Revenue Service (the "IRS") issued guidance that provided additional clarification on certain aspects of the transition tax calculation. The application of the additional IRS guidance resulted in a $16.2 increase in includible untaxed foreign earnings, which resulted in a $5.7 increase in tax expense. This increase was offset by the tax benefit of the utilization of $16.2 of net operating loss carryover. The overall impact to tax expense in the year ended December 31, 2018, was zero.

Other provisions introduced by the Tax Act that had a significant impact on our current year tax provision were the provisions introducing the Global Intangible Low-Taxed Income ("GILTI") and the Base Erosion and Anti-Abuse Tax ("BEAT"). The GILTI resulted in an increase of $29.7 in taxable income, which resulted in a $6.6 increase in tax expense. This tax increase was offset by the tax benefit of the utilization of $29.7 of net operating loss carryover. The BEAT resulted in an increase of $3.8 in tax expense in the year ended December 31, 2018.

	December 31,	
	2018	2017
Tax Effect of Items That Comprise a Significant Portion of the Net Deferred Tax Asset and Deferred Tax Liability		
Deferred Tax Asset:		
Employment related accruals	$ 51.2	$ 51.0
Foreign tax credit carryover and other credit carryovers	0.3	0.2
Net operating loss carryforwards	78.2	100.3
Total gross deferred tax asset	129.7	151.5
Valuation allowance	(93.3)	(90.7)
Total deferred tax asset	$ 36.4	$ 60.8
Deferred Tax Liability:		
Intangibles	$ (62.1)	$ (65.7)
Unremitted foreign earnings	—	—
Unrealized gain on investment	—	(22.2)
Other	(5.8)	(5.0)
Total deferred tax liability	(67.9)	(92.9)
Net deferred tax liability	$ (31.5)	$ (32.1)

	December 31,	
	2018	2017
Net Deferred Tax by Geography		
U.S.	$ (19.8)	$ (18.4)
International	(11.7)	(13.7)
Total	$ (31.5)	$ (32.1)

As of December 31, 2018, we had federal, state, and foreign net operating loss carryovers, which will reduce future taxable income when utilized. Approximately $47.2 in net federal tax benefit is available from the loss carryovers and an additional $0.3 is available in federal tax credit carryovers. The state loss carryovers will result in state tax benefit of approximately $31.0 when utilized. The federal net operating loss tax benefit will begin to expire in 2031, and state net operating loss carryovers will begin to expire in 2019. The federal credit carryovers are composed of foreign tax credits, which will begin to expire in 2019; research credits, which will begin to expire in 2027; and alternative minimum tax credits, which have no expiration date.

As of December 31, 2018, we carried a full valuation allowance against our domestic net deferred tax asset ("DTA") position after excluding a portion of the deferred tax liability for long-lived, non-amortizable taxable temporary differences. We periodically re-assess the likelihood that DTA reported in the accompanying consolidated financial statements will be recovered from future taxable income.

We have re-evaluated the likelihood of recovering our net DTA, and we have determined that it is still more likely than not that the tax benefit associated with a portion of the DTA will not be realized. We assessed the available positive and negative evidence to estimate if sufficient future taxable income will be generated to use the existing net DTAs not already identified as requiring a valuation allowance. The cumulative loss incurred over the three-year period ended December 31, 2018, is a significant piece of objective negative evidence. Such objective evidence limits the ability to consider other subjective evidence, such as our projections for positive future growth. As of December 31, 2018, we had a total valuation allowance of $93.3. The amount of the DTA considered realizable could be adjusted in the future if objective negative evidence in the form of cumulative losses is no longer present, and additional weight may be given to subjective evidence, such as our projections for growth.

We file income tax returns in the U.S. federal jurisdiction, and various states and foreign jurisdictions. With a few exceptions, we are no longer subject to U.S. federal, state and local, or non-U.S. income tax examinations by tax authorities for years before 2014.

The following table summarizes the activity for unrecognized tax benefits:

	Year Ended December 31,	
	2018	**2017**
Federal, State and Foreign Tax		
Beginning unrecognized tax balance	$ 1.5	$ 1.4
Increase prior period positions	0.1	0.2
Increase current period positions	0.2	0.1
Decrease prior period positions	(0.1)	—
Decrease current period positions	(0.3)	—
Statutes expiring	(0.1)	(0.2)
Ending unrecognized tax benefits	$ 1.3	$ 1.5

The total amount of unrecognized tax benefits as of December 31, 2018, was $1.3 including $0.2 of accrued interest and penalty. Of the total amount of unrecognized tax benefits, $1.3 represents the amount that, if recognized, would impact our effective income tax rate as of December 31, 2018. It is expected that the amount of unrecognized tax benefits will change in the next 12 months; however, we cannot reasonably estimate the amount of the change. We do not expect the change to have a significant impact on our results of operations or financial condition.

The Tax Act imposed a mandatory transition tax on the unremitted earnings of our international subsidiaries and generally eliminated US taxes on foreign subsidiary distributions for years beginning after December 31, 2017. As of December 31, 2018, we have $298.5 of unremitted foreign earnings. We consider $174.6 of the unremitted earnings to be indefinitely reinvested. For the portion of the unremitted earnings not considered indefinitely reinvested, $123.9, we have provided a deferred tax liability of $6.2, which represents the expected withholding tax cost of repatriating such earnings. In the event the portion of the unremitted earnings considered to be indefinitely reinvested were repatriated, we would incur a withholding tax expense of approximately $8.7.

15. Commitments and Contingencies

Leasing

We conduct substantially all of our operations in leased facilities. Most of our leases contain renewal options and require payments for taxes, insurance and maintenance. We recognize rent holidays, including the time period during which we have access to the property for construction of improvements, construction allowances and escalating rent provisions on a straight-line basis over the term of the lease.

Substantially all of our leasing arrangements for equipment and facilities are operating leases and the rental payments under these leases are charged to operations as incurred. The amounts in the accompanying tables do not include capital lease obligations recorded as liabilities.

Our rental expense and sublease income were as follows:

	Year Ended December 31,		
	2018	2017	2016
Rental Expense, Net			
Rental expense	$ 17.6	$ 17.0	$ 16.8
Sublease rental income	(4.9)	(4.2)	(3.5)
Net rental expense	$ 12.7	$ 12.8	$ 13.3

Our future minimum noncancellable lease payments on existing operating leases at December 31, 2018, which have an initial term of more than one year, are as follows:

Years Ending December 31,	Amount
2019	$ 13.6
2020	11.8
2021	7.7
2022	7.4
2023	6.2
Thereafter	9.4
Total (a)	$ 56.1

(a) Minimum payments have not been reduced by minimum sublease rentals of $13.1 due in the future under noncancellable subleases.

Environmental Matters

We accrue for losses associated with environmental remediation obligations when such losses are probable and reasonably estimable. Accruals for estimated losses from environmental remediation obligations generally are recognized no later than completion of the remedial feasibility study. Such accruals are adjusted as further information develops or circumstances change. Costs of future expenditures for environmental remediation obligations are not discounted to their present value.

In February 1988, Parent’s predecessor entered into an arrangement with Northern Engraving Corporation (“NEC”) and the Minnesota Pollution Control Agency (“MPCA”) in relation to groundwater contamination on a parcel of real estate sold by Parent’s predecessor to NEC. Ceridian is now responsible for the arrangement with NEC and the MPCA. The arrangement requires expense sharing between Ceridian and NEC for the remediation of groundwater contamination.

In September 1989, Parent’s predecessor entered into an EMA with Seagate related to groundwater contamination on a parcel of real estate sold by Parent’s predecessor to Seagate. Ceridian is now responsible for the EMA. The EMA requires expense sharing between Ceridian and Seagate for the remediation of groundwater contamination up to a certain limit. Based on additional information obtained with respect to more stringent remediation requirements, we updated our estimate of the potential liability related to the EMA, resulting in an increase to the environmental reserve of $5.9 for the year ended December 31, 2016, which represented the limit under the EMA.

We have recognized an undiscounted liability of approximately $5.2 and $5.4 as of December 31, 2018 and 2017, respectively, in our consolidated balance sheets to comply with the NEC arrangement and EMA described above. The ultimate cost, however, will depend on the extent of continued monitoring activities as these projects progress. Please refer to Note 12, “Supplementary Data to Statements of Operations,” for further discussion of changes in the liability during the year ended December 31, 2016.

Legal Matters

We are subject to claims and a number of judicial and administrative proceedings considered normal in the course of our current and past operations, including employment-related disputes, contract disputes, disputes with our competitors, intellectual property disputes, government audits and proceedings, customer disputes, and tort claims. In some proceedings, the claimant seeks damages as well as other relief, which, if granted, would require substantial expenditures on our part.

Our general terms and conditions in customer contracts frequently include a provision indicating we will indemnify and hold our customers harmless from and against any and all claims alleging that the services and materials furnished by us violate any third party’s patent, trade secret, copyright or other intellectual property right. We are not aware of any material pending litigation concerning these indemnifications.

Some of these matters raise difficult and complex factual and legal issues and are subject to many uncertainties, including the facts and circumstances of each particular action, and the jurisdiction, forum, and law under which each action is proceeding. Because of these complexities, final disposition of some of these proceedings may not occur for several years. As such, we are not always able to estimate the amount of our possible future liabilities, if any.

There can be no certainty that we may not ultimately incur charges in excess of presently established or future financial accruals or insurance coverage. Although occasional adverse decisions or settlements may occur, it is management’s opinion that the final disposition of these proceedings will not, considering the merits of the claims and available resources or reserves and insurance, and based upon the facts and circumstances currently known, have a material adverse effect on our financial position or results of operations.

16. Related Party Transactions

Management Agreements

Prior to our IPO, Ceridian was party to management agreements with affiliates of our Sponsors, Fidelity National Financial, Inc. (“FNF”) and THL Managers VI, LLC (“THLM”). FNF assigned its management agreement to Cannae in November 2017. Pursuant to these management agreements, Cannae and THLM each, respectively, agreed to provide the Company with financial advisory, strategic, and general oversight services. These management agreements provided that we pay annual management fees to each of Cannae and THLM in an amount equal to the greater of (a) $0.9, or (b) 0.5 percent of Adjusted EBITDA. Adjusted EBITDA, for purposes of the management agreements, is EBITDA as defined in the 2014 Senior Secured Credit Facility, further adjusted to exclude the payments made pursuant to the management agreements and certain stock options or other equity compensation.

In April 2018, the management agreements terminated upon consummation of our IPO. Upon termination, the management agreements provided that we pay a termination fee equal to the net present value of the management fee for a seven-year period, which was $11.3.

We recorded a management fee expense in selling, general, and administrative expense of $12.0, $1.9, and $5.0 for the years ended December 31, 2018, 2017, and 2016, respectively, related to these management agreements. The expense for the year ended December 31, 2016, included transaction advisory fees of $3.0 related to the issuance of the senior convertible participating preferred stock. Please refer to Note 18, “Capital Stock,” for further discussion of this transaction.

Indebtedness

Prior to its split-off from FNF, Cannae was an affiliate of FNF. FNF and its subsidiaries owned $24.0 of the Senior Notes as of December 31, 2017, and 2016, respectively. Based on this ownership, $1.3, $3.2, and $3.2 in interest payments were made to affiliates of Cannae during the years ended December 31, 2018, 2017, and 2016, respectively. The affiliates of Cannae conducted the debt transactions through third parties in the ordinary course of their business and not directly with us. Following Cannae’s split-off from FNF, FNF retained ownership of the Senior Notes.

Service and Vendor Related Agreements

Ceridian is a party to a service agreement with CompuCom Systems, Inc. ("CompuCom"), an investment portfolio company of THL Partners. Pursuant to the service agreement, CompuCom agrees to provide us with service desk and desk side support services. Pursuant to this arrangement, we made payments to CompuCom totaling $1.8, $3.1, and $5.0 during the years ended December 31, 2018, 2017, and 2016, respectively.

Other Transactions

On July 23, 2018, Ronald F. Clarke was appointed to our Board of Directors. Mr. Clarke has been the chief executive officer of FleetCor Technologies Inc. ("FleetCor Technologies") since August 2000 and its chairman of the board of directors since March 2003. We provide services to FleetCor Technologies or one of its wholly owned affiliates through certain commercial arrangements entered into in the ordinary course of business, which include provision of Dayforce HCM services, reseller or referral arrangements whereby we resell or refer FleetCor Technologies services to its customers, and other administrative services. For these services, we have recorded revenue of $2.3 and $2.9 for the years ended December 31, 2018, and 2017, respectively. We are also a corporate charge card customer of FleetCor Technologies. FleetCor Technologies receives a fee from the merchants from whom purchases are made on the FleetCor Technologies corporate charge card by us. In connection with charge card purchases made by us, FleetCor Technologies has provided us with rebates of approximately $0.2 for year ended December 31, 2017.

We provide Dayforce and related services to The Stronach Group, for which we recorded revenue of $0.3 and $0.2 for the years ended December 31, 2018, and 2016, respectively. Alon Ossip, the brother of David Ossip, was the chief executive officer, and is currently a minority shareholder, of The Stronach Group.

We provide payroll-related tax filing services to FNF for which we recorded revenue of $0.4, $0.5, and $0.3 for the years ended December 31, 2018, 2017, and 2016, respectively.

We provide Dayforce and related services to certain investment portfolio companies of THLM and Cannae. We recorded revenue of $1.8 million from American Blue Ribbon Holdings, LLC; $0.5 million from Essex Bargain Hunt Superstores; $0.5 million from Guaranteed Rate; $0.3 million from Phillips Feed Services; and $0.3 million from System One Holdings LLC for the year ended December 31, 2018.

17. Segments and Financial Data by Solution and Geographic Area

Segments

After consideration of the LifeWorks Disposition, management has concluded that we have one operating and reportable segment. This conclusion aligns with how management monitors operating performance, allocates resources, and deploys capital. Please refer to Note 3, "Discontinued Operations," for further discussion of the LifeWorks Disposition.

Our Solutions

We categorize our solutions into two categories: Cloud and Bureau offerings.

Cloud revenue is generated from HCM solutions that are delivered via two cloud offerings: Dayforce and Powerpay. The Dayforce offering is differentiated from our market competition as being a single application that offers a comprehensive range of functionality, including global HR, payroll, benefits, workforce management, and talent management on web and native iOS and Android platforms. Dayforce provides continuous real-time calculations across all modules to enable, for example, payroll administrators access to data through the entire pay period, and managers access to real-time data to optimize work schedules. Dayforce revenue is primarily generated from monthly recurring fees charged on a PEPM basis, generally one-month in advance of service. We also provide outsourced human resource solutions to certain of our Dayforce customers, which are tailored to meet their individual needs, and entail performing the duties of a customer's human resources department, including payroll processing, time and labor management, performance management, and recruiting, as needed. Also included within Dayforce revenue is implementation, staging, and other professional services revenue; revenues from the sale, rental, and maintenance of time clocks; and billable travel expenses. The Powerpay offering is our solution designed primarily for small market Canadian customers. The typical Powerpay customer has fewer than 20 employees, and the majority of the revenue is generated from recurring fees charged on a per-employee, per-process basis. Typical processes include the customer's payroll runs, year-end tax packages, and delivery of customers' remittance advices or checks. In addition to the direct revenue earned from the Dayforce and Powerpay offerings, Cloud revenue also includes investment income generated from holding Cloud customer funds in trust before funds are remitted to taxing authorities, Cloud customer employees, or other third parties; and revenue from the sale of third party services.

Bureau revenue is generated primarily from HCM solutions delivered via a service-bureau model. These solutions are delivered via three primary service lines: payroll, payroll-related tax filing services, and outsourced human resource solutions. Revenue from payroll services is generated from recurring fees charged on a per-process basis. Typical processes include the customer's payroll runs, year-end tax packages, and delivery of customers' remittance advices or checks. In addition to customers who use our payroll services, certain customers use our tax filing services on a stand-alone basis. Our outsourced human resource solutions are tailored to meet the needs of individual customers, and entail our contracting to perform many of the duties of a customer's human resources department, including payroll processing, time and labor management, performance management, and recruiting. We also perform individual services for customers, such as check printing, wage attachment and disbursement, and Affordable Care Act ("ACA") management. Additional items included in Bureau revenue are custom professional services revenue; investment income generated from holding Bureau customer funds in trust before funds are remitted to taxing authorities, Bureau customer employees, or other third parties; consulting services related to Bureau offerings; and revenue from the sale of third party services.

Revenue by solution is as follows:

	Year Ended December 31,		
	2018	2017	2016
Cloud	$ 534.3	$ 404.3	$ 297.8
Bureau	212.1	266.5	325.6
Total revenue	$ 746.4	$ 670.8	$ 623.4

Geographic and Customer Information

No single customer accounts for 1% or more of our consolidated revenue for any of the periods presented.

Revenue by country is as follows. The country in which the revenue is recorded is determined by the legal entity with which the customer has contracted.

	Year Ended December 31,		
	2018	2017	2016
United States	$ 518.5	$ 465.2	$ 432.7
Canada	224.7	203.4	189.0
Other	3.2	2.2	1.7
Total revenue	$ 746.4	$ 670.8	$ 623.4

Long-lived assets by country is as follows:

	December 31,	
	2018	2017
United States	$ 1,778.7	$ 1,786.1
Canada	438.1	480.6
Other	2.5	2.8
Total long-lived assets	$ 2,219.3	$ 2,269.5

18. Capital Stock

As of October 1, 2013, Ceridian was authorized to issue 100,000,000 shares of common stock with a par value of $0.01 per share and 70,000,000 shares of junior convertible participating preferred stock (“Junior Preferred Stock”) with a par value of $0.01 per share. On March 30, 2016, the Board of Directors increased the number of authorized shares of common stock to 150,000,000 and authorized 70,000,000 shares of senior convertible participating preferred stock (“Senior Preferred Stock”) with a par value of $0.01 per share. In April 2018, the Board of Directors increased the number of authorized shares of common stock to 500,000,000 and decreased the number of authorized shares of preferred stock to 10,000,000.

On March 30, 2016, we entered into an equity financing transaction with Ceridian Holding II. Ceridian Holding II raised $150.2 from our Sponsors, certain of their co-investors, and certain other existing stockholders of Ceridian Holding. Of such amount, $75.0 was contributed by Ceridian Holding II to Ceridian on March 30, 2016. The remaining $75.2 was committed to be funded to Ceridian HCM Holding Inc. within the following three years, and was recorded within equity as a receivable from stockholder. During the second quarter of 2017, the board of directors of Ceridian Holding II approved the funding of the remaining $75.2, which was transferred to Ceridian HCM Holding Inc. on June 28, 2017.

In connection therewith, Ceridian issued $150.2 of the Senior Preferred Stock to Ceridian Holding II. The Senior Preferred Stock was senior in priority to all outstanding equity securities of Ceridian and had the rights to be converted to common stock at the option of the stockholder for a number of shares based on the conversion price. The initial conversion price was equal to the original issuance price and was subject to adjustment for certain events of dilution, including common stock dividends, stock splits, mergers and reorganizations, and the initial public offering price upon such event. In the event of an initial public offering, the Senior Preferred Stock would be automatically converted to common stock. The Senior Preferred Stock received a 12.5% annual dividend (not cash paying). In the event of liquidation, the Senior Preferred Stock had a liquidation preference equal to 1.5 times the initial face amount plus any accrued but unpaid dividends.

The Junior Preferred Stock provided holders with the equivalent number of votes on an “as converted” basis. The Junior Preferred Stock had the rights to be converted to common stock at the option of the holder for a number of shares based on the conversion price. The initial conversion price was equal to the original issuance price adjusted for certain events of dilution other than shares issued to employees and directors pursuant to the 2013 SIP and certain other instances of issuances of shares of common stock. In the event of an initial public offering, the Junior Preferred Stock would be automatically converted to common stock. In the event of liquidation, Junior Preferred Stock received the greater of up to $13.50 per share of preferred stock (adjusted for dividend, stock split, combination or other similar recapitalization with respect to the convertible participating preferred stock) or a pro rata price per share of all common stock if converted in a liquidation event, subject to the total amount of net assets available in liquidation.

On April 30, 2018, we completed our IPO, in which we issued a total of 24,150,000 shares of common stock at a public offering price of $22.00. Concurrently with our IPO, we issued an additional 4,545,455 shares of our common stock in a private placement at $22.00 per share. Concurrent with the IPO and private placement, all outstanding Junior and Senior Preferred Stock were automatically converted into common shares pursuant to their terms.

As of December 31, 2018, there were 139,453,710 shares of common stock issued and outstanding. As of December 31, 2017, there were 65,285,962 shares of common stock issued and outstanding, 16,802,144 shares of Senior Preferred Stock issued and outstanding, and 58,244,308 shares of Junior Preferred Stock issued and outstanding.

Holders of our common stock are entitled to the rights set forth as follows. Directors are elected by a plurality of the votes entitled to be cast except as set forth below with respect to directors to be elected by the holders of common stock. Our stockholders do not have cumulative voting rights. Except as otherwise provided in our third amended and restated certificate of incorporation or as required by law, all matters to be voted on by our stockholders other than matters relating to the elections and removal of directors must be approved by a majority of the shares present in person or by proxy at the meeting and entitled to vote on the subject matter or by a written resolution of the stockholders representing the number of affirmative votes required for such matter at a meeting.

Our stockholders have no preemptive or other rights to subscribe for additional shares. All holders of our common stock are entitled to share equally on a share-for-share basis in any assets available for distribution to common stockholders upon our liquidation, dissolution or winding up. All outstanding shares are validly issued, fully paid and nonassessable.

19. Net Loss per Share

We compute net loss per share of common stock using the treasury stock method.

Basic net loss per share is computed by dividing net loss attributable to Ceridian available to common stockholders by the weighted-average number of shares of common stock outstanding during the period.

For the calculation of diluted net loss per share, net loss per share is adjusted by the effect of dilutive securities, including awards under our share-based compensation plans. Diluted net loss per share is computed by dividing the resulting net loss attributable to Ceridian available to common stockholders by the weighted-average number of fully diluted common shares outstanding. In the years ended December 31, 2018, 2017, and 2016, our potential dilutive shares, such as stock options, RSUs, and shares of senior and junior convertible preferred stock were not included in the computation of diluted net loss per share as the effect of including these shares in the calculation would have been anti-dilutive.

The numerators and denominators of the basic and diluted net loss per share computations are calculated as follows:

	Year Ended December 31,		
	2018	2017	2016
Numerator:			
Net loss attributable to Ceridian	$ (63.4)	$ (9.2)	$ (92.9)
Less: (Loss) income from discontinued operations	(25.8)	(6.0)	12.5
Net loss from continuing operations attributable to Ceridian	(37.6)	(3.2)	(105.4)
Less: Senior Preferred Stock dividends declared	7.7	20.5	14.1
Net loss from continuing operations attributable to Ceridian available to common stockholders	$ (45.3)	$ (23.7)	$ (119.5)
Denominator:			
Weighted-average shares outstanding-basic	114,049,682	65,204,960	64,988,338
Weighted-average shares outstanding-diluted	114,049,682	65,204,960	64,988,338
Net loss per share from continuing operations attributable to Ceridian-basic and diluted	$ (0.40)	$ (0.36)	$ (1.84)
Net (loss) income per share from discontinued operations-basic and diluted	$ (0.22)	$ (0.10)	$ 0.19
Net loss per share attributable to Ceridian-basic and diluted	$ (0.62)	$ (0.46)	$ (1.65)

The following potentially dilutive shares were excluded from the calculation of diluted net loss per share because their effect would have been anti-dilutive:

	Year Ended December 31,		
	2018	2017	2016
Senior convertible preferred stock	5,523,993	16,802,144	12,601,608
Junior convertible preferred stock	19,148,814	58,244,308	58,244,308
Stock options	14,227,487	10,201,105	8,423,124
RSUs	587,283	451,190	155,692