

2021 Annual Report and Form 10-K

DEAR FELLOW SHAREHOLDERS:

I hope that you and your families are staying safe and healthy. 2021 was a significant year in the history of DFIN. In October, we celebrated our fifth anniversary as an independent company. Over the five-year period, we have made tremendous progress in transforming our company and how we deliver value to our clients. We have developed and introduced advanced technology solutions to the market, accelerated our sales growth of software solutions and improved our balance sheet. Further, we are tracking significantly ahead of our original plan that underpins our "44 in 24" goal – that is software solutions comprising 44% of total sales by 2024 and importantly, delivering financial results consistent with such an improved sales mix.

2021 represented another positive proof point in our transformational journey. For the first time in the Company's history, software solutions sales exceeded print and distribution sales, a milestone and one we expect to continue moving forward. It is clear that our transformation efforts have enabled DFIN to become more profitable, focused, and resilient.

In 2021 we delivered record software solutions net sales, net earnings, and operating cash flow; creating value for each of our three critical stakeholders: clients, employees, and shareholders.

Increased value to our clients:

- Introduced new ActiveDisclosure, a cloud-native software solution purpose-built for SEC reporting and Total Compliance Management, a digital content management and distribution software, to help our clients navigate regulatory and technological changes.
- Formed strategic partnerships with leading SaaS providers including NetSuite, Diligent, Tipalti and others to expand our software offerings and serve our clients in new ways.
- Completed the acquisition of Guardum, a leading data security and privacy software provider that helps companies locate, secure, and control data.

Increased value to our employees:

- · Launched a Diversity, Equity and Inclusion council and improved diversity representation.
- Introduced "My Total Wellbeing", a program focused on "My Money, My Time, My Health, and My Career" that provides our employees with the tools and resources to make their experience at DFIN more meaningful.
- Recognized as a "Best Place to Work" by BuiltIn Chicago for the third year in a row and became a "Great Place to Work"-certified company.

Increased value to our shareholders:

- Delivered a 178% annual return in 2021, significantly above benchmark returns.
- Repurchased approximately 1 million shares of common stock in 2021 and repurchased approximately 2.1 million shares in the past two years.
- Authorized a new \$150 million common stock repurchase program in early 2022 that expires December 31, 2023.

I am proud of what we have accomplished over the last five years, and I am even more enthusiastic about the future, as the opportunities ahead exceed what we have accomplished thus far. We will continue to focus on accelerating software growth and pursuing initiatives in support of our strategy to be the market-leading provider of regulatory and compliance solutions. We have a significant opportunity to create additional value for our clients, employees, and shareholders.

Thank you for your feedback, ideas, and support, as well as your investment. We look forward to continuing to share our successes with you for years to come.

Thank you,

Dan Leib Chief Executive Officer

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

	CCTION 13 OR 15(d)	OF THE SECURI	TIES EXCHANGE ACT OF
For the fis	cal year ended Decem OR	ber 31, 2021	
☐ TRANSITION REPORT PURSUANT TO OF 1934	O SECTION 13 OR 15	5(d) OF THE SECU	URITIES EXCHANGE ACT
	nsition period from mission file number 1	-37728	
Donnelley F	inancial S e of registrant as specified		Inc.
Delaware			29638
(State or other jurisdiction of			Cmployer
incorporation or organization)	oic		ation No.) 601
35 West Wacker Drive, Chicago, Illin (Address of principal executive offices)	OIS		Code)
Registrant's telephone			
	red pursuant to Section	, ,	
Title of each class	Trading Symbol	Name of each ex	schange on which registered
Common Stock (Par Value \$0.01)	DFIN		NYSE
Securities registered	l pursuant to Section	12(g) of the Act: N	one
Indicated by check mark if the registrant is a well-kn	_	_	
Indicate by check mark if the registrant is not require			
Indicate by check mark whether the registrant (1) Exchange Act of 1934 during the preceding 12 months (c) has been subject to such filing requirements for the property of the	or for such shorter period th	nat the registrant was re	
Indicate by check mark whether the registrant has pursuant to Rule 405 of Regulation S-T (§232.405 of this registrant was required to submit such files). Yes 🗸	s chapter) during the preced		
Indicate by check mark whether the registrant is a company or an emerging growth company. See the defin and "emerging growth company" in Rule 12b-2 of the Ex	itions of "large accelerated		
Large accelerated filer $\ \ \ \ \ \ \ \ \ \ \ \ \ $	Non-acc	elerated filer	Smaller reporting company
If an emerging growth company, indicate by chec complying with any new or revised financial accounting			
Indicate by check mark whether the registrant has of its internal control over financial reporting under Secti accounting firm that prepared or issues its audit report.	ion 404(b) of the Sarbanes-		
Indicate by check mark whether the registrant is a	shell company (as defined	in Rule 12b-2 of the A	ct). Yes 🗌 No 🗸
The aggregate market value of the shares of committee last business day of the registrant's most recently commillion.			
As of February 15, 2022, 32,691,551 shares of co	mmon stock were outstand	ing.	
Docume	ents Incorporated By	Reference	
Portions of the registrant's proxy statement related		tockholders scheduled t	to be held on May 18, 2022 are

DONNELLEY FINANCIAL SOLUTIONS, INC. ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2021

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Signatures

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Donnelley Financial Solutions, Inc. and subsidiaries ("DFIN" or the "Company") has made forward-looking statements in this Annual Report on Form 10-K (the "Annual Report") within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995 that are subject to risks and uncertainties. These statements are based on the beliefs and assumptions of the Company. Generally, forward-looking statements include information concerning possible or assumed future actions, events, or results of operations of the Company. These statements may include words such as "anticipates," "estimates," "expects," "projects," "forecasts," "intends," "plans," "continues," "believes," "may," "will," "goals" and variations of such words and similar expressions are intended to identify forward-looking statements.

Forward-looking statements are not guarantees of future performance. These forward-looking statements are subject to a number of important factors, including those factors discussed in detail in "*Item 1A: Risk Factors*" in addition to those disclosed elsewhere in this Annual Report, that could cause the Company's actual results to differ materially from those indicated in any such forward-looking statements. These factors include, but are not limited to:

- the adverse impacts of the pandemic resulting from a novel strain of coronavirus, known as COVID-19 ("COVID-19"), and other global public health epidemics on the Company's business and operations, including demand for DFIN services and products, and the Company's ability to effectively manage the impacts of the coronavirus pandemic on its business operations;
- the volatility of the global economy and financial markets, and its impact on transactional volume;
- failure to offer high quality customer support and services;
- the retention of existing, and continued attraction of additional clients;
- the growth of new technologies with which the Company may be able to adequately compete;
- the Company's inability to maintain client referrals;
- the competitive market for the Company's products and industry fragmentation affecting prices;
- the ability to gain client acceptance of the Company's new products and technologies;
- delay in market acceptance of the Company's services and products due to undetected errors or failures found in its services and products;
- failure to maintain the confidentiality, integrity and availability of systems, software and solutions;
- failure to properly use and protect client and employee information and data;
- the effect of a material breach of security or other performance issues of any of the Company's or its vendors' systems;
- factors that affect client demand, including changes in economic conditions, national or international regulations and clients' budgetary constraints;
- the Company's ability to access debt and the capital markets due to adverse credit market conditions;
- the effect of increasing costs of providing healthcare and other benefits to employees;
- changes in the availability or costs of key materials (such as ink and paper);
- failure to protect the Company's proprietary technology;
- ability to maintain the Company's brands and reputation;
- the retention of existing, and continued attraction of, key employees, including management;
- funding obligations arising from multi-employer pension plan obligations of the Company's former affiliates;
- the effects of operating in international markets, including fluctuations in currency exchange rates; and
- the effect of economic and political conditions on a regional, national or international basis.

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

Consequently, readers of this Annual Report should consider these forward-looking statements only as the Company's current plans, estimates and beliefs. Except to the extent required by law, the Company does not undertake and specifically declines any obligation to publicly release the results of any revisions to these forward-looking statements that may be made to reflect future events or circumstances after the date of such statements or to reflect the occurrence of anticipated or unanticipated events. The Company undertakes no obligation to update or revise any forward-looking statements in this Annual Report to reflect any new events or any change in conditions or circumstances other than to the extent required by law.

PART I

ITEM 1. BUSINESS

Company Overview

DFIN is a leading global risk and compliance solutions company. The Company provides regulatory filing and deal solutions via its software, technology-enabled services and print and distribution solutions to public and private companies, mutual funds and other regulated investment firms, to serve its clients' regulatory and compliance needs. DFIN helps its clients comply with applicable regulations where and how they want to work in a digital world, providing numerous solutions tailored to each client's precise needs. The prevailing trend is toward clients choosing to utilize the Company's software solutions, in conjunction with its tech-enabled services, to meet their document and filing needs, while at the same time shifting away from physical print and distribution of documents, except for cases where it is still regulatorily required or requested by stockholders.

The Company serves its clients' regulatory and compliance needs throughout their respective life cycles. For its capital markets clients, the Company offers solutions that allow public companies to comply with applicable U.S. Securities and Exchange Commission ("SEC") regulations including filing agent services, digital document creation and online content management tools that support their corporate financial transactions and regulatory reporting; solutions to facilitate clients' communications with their stockholders; and virtual data rooms and other deal management solutions. For investment companies, including mutual fund, insurance-investment and alternative investment companies, the Company provides solutions for creating, compiling and filing regulatory communications as well as solutions for investors designed to improve the access to and accuracy of their investment information.

Technological advancements, regulatory changes, and evolving workflow preferences have led to the Company's clients managing more of the financial disclosure process themselves, changing the marketplace for the Company's services and products. DFIN's strategy in its Software Solutions segments (CM-SS and IC-SS, as defined below) aligns with the changing marketplace by focusing the Company's investments and resources in its advanced software solutions, primarily ActiveDisclosure®, Arc Suite and Venue® Virtual Data Room ("Venue"), while making targeted investments, such as the Company's acquisition of Guardum Holdings Limited ("Guardum"), to further enhance its solution set. In its Compliance & Communications Management segments (CM-CCM and IC-CCM, as defined below), the Company's strategy focuses on maintaining its market-leading position by offering a high-touch, service-oriented experience, using its unique combination of tech-enabled services and print and distribution capabilities.

Capital Markets

The Company provides software solutions, technology-enabled services and print and distribution solutions to public and private companies that are, or are preparing to become, subject to the filing and reporting requirements of the Securities Act of 1933, as amended (the "Securities Act") and the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Clients leverage the Company's software solutions, proprietary technology, deep industry expertise and experience to successfully navigate the SEC's specified file formats when submitting compliance documents through the Electronic Data Gathering, Analysis, and Retrieval ("EDGAR") system for their transactional and ongoing compliance needs. The Company assists its capital markets clients throughout the course of public and private business transactions; mergers and acquisitions ("M&A"), initial public offerings ("IPOs"), initial creation of special purpose acquisition corporations ("SPAC") and subsequent de-SPAC (acquisition of a public or private company), debt offerings and other similar transactions. In addition, the Company provides clients with compliance solutions to prepare their ongoing required Exchange Act filings that are compatible with the SEC's EDGAR system, most notably Form 10-K, Form 10-O, Form 8-K and proxy filings. These solutions include the Company's traditional full-service EDGAR filing preparation and filing agent services, technology-enabled services and print and distribution solutions as well as the Company's software solutions, ActiveDisclosure, Venue, eBrevia and others. In 2021, approximately 55% of capital markets net sales were transactional in nature, approximately 24% of capital market net sales were related to software solutions, including Venue and ActiveDisclosure, and approximately 21% of capital markets net sales were compliance in nature.

Transaction Solutions

The Company helps capital markets clients throughout the course of public and private business transactions. For M&A transactions, the Company supports deal participants in creating transaction-related registration statements, proxy statements and prospectuses, filing client documents as their filing agent through the EDGAR filing system and managing print for distribution to stockholders. The Company also provides registration statement and prospectus preparation and filing services through the Company's filing solution and software solution, ActiveDisclosure, data room and secure file sharing through Venue as well as contract analytics through eBrevia.

The Company's Venue solution is a highly secure data room platform that allows clients to share confidential information in real-time throughout the transaction lifecycle. Clients can also maintain control over sensitive data when conducting due diligence for M&A transactions, raising capital for an IPO or developing a document repository. Specifically, companies have used Venue to securely organize, manage, distribute and track corporate governance, financing, legal and other documents in an online workspace accessible to internal and outside advisors. Via integration with the Company's eBrevia solution, Venue uses artificial intelligence to analyze documents to help clients better understand their content and make informed decisions. Venue's auto-redaction capability, powered by Guardum, also allows clients to protect personally identifiable information ("PII") using efficient, secure, systematically burned-in redaction.

The Company's eBrevia solution leverages artificial intelligence-based data extraction and contract analytics algorithms to provide enterprise contract review and analysis solutions, utilizing machine learning to produce fast and accurate results. eBrevia's software, which extracts and summarizes key provisions and other information, is leveraged in due diligence, contract management, lease abstraction and document drafting. eBrevia complements the Company's Venue offerings to provide clients with secure data aggregation, due diligence, compliance and risk management solutions.

The Company also offers clients the use of private conferencing facilities in major global cities. This service helps clients maintain confidentiality in deal negotiations and provides clients a place to host in-person working groups to meet, strategize and prepare documents for the transactional deal stream. The Company's sites are outfitted to provide around-the-clock services to support the transaction process. Due to the COVID-19 pandemic, the Company transformed its production platform and service delivery model for a fully-virtual experience while replicating the in-person experience. The Company anticipates that in the future, clients will utilize the range of options available to them, including a hybrid approach with working group members working both virtually and in-person during drafting sessions for their transactions.

Compliance Solutions

The Company provides compliance solutions to capital markets clients in preparing the Exchange Act filings that are compatible with the SEC's EDGAR system. Capital markets clients leverage the Company's deep industry expertise and experience to successfully navigate the SEC's specified file formats when submitting compliance documents through the EDGAR system.

In 2021, the Company launched an entirely new cloud-based product, ActiveDisclosure ("ActiveDisclosure"), which provides new features such as built-in collaboration tools and eXtensible Business Reporting Language ("XBRL") client-tagging capability. The new product replaces ActiveDisclosure 3.0, which will be decommissioned once the transition of clients has been completed. ActiveDisclosure provides capital markets clients with end-to-end solutions to collaborate, tag, validate and file with the SEC efficiently. By leveraging its software platform, ActiveDisclosure brings teams together across departments, functions and geographies in real time to create and edit filings and other documents across devices, simultaneously, while providing detailed audit trails for tracking every change made and employing interactive notifications for important tasks or comments. ActiveDisclosure utilizes native Excel reporting capabilities of financial consolidation systems to seamlessly flow changes throughout an entire document automatically, reducing risk and providing additional assurance to clients. The Company employs stringent data security and privacy practices to provide that information is encrypted. The Company also engages third parties to perform annual SOC2 Type II compliance audits and penetration/vulnerability testing.

The Company also supports capital markets clients in meeting SEC-mandated regulatory filing requirements, including tagged filing in the XBRL format. The Company provides clients with a suite of tagging, review and validation tools to assist them with the XBRL requirements. The Company has accounting and finance professionals that assist its capital markets clients with the processes of tag selection, tag review, file creation, validation and distribution.

The Company helps capital markets clients elevate their proxy filings from compliance documents to investor-focused strategic communications tools with Proxy Design services. The Company's end-to-end proxy solutions include advisory services, proxy strategy and design, disclosure management, EDGAR filing and expertise, online hosting solutions, print production, distribution and annual meeting services.

The Company provides additional compliance solutions through strategic partnerships, including a full suite of audit management and compliance solutions for Sarbanes-Oxley Act ("SOX") compliance, operational audits, IT compliance, enterprise risk management and workflow management.

The Company's EDGAR® Online and EDGARPro solutions deliver intelligent solutions in financial disclosures, allow for the creation and distribution of company data and public filings as well as provide subscription-based tools for financial data analysis.

Through a minority investment in and commercial agreement with Mediant Communications, Inc. ("Mediant"), the Company can simplify the annual meeting and proxy process for its capital markets clients via project management services and state-of-the-art voting and tabulation technology. This partnership allows the Company to manage and centralize communications for all investors, fulfill and distribute proxy materials and host virtual stockholder meetings.

Investment Companies

The Company provides software solutions, technology-enabled services and print, distribution and fulfillment solutions to its investment companies clients, primarily consisting of mutual fund companies, alternative investment companies, insurance-investment companies and third-party administrators, that are subject to the filing and reporting requirements of the U.S. Investment Company Act of 1940, as amended (the "Investment Company Act") as well as European and Canadian regulations. The Company's Arc Suite software platform, which includes ArcDigital, ArcReporting, ArcPro and ArcRegulatory, enables its investment companies clients to comply with applicable ongoing SEC, Canadian and European regulations as well as to create, manage and deliver accurate and timely financial communications to investors and regulators. Investment companies leverage the Company's proprietary technology, deep industry expertise and experience to successfully navigate the SEC's specified file formats when submitting compliance documents (including incorporating appropriate XBRL tagging) through the EDGAR system.

In 2021, approximately 60% of investment companies net sales were compliance in nature, approximately 35% of the investment companies net sales were related to software solutions, and approximately 5% of investment companies net sales were transactional in nature. The Company's services and sales teams currently support clients in the United States, Canada, Ireland, the United Kingdom, France, Luxembourg, Poland, India and Australia.

The Company's Arc Suite software platform provides investment companies clients with a comprehensive suite of cloud-based technology services and products that store and manage information in a self-service, central repository allowing regulatory documents to be easily accessed, assembled, edited, translated, rendered and submitted to regulators for compliance purposes. Arc Suite products are cloud-based and include automation and single-source data validation which streamlines processes and drives efficiency for clients. The Company's Total Compliance Management ("TCM") offering allows clients to utilize multiple Arc Suite products to streamline the creation and distribution of materials required by the SEC Rules 30e-3 and 498A.

Through a minority investment in and commercial agreement with Mediant, the Company provides a suite of software to brokers and financial advisors that enables them to monitor and view stockholder communications. The Company offers various technology and electronic delivery services and products to make the distribution of documents and content more efficient. The Company also supports the distribution, tabulation and solicitation of stockholders for corporate elections and mutual fund proxy events.

The Company provides turnkey proxy services, including discovery, planning and implementation, print and mail management, solicitation, tabulation services, stockholder meeting review and expert support for mutual funds, variable annuities, REITs and other alternative investments.

Segments

The Company's four operating and reportable segments are: Capital Markets – Software Solutions ("CM-SS"), Capital Markets – Compliance and Communications Management ("CM-CCM"), Investment Companies – Software Solutions ("IC-SS") and Investment Companies – Compliance and Communications Management ("IC-CCM"). *Corporate* is not an operating segment and consists primarily of unallocated selling, general and administrative ("SG&A") activities and associated expenses including, in part, executive, legal, finance and certain facility costs. In addition, certain costs and earnings of employee benefit plans, such as pension and other postretirement benefit plans expense (income) as well as share-based compensation expense, are included in Corporate and are not allocated to the operating segments. For the Company's financial results and the presentation of certain other financial information by segment, see *Note 15. Segment Information*, to the audited Consolidated Financial Statements.

Capital Markets – Software Solutions—The CM-SS segment provides Venue, ActiveDisclosure, eBrevia and other solutions to public and private companies to help manage public and private transaction processes, extract data and analyze contracts; collaborate; and tag, validate and file SEC documents.

Capital Markets – Compliance & Communications Management—The CM-CCM segment provides techenabled services and print and distribution solutions to public and private companies for deal solutions and SEC compliance requirements. In addition, the Company offers clients the use of private conferencing facilities in major global cities. This service helps clients maintain confidentiality in deal negotiations and provide clients a place to host in-person working groups to meet, strategize and prepare documents for the transaction deal stream. Due to the COVID-19 pandemic, the Company transformed its production platform and service delivery model for a fully-virtual experience while replicating the in-person experience. The Company anticipates that in the future, clients will utilize the range of options available to them, including a hybrid approach with working group members working both virtually and inperson during drafting sessions for their transactions.

Investment Companies – Software Solutions—The IC-SS segment provides clients with the Arc Suite platform that contains a comprehensive suite of cloud-based solutions and services that enable storage and management of compliance and regulatory information in a self-service, central repository so that documents can be easily accessed, assembled, edited, translated, rendered and submitted to regulators.

Investment Companies – Compliance & Communications Management—The IC-CCM segment provides clients with tech-enabled solutions for creating and filing regulatory communications and solutions for investor communications, as well as XBRL-formatted filings pursuant to the Investment Company Act, through the SEC EDGAR system. The IC-CCM segment also provides turnkey proxy services, including discovery, planning and implementation, print and mail management, solicitation, tabulation services, stockholder meeting review and expert support.

Services and Products

The Company separately reports its net sales and related cost of sales for its software solutions, tech-enabled services and print and distribution offerings. The Company's software solutions consist of Venue, ActiveDisclosure, eBrevia, Arc Suite and others. The Company's tech-enabled services offerings consist of document composition, compliance-related SEC EDGAR filing services and transaction solutions. The Company's print and distribution offerings primarily consist of conventional and digital printed products and related shipping.

Company History

On October 1, 2016, DFIN became an independent publicly traded company through the distribution by R.R. Donnelley & Sons Company ("RRD") of shares of DFIN common stock to RRD stockholders (the "Separation"). On October 1, 2016, RRD also completed the separation of LSC Communications, Inc. ("LSC"), its publishing and retail-centric print services and office products business.

In 2018, the Company sold its Language Solutions business. Prior to its sale, the Language Solutions business supported domestic and international businesses in different countries and in a variety of industries, including the financial, corporate, life sciences and legal industries, among others, by helping them adapt their business content into different languages for specific countries, markets and regions through a complete suite of language services and products.

In 2018, the Company acquired eBrevia Inc. ("eBrevia"), a provider of artificial intelligence-based data extraction and contract analytics software solutions. Prior to the acquisition, the Company held a 12.8% investment in eBrevia. The purchase price for the remaining equity of eBrevia, which included the Company's estimate of contingent consideration, was \$23.3 million, net of cash acquired of \$0.2 million, as well as payments of \$4.5 million and \$1.9 million in 2019 and 2020, respectively. eBrevia's software, which extracts and summarizes key legal provisions and other information, is used in due diligence, contract management, lease abstraction and document drafting and enhances the Company's Venue offerings to provide clients with secure data aggregation, due diligence, compliance and risk management solutions. eBrevia's operations are included within the CM-SS operating segment.

On December 13, 2021, the Company completed the acquisition of Guardum, a leading data security and privacy software provider that helps companies locate, secure and control data. The acquisition enhances the Company's Venue offering. By safeguarding privacy and improving data accuracy, Guardum's data security is a competitive differentiator. Prior to the acquisition, the Company held a 33.0% investment in Guardum. The purchase price for the remaining equity of Guardum was \$3.6 million, net of cash acquired of \$0.1 million.

Markets and Competition

Technological and regulatory changes continue to impact the market for the Company's services and products. In addition to the Company's ongoing innovation in its software solutions, the Company's competitive strengths include its ability to offer a wide array of products for required regulatory communications, compliance services, a global platform, exceptional sales and service and regulatory domain expertise, which provide differentiated solutions for its clients.

The global risk and compliance industry, in general, is highly competitive and barriers to entry have decreased as a result of technology innovation and the simplification of EDGAR filings. Despite some consolidation in recent years, the industry remains highly fragmented in the United States and even more so internationally with many in-country alternative providers. The Company expects competition to increase from existing competitors as well as new and emerging market entrants. In addition, as the Company expands its services and product offerings, it may face competition from new and existing competitors. The Company competes primarily on the depth and breadth of its products, features, benefits, service levels, subject matter regulatory expertise, security, price and reputation.

The impact of digital technologies has impacted many of the products and markets in which the Company competes, most acutely in the Company's mutual fund, variable annuity and public company compliance business offerings. While the Company offers a high-touch, service oriented experience, technology changes have provided alternatives to the Company's clients that allow them to manage more of the financial disclosure process themselves. The Company has invested in its own software solutions, ActiveDisclosure, Arc Suite and Venue, to serve clients and increase retention, and has invested to expand capabilities and address new market sectors. The future impact of technology as well as the streamlining and modernizing of disclosure requirements on the business is difficult to predict and could result in additional expenditures to restructure impacted operations or develop new technologies. In addition, the Company has made targeted acquisitions and investments in its existing business to offer clients innovative services and solutions, including the acquisition of eBrevia and Guardum and investments in Mediant and Gain Compliance that support the Company's position as a technology service leader in this evolving industry.

The Company's competitors for SEC filing services for public company compliance clients include full service financial communications providers, technology point solution providers focused on financial communications and general technology providers. The Company's competitors for Venue include providers of virtual data room-specific solutions and enterprise software providers that offer online products that serve as document repositories, virtual data rooms as well as file sharing and collaboration solutions. The Company's competitors for SEC filing services for investment companies clients include full service traditional providers, small niche technology providers as well as local and regional print providers that bid against the Company for printing, mailing and fulfillment services.

Technology

The Company invests resources in developing software solutions to address customer and market requirements. The Company invests in client facing solutions and its core composition systems and has also adopted market-leading third-party systems which have improved the efficiency of its sales and operations processes. The Company has continued to invest in enhancements of its technology-based offerings including ActiveDisclosure, the Arc Suite software platform, Venue, EDGAR filing and iXBRL services and data and analytics solutions. The Company continues to invest in leading and innovative technology such as cloud-native solutions, composable applications, API management machine learning and hybrid cloud architecture.

Market Volatility/Cyclicality and Seasonality

The Company's Capital Markets segments (CM-SS and CM-CCM), in particular, are subject to market volatility in the United States and world economy, as the success of the transactional and Venue offerings is largely dependent on the global market for IPOs, secondary offerings, M&A, public and private debt offerings, leveraged buyouts, spinouts, special purpose acquisition company ("SPAC") and de-SPAC transactions and other transactions. A variety of factors impact the global markets for transactions, including economic activity levels, market volatility, the regulatory and political environment, geopolitical and civil unrest and global pandemics, among others. Due to the significant net sales and profitability derived from transactional and Venue offerings, market volatility can lead to uneven financial performance when comparing to previous periods. U.S. IPOs, M&A transactions and public debt offerings were also disrupted by the U.S. federal government shutdown that occurred, most recently, from December 2018 to January 2019. Future government shutdowns could result in additional volatility. The Company mitigates a portion of this volatility through its compliance offerings, supporting the quarterly and annual public company reporting processes through its filing services and ActiveDisclosure, as well as its Investment Companies segments (IC-SS and IC-CCM) regulatory and stockholder communications offerings, including Arc Suite. The Company also mitigates some of that risk by offering services in higher demand during a down market, such as document management tools for the bankruptcy/restructuring process and by moving upstream in the filing process with products like Venue.

The quarterly/annual public company reporting process work subjects the Company to filing seasonality which peaks shortly after the end of each fiscal quarter. Additionally, investment companies clients require the Company to manage the financial and regulatory reporting and filing for mutual funds on an annual basis as well as annual prospectus filings, which peaks during the second fiscal quarter. The seasonality and associated operational implications include the need to increase staff during peak periods through a combined strategy of hiring temporary personnel, increasing the premium time of existing staff and outsourcing production for a number of services. Additionally, clients and their financial advisors have begun to increasingly rely on web-based services which allow clients to autonomously file and distribute compliance documents with regulatory agencies, such as the SEC. While the Company believes that its ActiveDisclosure and Arc Suite solutions are competitive in this space, competitors are also continuing to develop technologies that aim to improve clients' ability to autonomously produce and file documents to meet their regulatory obligations. The Company remains focused on driving annual recurring revenue to mitigate market volatility.

COVID-19

In December 2019, a novel strain of coronavirus, known as COVID-19, was identified in China and has since extensively impacted the global health and economic environment. On March 11, 2020, the World Health Organization ("WHO") characterized COVID-19 as a pandemic. Although COVID-19 has adversely impacted the Company's financial condition, results of operations and overall financial performance, the extent of that impact is currently uncertain and depends on factors including the impact on the Company's customers, employees and vendors.

In response to the COVID-19 pandemic, the Company has taken numerous steps, and will continue to take further actions to ensure the safety of the Company's employees. At the beginning of the pandemic, the Company reviewed and implemented an updated business continuity plan, required all non-essential employees to work from home, prohibited non-essential travel and conducted client and employee meetings virtually. During the third quarter of 2021, the Company implemented a flexible model that allows employees the option to continue to work from home, with the exception of essential employees whose roles require them to be on site. In the Company's manufacturing locations, the Company is following all federal, state and local safety requirements including social distancing where possible, wearing masks and increased cleaning. The Company continues to reevaluate these measures on an ongoing basis to ensure continuity of the Company's business operations and the safety of the Company's workforce. The Company also continues to work closely with its clients to support them as they implement their own contingency plans, helping them access the Company's services and products and continue to meet their regulatory requirements.

The ultimate impact of the COVID-19 pandemic and the effects on the Company's business, results of operations, liquidity and overall financial performance cannot be predicted at this time.

Refer to Item 7. Management's Discussion and Analysis of Financial Conditions and Results of Operations—COVID-19 for additional information.

Government Regulation and Regulatory Impact

The SEC is adopting new as well as amending existing rules and forms to modernize the reporting and disclosure of information by registered investment companies. These changes are driving significant regulatory changes which impact the Company's customers within its Investment Companies business.

On June 5, 2018, the SEC adopted Rule 30e-3 which provides certain registered investment companies with an option to electronically deliver stockholder reports and other materials rather than providing such reports in paper. Investors who prefer to receive reports in paper will continue to receive them in that format. While Rule 30e-3 was effective January 1, 2019, default electronic distribution pursuant to the rule began on January 1, 2021 due to a 24-month transition period, during which registered investment companies notified investors of the upcoming change in transmission format of stockholder reports. As a result of Rule 30e-3, the Company experienced a significant decline in the volume of printed annual and semi-annual stockholder reports in 2021 and an increase in revenue from ArcDigital software solutions. This trend is expected to continue during 2022.

On March 11, 2020, the SEC announced that it has adopted a new rule 498A under the Securities Act and related regulatory amendments permitting variable annuity and variable life insurance contracts to use a more concise summary prospectus to provide disclosures to investors. More detailed information about the variable annuity or variable life insurance contract will be available online, and an investor must opt in to have that information delivered in paper. The new rule and related form amendments became effective on July 1, 2020 with compliance required by January 1, 2022. As a result of Rule 498A, the Company experienced a significant decline in printed prospectus volume in 2021 and an increase in revenue from the ArcPro and ArcDigital software solutions. This trend is expected to continue during 2022.

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

Resources

The primary raw materials used in the Company's printed products are paper and ink. Paper and ink are sourced from a small set of select suppliers to ensure consistent quality and provide for continuity of supply. The global supply chain challenges as a result of the COVID-19 pandemic made it more difficult to source paper in the second half of 2021, and the Company anticipates it will continue to be more difficult and more expensive to source paper in 2022. The increased cost of paper is typically recovered by increased pricing. The Company believes that the risk of incurring material losses as a result of a shortage in raw materials is unlikely as the Company has strategically reduced its print and distribution revenue and downsized the Company's print production platform and that the losses, if any, would not have a materially negative impact on the Company's business.

Distribution

The Company's products are distributed to end-users through the U.S or foreign postal services, through retail channels, electronically or by direct shipment to customer facilities.

Customers

For each of the years ended December 31, 2021, 2020 and 2019, no customer accounted for 10% or more of the Company's net sales.

Cybersecurity and Data Protection

A core aspect of the Company's business relies on technology and software; as a result, the security of those technologies and software, as well as the protection of the confidential information entrusted to the Company by its customers, are key components of the Company's business and strategy. The DFIN Cybersecurity Program is based upon industry leading frameworks, which include International Standardization Organization #27001 (ISO 27001), Control Objectives for Information Technology (COBIT), and the National Institute of Standards and Technology Framework for Improving Critical Infrastructure Cybersecurity (commonly known as NIST). The Company's technologies and software must also comply with domestic and international regulatory and legal requirements. Ensuring that these technologies and software comply with those regulations is a key focus of the Company's efforts.

The Company leverages cybersecurity technologies designed to provide for the security of client, employee and business confidential data. The Company's cybersecurity portfolio is inclusive of, but not limited to, data encryption, data masking, leading secure software development methodologies, application and network penetration testing, incident response, digital forensics, least-privileged access controls, anti-malware, end-point detection and response, virtual private networks and cyber threat intelligence. Additionally, the Company manages a 24x7 Security Operations capability that monitors and responds to cyber threats in real time.

To demonstrate transparency, the Company's commitment to effective cybersecurity and data protection efforts and in pursuit of continuous improvement, the Company undergoes a series of third-party security reviews, including third-party penetration tests.

Human Capital

The Company's human capital objective is to attract, retain and develop the talent needed to deliver on the Company's strategic priorities. DFIN strives to get the best talent available, help them grow their career and keep them engaged and motivated with rewards based on their contributions and performance.

As of December 31, 2021, the Company had approximately 2,185 employees, approximately 80% of whom are located in the United States and approximately 20% in international locations. DFIN's workforce is approximately 40% female and 60% male, with an average tenure of approximately 13.2 years with DFIN (including periods prior to the separation from RRD). The Company also hires temporary employees in its manufacturing facilities during peak periods of production. None of the Company's employees are represented by a labor union or covered by a collective bargaining agreement. The Company's U.S. employee voluntary turnover rate is under 8.5% per year.

The Company recently launched its "My Total Wellbeing" strategy that provides greater market-driven and predictable pay and benefit programs. My Total Wellbeing encompasses:

My Time—DFIN evaluates its "time off" policies to address the diverse and changing needs of the workforce. DFIN offers every employee at least four weeks of paid time off, including paid sick time. Additionally, in 2021, the Company increased its paid parental leave from four to six weeks for both moms and dads. In 2021, the Company implemented a flexible model that allows employees the option to continue to work from home, with the exception of essential employees whose roles require them to be on site. The Company maintains office space available for team meetings, collaboration and other critical in-person events.

My Career—DFIN is committed to helping employees grow their skills and capabilities. To facilitate that goal, in 2021, the Company launched a new career framework for U.S. employees that helps them make informed choices about their skill development and career growth. The career framework includes a "Career Map" that shows every role in the Company by level. This helps employees understand how their job fits into the overall structure and shows the various pathways for advancement.

My Health—DFIN offers comprehensive health and benefits including medical insurance, prescription drug benefits, dental insurance and vision insurance. The Company's programs focus on physical health, emotional/mental health and encourages all employees to take ownership of their wellbeing. Program highlights include topical webinars, targeted programs (e.g., tobacco cessation, diabetes management and weight management) and employee assistance programs.

My Money—DFIN offers competitive base salaries and a variety of compensation programs to reward performance relative to key strategic and financial metrics. The Company also cultivates a "pay for performance" culture in which when the Company does well, the Company shares those rewards with employees. Based on the Company's strong fiscal year 2020 results, in March 2021, the Company paid a performance bonus to all employees who were not eligible for another variable compensation program. DFIN also announced that beginning in 2022, there will be a 401(k) match of 50 cents for every dollar an employee contributes up to 6% of eligible compensation and the Company has the ability to contribute a discretionary match that would apply to employee contributions, based on the Company's performance, as determined by the Company. Other financially focused benefits available include accident and critical illness insurance, life and disability insurance, health savings account (which includes a company contribution), flexible spending accounts and a group legal services plan.

Diversity, Equity & Inclusion ("DEI")—Creating an inclusive community in which all voices are heard is key to the Company's success. In 2021, DFIN launched a DEI Council comprised of individuals with various backgrounds and experience across the organization, with a mission "to be a strategic resource to DFIN leadership to help keep a sustained focus on DEI. We aspire to foster a culture where all employees feel valued, respected and heard. Inclusivity will enable DFIN to attract and retain the very best talent."

The pillars of education and awareness, advocacy and support and fairness and equality will continue to guide the actions that are aligned to the Company's goals and support fostering an inclusive environment. In 2021, the Company introduced voluntary self-identification for gender identity and sexual orientation.

DFIN has made progress in bringing more diverse perspectives to leadership. Since the beginning of 2021, approximately 59% of all U.S. hires and promotions at the manager level and above have been women or people of color. Women or people of color constitute approximately 25% and 13% of the Company's Board of Directors, respectively. In 2021, approximately 36% of DFIN's U.S. employees in managerial roles were women and approximately 24% of its U.S. employees in managerial roles were people of color.

The Company is committed to paying its employees in a fair and equitable way. In 2021, the Company retained a compensation consultant to review its pay structures against market practices. Additionally, DFIN has a rigorous internal compensation review process. The Company is also committed to increasing gender and racial diversity at all levels of the Company through recruiting, training and promotion opportunities, especially at the management level. In 2022, a portion of executive performance incentive pay will be tied to achieving that objective.

Training and Development—DFIN invests in its employees' skills and professional development by offering virtual, social and self-directed learning, mentoring, coaching and career development opportunities. In 2021, approximately 55% of employees engaged in self-directed learning and development activities through the Company's on-demand learning platform. DFIN provides its employees with curated and targeted learning pathways for leadership, finance, and technical roles as well as safety, compliance and equipment-related training. DFIN continues to focus on leadership development and piloted cohort leadership development programs aligned to the Company's values and leadership behaviors.

In addition to personal training and development, the Company requires employees to complete a series of mandatory courses in data protection, principles of ethical business conduct, harassment awareness and anti-corruption. In 2021, the Company achieved more than 99% completion of these required courses.

Employee Experience and Retention—DFIN gains insight into what matters to its employees, what motivates them and how best to reach them by regularly surveying employees on culture, from wellbeing to career development.

In a 2021 survey sponsored by the newly created DEI Council to gauge employee sentiment, a majority of employees who responded said they feel comfortable being their authentic, whole selves at work, and that DFIN cultivates a culture where people of all background are welcome and valued. The Company consistently tracked whether employees felt treated with dignity and respect and whether employees felt proud to work at DFIN. Over three separate surveys in 2021, employees consistently reported that they "almost always" felt treated with dignity and respect by their managers and leaders and "almost always" felt proud to work at DFIN.

The Company conducts town hall meetings, quarterly all-employee calls and frequent internal communications. In 2021, DFIN also implemented a social recognition platform to cultivate a culture of recognition and appreciation, while bringing connectivity to the employees in a virtual environment.

Health and Safety—The health, safety and well-being of its employees is DFIN's highest priority and a core element of its culture and the Company believes everyone contributes to a safe and healthy work environment no matter their role in the organization. DFIN's Environmental, Health and Safety Management System aligns with ISO 14001 and 45001. The Company sets annual leading and lagging indicators to improve its sustainability performance and in 2021 achieved a workforce total recordable incident rate of 0.32 (per 200,000 hours worked).

The Company's manufacturing employees participate in robust safety committees and quarterly roundtables to share best practices transparently and conduct a *Speak Up for Safety* employee recognition program for identifying near misses. In 2021, the manufacturing workforce achieved a 99% completion rate for job-specific safety training. DFIN also observes Safety Month globally each June and in 2021 focused on COVID-19 vaccination benefits, cyber safety, ergonomics and emotional health. Results from the annual Safety Monthly Survey showed that 84% of employees who responded believe their safety, health and well-being is a priority at DFIN. Finally, in November 2021, 57 employees were nominated for a Safety Pinnacle Award. These awards recognize the best-in-class contributions of employees from across the Company who foster a culture of safety, health and well-being in the workplace.

As the pandemic persists, the Company continues to focus on safety and health, especially among its manufacturing employees who continue work onsite. DFIN implemented a company-wide COVID-19 Protocol for reporting suspected and/or positive cases, contact tracing, communications and employee testing to help prevent workplace exposure.

Climate

In 2021, the Company sourced 100% of the electricity used by its print manufacturing facilities from the purchase of renewable energy credits. The Corporate Responsibility and Governance Committee has broad oversight of environmental, social and governance issues, which includes climate-related risks and opportunities. Due to the nature of the business, DFIN does not anticipate any material impact from climate-related regulations.

Available Information

The Company maintains a website at www.dfinsolutions.com where the Company's Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports, as well as other SEC filings, are available without charge, as soon as reasonably practicable following the time they are filed with, or furnished to, the SEC. The Principles of Corporate Governance of the Company's Board of Directors, the charters of the Audit, Compensation, Corporate Responsibility & Governance Committees of the Board of Directors and the Company's Principles of Ethical Business Conduct are also available on the Investor Relations portion of the Company's website, and will be provided, free of charge, to any stockholder who requests a copy. References to the Company's website address do not constitute incorporation by reference of the information contained on the website, and the information contained on the website is not part of or incorporated by reference in this document.

ITEM 1A. RISK FACTORS

The Company's consolidated results of operations, financial position and cash flows can be adversely affected by various risks. These risks include the principal factors listed below and the other matters set forth in the Annual Report. You should carefully consider all of these risks.

COVID-19 Pandemic Risk

The current COVID-19 pandemic and other global public health epidemics may materially adversely impact the Company's business, its future results of operations and its overall financial performance.

The Company's business could be materially adversely affected by the risk, or the public perception of risk, related to a pandemic or widespread health crisis, such as the current COVID-19 pandemic. A significant outbreak of epidemic, pandemic, or contagious diseases in the human population resulting in a widespread health crisis that adversely affect the broader economies and financial markets will also adversely impact the overall demand environment for DFIN's services and products. The COVID-19 pandemic has had and may continue to have a material adverse impact on certain of the Company's customers' financial results, which has and may continue to force those clients to alter their plans for purchasing the Company's services and products. In addition, the global markets were disrupted due to the COVID-19 pandemic, which had a temporary negative impact on the Company's transactional offerings. A resurgence of the COVID-19 pandemic, including potentially new strains of COVID-19, resulting in renewal of mitigation measures, including targeted shutdowns, could lead to further economic downturns and adverse effects on the Company. A recession would adversely impact the global market for IPOs and other financial transactions, adversely affecting the demand for DFIN's services and products (see the Company's risk factor captioned "A significant part of the Company's business is derived from the use of DFIN's services and products in connection with financial and strategic business transactions. Trends that affect the volume of these transactions may negatively impact the demand for DFIN's services and products." below), and those adverse effects may be material.

In addition, any preventative or protective actions that governments implement or that the Company takes in respect of a global health crises such as COVID-19, such as travel or movement restrictions, quarantines or site closures, may interfere with the ability of the Company's employees and vendors to perform their respective responsibilities and obligations relative to the conduct of DFIN's business. Such results could have a material adverse effect on DFIN's operations, business, financial condition, results of operations, or cash flows. For example, when both the State of New Jersey and the Commonwealth of Pennsylvania enacted stay at home orders in 2020, the Company was deemed essential and continued to operate, but there can be no assurances that the operations will continue to be deemed essential both in those locations and in other jurisdictions in which the Company or its vendors operate and are allowed to remain operational. In addition, the Company uses vendors in multiple countries to fulfill the global demand for its services. When global lockdowns were ordered by many governments in March 2020, many of the Company's vendors had to rapidly transition to work from home, creating process inefficiencies. If the Company is not able to meet its client's work requirements in a timely fashion or at all, the Company's business, reputation and ability to retain clients would be adversely affected.

The Company is unable to accurately predict the ultimate impact of the current COVID-19 pandemic due to various uncertainties, including the ultimate geographic spread of the virus, the severity of the virus, the presence of new strains of the virus, the duration of the outbreak, actions that may be taken by governmental authorities to contain the virus and any economic recession resulting from the pandemic. The Company closely monitors the impact of the COVID-19 pandemic, continually assessing its potential effects on its business. The extent to which the Company's results are affected by COVID-19 will largely depend on future developments which cannot be accurately predicted and are uncertain, but the COVID-19 pandemic or the perception of its effects could have a material adverse effect on DFIN's business, financial condition, results of operations, or cash flows. Refer to Item 7. Management's Discussion and Analysis of Financial Conditions and Results of Operations—COVID-19 for additional information.

Technology Risks

The Company's failure to maintain the confidentiality, integrity and availability of its systems, software and solutions could seriously damage the Company's reputation and affect its ability to retain clients and attract new business.

Maintaining the confidentiality, integrity and availability of DFIN's systems, software and solutions is an issue of critical importance for the Company and its clients and users who rely on DFIN's systems to prepare regulatory filings and store and exchange large volumes of information, much of which is proprietary, confidential and may constitute material nonpublic information. Given DFIN's systems contain material nonpublic information about public reporting companies and potential mergers and acquisitions activities prior to its public release, the Company has been, and expects it will continue to be, a target of hacking or cybercrime. Inadvertent disclosure of the information maintained on DFIN's systems (or on the systems of the vendors on which the Company relies) due to human error, breach of the systems through hacking, cybercrime or a leak of confidential information due to employee misconduct, could seriously damage the Company's reputation, could cause it to expend significant resources responding to requests from government agencies and customers and could cause significant reputational harm for the Company and its clients. The Company's technologies, systems, networks and software have been and continue to be subject to cybersecurity threats and attacks, which range from uncoordinated individual attempts to sophisticated and targeted measures directed at the Company. The risk of a security breach or disruption, particularly through cyber attack or cyber intrusion, has increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased and the Company has in the past and may in the future be subject to security breaches. For example, during 2019 and 2020 the Company experienced two cyber incidents, one of which was through a commercial partner. The incident involving the Company's commercial partner was a result of a compromise to the partner's email server, which allowed unauthorized viewing of client information on that system. The DFIN incident was, the Company believes, the result of a compromised login credential which allowed unauthorized viewing of client information on that system and access to an internal Company system. In each incident, the Company believes the unauthorized viewing of client information was limited to that system and the DFIN incident has been fully remediated with no indication of continuing unauthorized access.

The Company's customers and employees have been, and will continue to be, targeted by parties using fraudulent e-mails and other communications in attempts to misappropriate login credentials, including passwords, or to introduce viruses or other malware programs to its information systems, the information systems of its vendors or third-party service providers and/or its customers' computers. Though the Company endeavors to mitigate these threats through product improvements, use of encryption and authentication technology and customer and employee education, such cyber attacks against the Company or its vendors and third-party service providers remain a serious issue. Further, to access the Company's services and products, the Company's customers use personal electronic devices that are beyond DFIN's security control systems. Techniques used to obtain unauthorized access to, or to sabotage, systems change frequently and generally are not recognized until executed against a target. Consistent with all software solutions, DFIN's software may be vulnerable to these types of attacks. Breaches and other inappropriate access can be difficult to detect and any delay in identifying them could increase their harm. An attack of this type, such as the incident described in the preceding paragraph, could disrupt the proper functioning of the Company's software solutions, cause errors in the output of clients' work, allow unauthorized access to sensitive, proprietary or confidential information and other undesirable or destructive outcomes.

As a result of these types of risks and attacks, the Company has implemented and continuously reviews and updates systems, processes and procedures to protect against unauthorized access to or use of data and to prevent data loss. For example, the Company continues to refresh relevant security standards to reflect changes in current security threats, monitors DFIN systems for cyber threats, continues to update intrusion and detection capabilities and refreshes mandatory information security awareness training content, including awareness around phishing. However, the everevolving threats mean the Company and its third-party service providers and vendors must continually evaluate and adapt their respective systems and processes and overall security environment. There is no guarantee that these measures will be adequate to safeguard against all data security breaches, system compromises or misuses of data.

Furthermore, DFIN's systems allow the Company to share information that may be confidential in nature to its clients across the Company's offices worldwide. This design allows the Company to increase global reach for its clients and increase its responsiveness to client demands, but also increases the risk of a security breach or a leak of such information as it allows additional points of access to information by increasing the number of employees and facilities working on certain jobs. In addition, DFIN's systems leverage third party outsourcing arrangements, which expedites the Company's responsiveness but exposes information to additional access points. The occurrence of an actual or perceived information leak or breach of security could cause the Company's reputation to suffer, clients to stop using DFIN's services and products offerings, the Company to have to respond to requests from government agencies and customers in connection with such event and the Company to face lawsuits and potential liability, any of which could cause DFIN's financial performance to be negatively impacted. The Company has incurred, and expects to continue to incur, expenses to prevent, investigate and remediate security breaches and vulnerabilities, including deploying additional personnel and protection technologies, training employees and engaging third-party experts and consultants. Though the Company maintains professional liability insurance that includes coverage if a cybersecurity incident were to occur, there can be no assurance that insurance coverage will be available, responsive, or that the available coverage will be sufficient to cover losses and claims related to any cybersecurity incidents the Company may experience.

A number of core processes, such as software development, sales and marketing, client service and financial transactions, rely on DFIN's IT infrastructure and applications. Defects or malfunctions in the Company's IT infrastructure and applications have caused, and could cause in the future, DFIN's services and products offerings not to perform as clients expect, which could negatively impact the Company's reputation and business. In addition, malicious software, sabotage, ransomware and other cybersecurity breaches of the types described above could cause an outage in DFIN's infrastructure, which could lead to a substantial delay of service and ultimately downtimes, recovery costs and client claims, any of which could negatively impact the Company's results of operations, financial position and cash flows.

The Company's business may be adversely affected by new technologies enabling clients to produce and file documents on their own.

The Company's business may be adversely affected as clients seek out opportunities to produce and file regulatory documentation on their own and begin to implement technologies that assist them in this process. For example, clients and their financial advisors have increasingly relied on web-based services which allow clients to autonomously file and distribute reports required pursuant to the Exchange Act, prospectuses and other materials as a replacement for using the Company's EDGAR filing services. If technologies are further developed to provide clients with the ability to autonomously produce and file documents to meet their regulatory obligations, and the Company does not develop products or provide services to compete with such new technologies, the Company's business may be adversely affected by those clients who choose alternative solutions, including self-serving or filing themselves.

Undetected errors or failures found in DFIN's services and products may result in loss of or delay in market acceptance of the services and products that could negatively impact its business.

DFIN's services and products may contain undetected errors or scalability limitations during their life cycle, but particularly when first introduced or as new versions are released to the market. The Company releases enhanced versions of products including platforms during various stages of development. Despite production testing by the Company and operational testing by current and potential clients, errors may not be found in new services and products until after commencement of commercial availability or use, resulting in a loss of or a delay in market acceptance, damage to the Company's reputation, client dissatisfaction and decline in net sales and operating income.

Some of DFIN's systems and services are developed by third parties or supported by third party hardware and software. The Company's business and reputation could suffer if these third party systems and services fail to perform properly or are no longer available to the Company.

Some of DFIN's systems and services are developed by third parties or rely on hardware purchased or leased and software licensed from third parties. These systems and services, or the hardware and software required to run the Company's existing systems and services, may not continue to be available on commercially reasonable terms or at all. Any loss of the right to use any of this hardware or software could result in delays in the provisioning of DFIN's services, which could negatively affect the Company's business until equivalent technology is either developed by the Company or, if available, is identified, obtained and integrated. In addition, it is possible that the Company's hardware vendors or the licensors of third party software could increase their prices, which could have an adverse impact on DFIN's business, operating results and financial condition. Further, changing hardware vendors or software licensors could detract from management's ability to focus on the ongoing operations of the Company's business or could cause delays in the operations of the business.

Additionally, third party software underlying DFIN's services can contain undetected errors or bugs, or be susceptible to cybersecurity breaches described above. The Company may be forced to delay commercial release of its services until any discovered problems are corrected and, in some cases, may need to implement enhancements or modifications to correct errors that the Company does not detect until after deployment of its services.

If the Company is unable to protect its proprietary technology and other rights, the value of DFIN's business and its competitive position may be impaired.

If the Company is unable to protect its intellectual property, the Company's competitors could use its intellectual property to market services and products similar to DFIN's, which could decrease demand for its services. The Company relies on a combination of patents, trademarks, licensing and other proprietary rights laws, as well as third party nondisclosure agreements and other contractual provisions and technical measures, to protect its intellectual property rights. These protections may not be adequate to prevent competitors from copying or reverse-engineering DFIN's technology and services to create similar offerings. Additionally, any of DFIN's pending or future patent applications may not be issued with the scope of protection the Company seeks, if at all. The scope of patent protection, if any, the Company may obtain is difficult to predict and the patents may be found invalid, unenforceable or of insufficient scope to prevent competitors from offering similar services. DFIN's competitors may independently develop technologies that are substantially equivalent or superior to the Company's technology. To protect DFIN's proprietary information, the Company requires employees, consultants, advisors, independent contractors and collaborators to enter into confidentiality agreements and maintain policies and procedures to limit access to the Company's trade secrets and proprietary information. These agreements and the other actions may not provide meaningful protection for DFIN's proprietary information or know-how from unauthorized use, misappropriation or disclosure. Further, existing patent laws may not provide adequate or meaningful protection in the event competitors independently develop technology, products or services similar to DFIN's. Even if the laws governing intellectual property rights provide protection, the Company may have insufficient resources to take the legal actions necessary to protect its interests. In addition, DFIN's intellectual property rights and interests may not be afforded the same protection under the laws of foreign countries as they are under the laws of the United States.

Business, Economic, Market and Operating Risks

A significant part of the Company's business is derived from the use of DFIN's services and products in connection with financial and strategic business transactions. Trends that affect the volume of these transactions may negatively impact the demand for DFIN's services and products.

A significant portion of the Company's net sales depends on the purchase of DFIN's services and products by parties involved in capital markets compliance and transactions. As a result, the Company's business is largely dependent on the global market for IPOs, secondary offerings, mergers and acquisitions, public and private debt offerings, leveraged buyouts, spinouts, bankruptcy and claims processing and other transactions. These transactions are often tied to market conditions and the resulting volume of these types of transactions affects demand for the Company's services and products. Downturns in the financial markets, global economy or in the economies of the geographies in which the Company does business and reduced equity valuations create risks that could negatively impact the Company's business. For example, in the past, economic volatility has led to a decline in the financial condition of a number of the Company's clients and led to the postponement of their capital markets transactions. To the extent that there is continued volatility, the Company may face increasing volume pressure. Furthermore, the Company's offerings for investment companies clients can be affected by fluctuations in the inflow and outflow of money into investment management funds which determines the number of new funds that are opened and closed. As a result, the Company is unable to predict the impact of any potential worsening of macroeconomic conditions which could have impacts to the Company's results of operations. The level of activity in the financial communications services industry, including the financial transactions and related compliance needs DFIN's services and products are used to support, is sensitive to many factors beyond the Company's control, including interest rates, regulatory policies, general economic conditions, the Company's clients' competitive environments, business trends, terrorism and political change. In addition, a weak economy could hinder the Company's ability to collect amounts owed by clients. Failure of the Company's clients to pay the amounts owed or to pay such amounts in a timely manner, may increase the Company's exposure to credit risks and result in bad debt write-offs. Unfavorable conditions or changes in any of these factors could negatively impact the Company's business, results of operations, financial position and cash flows.

The highly competitive market for DFIN's services and products and industry fragmentation may continue to create adverse price pressures.

The financial communications services industry is highly competitive with relatively low barriers to entry and the industry remains highly fragmented in North America and internationally. Management expects that competition will increase from existing competitors, as well as new and emerging entrants. Additionally, as the Company expands its services and products offerings, it may face competition from new and existing competitors. As a result, competition may lead to additional pricing pressure on DFIN's services and products, which could negatively impact its business, results of operations, financial position and cash flows.

The quality of the Company's customer support and services offerings is important to the Company's clients, and if the Company fails to offer high quality customer support and services, clients may not use DFIN's solutions resulting in a potential decline in net sales.

A high level of customer support is critical for the successful marketing and sale of DFIN's solutions. If the Company is unable to provide a level of customer support and service to meet or exceed clients' expectations, the Company could experience a loss of clients and market share, a failure to attract new clients, including in new geographic regions, and increased service and support costs and a diversion of resources. Any of these results could negatively impact the Company's business, results of operations, financial position and cash flows.

A substantial part of the Company's business depends on clients continuing their use of DFIN's services and products. Any decline in the Company's client retention would harm the Company's future operating results.

The Company does not have long-term contracts with most of capital markets and some investment companies clients and, therefore, relies on their continued use of DFIN's services and products, particularly for compliance-related services. As a result, client retention, particularly during periods of declining transactional volume, is an important part of the Company's strategic business plan. There can be no assurance that clients will continue to use DFIN's services and products to meet their ongoing needs, particularly in the face of competitors' services and products offerings. Client retention rates may decline due to a variety of factors, including:

- the Company's inability to demonstrate to clients the value of its solutions;
- the price, performance and functionality of DFIN's solutions;
- the availability, price, performance and functionality of competing services and products;
- clients' ceasing to use or anticipating a declining need for the Company's services in their operations;
- consolidation in the Company's client base;
- the effects of economic downturns and global economic conditions;
- technology and application failures and outages, interruption of service, security breaches or fraud, which could adversely affect the Company's reputation and the Company's relations with its clients; or
- reductions in clients' spending levels.

If the Company's retention rates are lower than anticipated or decline for any reason, the Company's net sales may decrease and the Company's profitability may be harmed, which could negatively impact the Company's business, results of operations, financial position and cash flows.

The Company's performance and growth depend on its ability to generate client referrals and to develop referenceable client relationships that will enhance the Company's sales and marketing efforts.

The Company depends on users of its solutions to generate client referrals for the Company's services. The Company depends, in part, on the financial institutions, law firms and other third parties who use DFIN's services and products to recommend solutions to their client base, which provides the Company the opportunity to reach a larger client base than it can reach through the direct sales and internal marketing efforts. For instance, a portion of the Company's net sales from capital markets clients is generated through referrals by investment banks, financial advisors and law firms that have utilized the Company's services in connection with prior transactions. These referrals are an important source of new clients for the Company's services.

A decline in the number of referrals could require the Company to devote substantially more resources to the sales and marketing of its services, which would increase costs, potentially lead to a decline in net sales, slow the Company's growth and negatively impact its business, results of operations, financial position and cash flows.

A failure to adapt to technological changes to address the changing demands of clients may adversely impact the Company's business, and if the Company fails to successfully develop, introduce or integrate new services or enhancements to its services and products platforms, systems or applications, DFIN's reputation, net sales and operating income may suffer.

In May 2018, management introduced the Company's new business plan that focuses on transitioning its business to a software and technology focused company. In order to do that, the Company must attract new clients for those businesses, and its ability to attract new clients and increase sales to existing clients will depend in large part on the Company's ability to enhance and improve existing services and products platforms, including application solutions, and to introduce new functionality either by acquisition or internal development. As further described in Item 1. Business— Company History, in 2018, the Company sold its Language Solutions business and acquired eBrevia. In the first quarter of 2020, management realigned the Company's operating segments to enable management to have greater visibility into the performance of the Company's software solutions and compliance and communications management operating segments. The Company's software solutions net sales increased from 18.5% of total net sales in 2018 to 27.2% of total net sales in 2021, while the Company's tech-enabled services net sales increased from 45.7% of total net sales in 2018 to 52.3% of total net sales in 2021 and print and distribution net sales as a percentage of total net sales has declined from 35.8% in 2018 to 20.5% in 2021. In 2020, the Company undertook significant restructuring of its compliance and communications management operating segments due partially to regulatory changes that significantly reduced print volumes starting in 2021. The Company continues to invest a significant portion of its capital expenditures budget on software development, including the development of software solutions for both investment companies and capital markets, most recently with the launch of new cloud-based ActiveDisclosure in early 2021. In December 2021, the Company completed an acquisition of Guardum in order to enhance Venue capabilities. The Company's operating results would suffer if its innovations are not responsive to the needs of the Company's clients, are not appropriately timed with market opportunities or are not brought to market effectively. In addition, it is possible that management's assumptions about the features that they believe will drive purchasing decisions for the Company's potential clients or renewal decisions for the existing clients could be inaccurate. There can be no assurance that new products or services, or upgrades to DFIN's products or services, will be released as anticipated or that, when released, they will not contain defects. If product defects arise, the Company could experience negative publicity, damage to its reputation, decline in net sales, delay in market acceptance or claims by clients brought against the Company. Moreover, upgrades and enhancements to the Company's platforms may require substantial capital investment without assurance that the upgrades and enhancements will enable the Company to achieve or sustain a competitive advantage in the services and products offerings. If the Company is unable to license or acquire new technology solutions to enhance existing services and products offerings, the results of operations, financial position and cash flows may be negatively impacted.

Fluctuations in the costs and availability of paper and other raw materials may adversely impact the Company.

Global supply chain challenges leading to decreased availability of paper and other raw materials and the costs of these resources due to sourcing difficulties or otherwise have increased and are expected to continue to increase DFIN's costs. The Company may not be able to pass these costs on to clients through higher prices. Moreover, rising raw materials costs, and any consequent impact on pricing, could lead to a decrease in demand for DFIN's services and products.

DFIN's business is dependent upon brand recognition and reputation, and the failure to maintain or enhance the Company's brand or reputation would likely have an adverse effect on its business.

DFIN's brand recognition and reputation are important aspects of the Company's business. Maintaining and further enhancing DFIN's brands and reputation will be important to retaining and attracting clients for DFIN's products. The Company also believes that the importance of DFIN's brand recognition and reputation for products will continue to increase as competition in the market for DFIN's products and industry continues to increase. The Company's success in this area will be dependent on a wide range of factors, some of which are beyond the Company's control, including the efficacy of the Company's marketing efforts, its ability to retain existing and obtain new clients and strategic partners, human error, the quality and perceived value of DFIN's services and products offerings, actions of the Company's competitors and positive or negative publicity. Damage to the Company's reputation and loss of brand equity may reduce demand for DFIN's services and products offerings and negatively impact its business, results of operations, financial position and cash flows.

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

DFIN's success depends, in part, on its general ability to attract, develop, motivate and retain highly skilled employees. The loss of a significant number of employees or the inability to attract, hire, develop, train and retain additional skilled personnel could have a serious negative effect on DFIN's business. Management believes the Company's ability to retain its client base and to attract new clients is directly related to DFIN's sales force and client service personnel, and if the Company cannot retain these key employees, its business could suffer. In addition, many members of DFIN's management have significant industry experience that is valuable to competitors. The Company expects that its executive officers will have non-solicitation agreements contractually prohibiting them from soliciting clients and employees within a specified period of time after they leave DFIN. If one or more members of the senior management team leave and cannot be replaced with a suitable candidate quickly, the Company could experience difficulty in managing its business properly, which could negatively impact its business, results of operations, financial position and cash flows.

There are risks associated with operations outside the United States.

The Company has operations outside the United States. DFIN works with capital markets clients around the world, and in 2021 the Company's international sales accounted for approximately 13.8% of DFIN's net sales. The Company's operations outside of the United States are primarily focused in Europe, Asia and Canada. As a result, the Company is subject to the risks inherent in conducting business outside the United States, including:

- costs of customizing services and products for foreign countries;
- difficulties in managing and staffing international operations;
- increased infrastructure costs including legal, tax, accounting and information technology;
- reduced protection for intellectual property rights in some countries;
- potentially greater difficulties in collecting accounts receivable, including currency conversion and cash repatriation from foreign jurisdictions;
- increased licenses, tariffs and other trade barriers;
- potentially adverse tax consequences;
- increased burdens of complying with a wide variety of foreign laws, including employment-related laws, which may be more stringent than U.S. laws;
- unexpected changes in regulatory requirements;
- political and economic instability; and
- compliance with applicable anti-corruption and sanction laws and regulations.

The Company cannot be sure that its investments or operations in other countries will produce desired levels of net sales or that one or more of the factors listed above will not affect the Company's global business.

The Company's reliance on strategic partnerships as part of its business strategy may adversely affect the development of DFIN's business in those areas.

The Company's business strategy includes pursuing and maintaining strategic partnerships, such as the Company's commercial agreement with Mediant, in order to facilitate its entry into adjacent lines of business. This approach may expose the Company to risk of conflict with its strategic arrangement partners and divert management resources to oversee these partnership arrangements. Further, as these arrangements require cooperation with third party partners, these strategic arrangements may not be able to make decisions as quickly as DFIN would if it was operating on its own or may take actions that are different from what the Company would do on a standalone basis in light of the need to consider DFIN partners' interests. As a result, the Company may be less able to respond timely to changes in market dynamics, which could have a material adverse effect on its business, results of operations, financial position and cash flows.

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

Achieving the anticipated benefits of acquisitions will depend in part upon DFIN's ability to integrate these businesses in an efficient and effective manner. The integration of companies that have previously operated independently may result in significant challenges, and the Company may be unable to accomplish the integration smoothly or successfully. In particular, the coordination of geographically dispersed organizations with differences in corporate cultures and management philosophies may increase the difficulties of integration. The integration of acquired businesses may also require the dedication of significant management resources, which may temporarily distract management's attention from the day-to-day operations of the Company. In addition, the process of integrating operations may cause an interruption of, or loss of momentum in, the activities of one or more of the Company's businesses and the loss of key personnel from the Company or the acquired businesses. Further, employee uncertainty and lack of focus during the integration process may disrupt the businesses of the Company or the acquired businesses.

Financial Risks

The Company's indebtedness may adversely affect the Company's business and results of operations, financial position and cash flows.

As of December 31, 2021, the Company had \$125.0 million outstanding under its Term Loan A Facility, as defined below, and did not have any amounts outstanding under its Revolving Facility, as defined below. The Company's ability to make payments on and to refinance indebtedness, as well as any future debt that it may incur, will depend on the Company's ability to generate cash in the future from operations, financings or asset sales. The Company's ability to generate cash is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond the Company's control. The Company may not generate sufficient funds to service its debt and meet its business needs, such as funding working capital or the expansion of the Company's operations. If the Company is not able to repay or refinance debt as it becomes due, it may be forced to take disadvantageous actions, including facility closure, staff reductions, reducing financing in the future for working capital, capital expenditures and general corporate purposes, selling assets or dedicating an unsustainable level of cash flows from operations to the payment of principal and interest on its indebtedness, and restricting future capital return to stockholders. The lenders who hold the Company's debt could also accelerate amounts due in the event of a default, which could potentially trigger a default or acceleration of the maturity of the Company's debt.

In addition, the Company's competitors who may be less leveraged, could put the Company at a competitive disadvantage. These competitors could have greater financial flexibility to pursue strategic acquisitions, secure additional financing and may better withstand downturns in the Company's industry or the economy in general.

The agreements and instruments that govern the Company's debt impose restrictions that may limit the Company's operating and financial flexibility.

On May 27, 2021, the Company amended and restated its credit agreement dated as of September 30, 2016 (as in effect prior to such amendment and restatement, the "Credit Agreement," and the Credit agreement, as so amended and restated, the "Amended and Restated Credit Agreement"), by and among the Company, the lenders party thereto from time to time and JPMorgan Chase Bank, N.A., as administrative agent and collateral agent, to, among other things, provide for a \$200.0 million delayed-draw term loan A facility (the "Term Loan A Facility"), extend the maturity of the \$300.0 million revolving facility (the "Revolving Facility," and, together with the Term Loan A Facility, the "Credit Facilities") to May 27, 2026 and modify the financial maintenance and negative covenants in the Credit Agreement. On October 14, 2021, the Company drew \$200.0 million from the Term Loan A Facility and used the proceeds to redeem the Company's senior notes due October 15, 2024. The Amended and Restated Credit Agreement that governs the Company's Credit Facilities contain a number of significant restrictions and covenants that limit the Company's ability to:

- incur additional debt;
- pay dividends, make other distributions or repurchase or redeem capital stock;
- prepay, redeem or repurchase certain debt;
- make loans and investments:
- sell, transfer or otherwise dispose of assets;

- incur or permit to exist certain liens;
- enter into certain types of transactions with affiliates;
- enter into agreements restricting the Company's subsidiaries' ability to pay dividends; and
- consolidate, merge or sell all or substantially all of the Company's assets.

These covenants can have the effect of limiting the Company's flexibility in planning for or reacting to changes in the Company's business and the markets in which it competes. In addition, the Amended and Restated Credit Agreement that governs the Credit Facilities requires the Company to comply with certain financial maintenance covenants. Operating results below current levels or other adverse factors, including a significant increase in interest rates, could result in the Company being unable to comply with the financial covenants contained in the Term Loan A Facility. If the Company violates covenants under the Credit Facilities and is unable to obtain a waiver from the lenders, the Company's debt under the Credit Facilities would be in default and could be accelerated by the Company's lenders.

If the Company's debt is accelerated, the Company may not be able to repay its debt or borrow sufficient funds to refinance it. Even if the Company is able to obtain new financing, it may not be on commercially reasonable terms, on terms that are acceptable, or at all. If the Company's debt is in default for any reason, the Company's business and results of operations, financial position and cash flows could be materially and adversely affected. In addition, complying with these covenants may also cause the Company to take actions that may make it more difficult for the Company to successfully execute its business strategy and compete against companies that are not subject to such restrictions.

Despite the Company's current level of indebtedness, it may be able to incur significantly more debt.

Despite the Company's current level of indebtedness, the Company may be able to incur significant additional debt, including secured debt, in the future. Although the Amended and Restated Credit Agreement governing the Credit Facilities restrict the incurrence of additional debt, these restrictions are subject to a number of qualifications and exceptions. Also, these restrictions do not prevent the Company from incurring obligations that do not constitute indebtedness. In addition, as of December 31, 2021, the Company had \$297.8 million available for additional borrowing under the Revolving Facility. The more indebtedness the Company incurs, the further exposed it becomes to the risks associated with leverage described above.

Adverse credit market conditions may limit the Company's ability to obtain future financing.

The Company may, from time to time, depend on access to credit markets. Uncertainty and volatility in global financial markets may cause financial markets institutions to fail or may cause lenders to hoard capital and reduce lending. As a result, DFIN may not obtain financing on terms and conditions that are favorable, or at all.

The Company is exposed to risks related to potential adverse changes in currency exchange rates.

The Company is exposed to market risks resulting from changes in the currency exchange rates of the currencies in the countries in which it does business. Although operating in local currencies may limit the impact of currency rate fluctuations on the operating results of non-U.S. activities, fluctuations in such rates may affect the translation of these results into DFIN's financial statements. To the extent borrowings, sales, purchases, net sales and expenses or other transactions are not in the applicable local currency, the Company may enter into foreign currency spot and forward contracts to hedge the currency risk. Management cannot be sure, however, that its efforts at hedging will be successful, and such efforts could, in certain circumstances, lead to losses.

Legal and Regulatory Risks

Modifications in the rules and regulations to which clients or potential clients are subject to may impact the demand for the Company's services and products offerings.

Clients are subject to rules and regulations requiring certain printed or electronic communications governing the form, content and delivery methods of such communications, such as SEC Rule 30e-3 which provides certain registered investment companies with an option to electronically deliver stockholder reports and other materials rather than providing such reports in paper. Modifications in these regulations may impact clients' business practices and could reduce demand for DFIN's services and products offerings. Modifications in such regulations could eliminate the need for certain types of communications altogether or impact the quantity or format of required communications.

Increasing regulatory focus on privacy issues and expanding laws could impact DFIN's software solutions and expose the Company to increased liability.

Privacy and data security laws apply to DFIN's various businesses in all jurisdictions in which the Company operates. In particular, clients use DFIN's software solutions, including Venue, to share personal data and information on a confidential basis, and such sharing may be subject to privacy and data security laws. DFIN's global business operates in countries that have more stringent data protection laws than those in the United States. These data protection laws may be inconsistent across jurisdictions and are subject to evolving and differing interpretations. Complying with these regulations has been, and will continue to be, costly, and there are or will be significant penalties for failure to comply with these regulations. Further, any perception of DFIN's practices, products or services as a violation of individual privacy rights may subject the Company to public criticism, class action lawsuits, reputational harm, or investigations or claims by regulators, industry groups or other third parties, all of which could disrupt DFIN's business and expose the Company to liability.

Transferring personal data and information across international borders is becoming increasingly complex. For example, Europe has stringent regulations regarding transfer of personal data and information. The mechanisms that DFIN and many other companies rely upon for data transfers from Europe to the United States (e.g., Privacy Shield and Model Clauses) have been successfully challenged in the European court systems and compliance with legislation related to data transfers is uncertain. The Company is closely monitoring developments related to requirements for transferring personal data and information. Privacy regulation continues to develop globally and could impact DFIN's business, results of operations, financial position and cash flows.

Benefit, Pension and Other Post-Retirement Benefit Plans Risk

Changes in market conditions, changes in discount rates, or lower returns on assets may increase required pension and other post-retirement benefits plans contributions in future periods.

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

The Company may become liable for funding obligations arising from multi-employer pension plan obligations of the Company's former affiliates.

On April 13, 2020, LSC announced that it, along with most of its U.S. subsidiaries, voluntarily filed for business reorganization under Chapter 11 of the U.S. Bankruptcy Code. LSC and the Company separated from RRD in a tax-free distribution to stockholders of RRD effective October 1, 2016. In the second quarter of 2020, the Company became aware that, subsequent to the LSC Chapter 11 Filing, LSC failed to make certain required monthly and quarterly withdrawal liability payments to multiemployer pension plans from which RRD had withdrawn prior to the Separation. Responsibility for certain pre-Separation withdrawal liability obligations, resulting in such monthly and quarterly payment obligations (the "LSC MEPP Liabilities"), had been assigned to LSC pursuant to the Separation Agreement, while RRD retained responsibility for certain other pre-Separation withdrawal liability assessments against RRD. However, the Company and RRD remain jointly and severally liable for the LSC MEPP Liabilities pursuant to laws and regulations governing multiemployer pension plans and the Company remains jointly and severally liable for certain additional RRD MEPP liabilities. In March 2021 and April 2021, the Company and RRD reached settlements with two of the three LSC multiemployer pension plan funds, which represented approximately \$59 million of the estimated \$103 million total undiscounted LSC MEPP Liabilities at the time of the LSC Chapter 11 filing. The Company and RRD each made lump sum payments in the second quarter of 2021 to settle all obligations related to these funds. In November 2021, arbitration proceedings were completed and the final allocation of the liability between the Company and RRD was determined. If RRD fails to make required payments in respect of the remaining LSC MEPP Liabilities or RRD fails to make required payments in respect of the RRD MEPP liabilities, the Company may become obligated to make such payments, which payment obligations may negatively impact the Company's cash flows and results of operations. In addition, the Company's MEPP liabilities could also be affected by the financial stability of other employers participating in such plans and decisions by those employers to withdraw from such plans in the future. See Note 8, Commitments and Contingencies to the audited Consolidated Financial Statements for more information about these potential LSC MEPP Liabilities.

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

DFIN provides health care and other benefits to both employees and retirees. For many years, costs for health care have increased more rapidly than general inflation in the U.S. economy. If this trend in health care costs continues, the cost to provide such benefits could increase, adversely impacting profitability. Changes to health care regulations in the U.S. and internationally may also increase cost of providing such benefits.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

The Company's corporate office is located in leased office space at 35 West Wacker Drive, Chicago, Illinois, 60601. As of December 31, 2021, the Company leased or owned 22 U.S. facilities, some of which had multiple buildings and warehouses, and these U.S. facilities encompassed approximately 0.7 million square feet. The Company leased 21 international facilities, some of which had multiple buildings and warehouses, encompassing less than 0.1 million square feet in Europe, Asia and Canada. Of the Company's worldwide facilities, approximately 0.2 million square feet of space was owned, while the remaining 0.6 million square feet of space was leased.

ITEM 3. LEGAL PROCEEDINGS

For a discussion of certain litigation involving the Company, see Note 8, *Commitments and Contingencies*, to the audited Consolidated Financial Statements.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR DONNELLEY FINANCIAL SOLUTIONS, INC.'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Principal Market

DFIN's common stock began "regular-way" trading under the ticker symbol "DFIN" on the New York Stock Exchange ("NYSE") on October 3, 2016.

Stockholders

As of February 15, 2022, there were 3,735 stockholders of record of the Company's common stock.

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Dollar Value of Shares that May Yet be Purchased Under the Plans or Programs (a)
October 1, 2021 - October 31, 2021	271,775	\$ 37.11	271,775	\$ 21,359,231
November 1, 2021 - November 30, 2021	39,722	40.78	39,722	19,739,493
December 1, 2021 - December 31, 2021 (b)	46,063	44.09	46,063	17,708,775
Total	357,560	\$ 38.42	357,560	

⁽a) On February 4, 2020, the Board of Directors (the "Board") authorized a stock repurchase program, under which the Company is authorized to repurchase up to \$25.0 million of its outstanding common stock from time to time in one or more transactions on the open market or in privately negotiated purchases in accordance with all applicable securities laws and regulations. On February 18, 2021, the Board authorized an increase to its stock repurchase program to bring the total remaining available repurchase authorization for shares on or after February 18, 2021 to \$50 million. On February 17, 2022, the Board authorized an increase to its stock repurchase program to bring the total remaining available repurchase for shares on or after February 17, 2022 to \$150 million and extended the expiration date of the repurchase program through December 31, 2023. The stock repurchase program may be suspended or discontinued at any time. The timing and amount of any shares repurchased are determined by the Company based on its evaluation of market conditions and other factors and may be completed from time to time in one or more transactions on the open market or in privately negotiated purchases in accordance with all applicable securities laws and regulations and all repurchases in the open market will be made in compliance with Rule 10b-18 under the Exchange Act. Repurchases may also be made under a Rule 10b5-1 plan, which would permit shares to be repurchased when the Company might otherwise be precluded from doing so.

Equity Compensation Plans

For information regarding equity compensation plans, see Item 12 of Part III of the Annual Report.

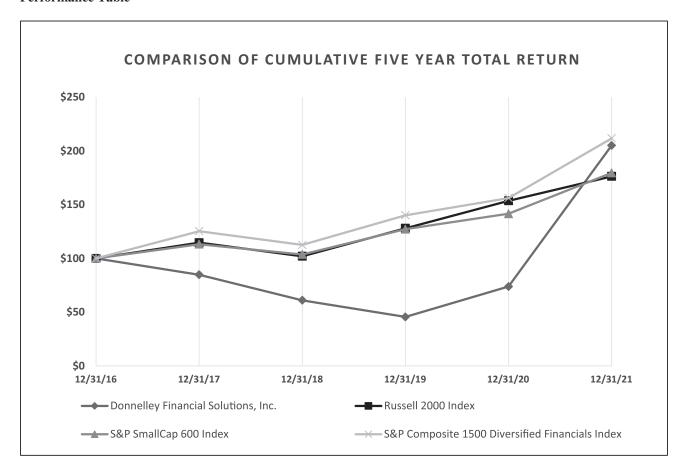
⁽b) Includes 4,000 shares, valued at \$0.2 million, for which the Company placed orders prior to December 31, 2021 that were not settled until the first quarter of 2022.

PEER PERFORMANCE TABLE

The following graph compares the cumulative total stockholder return on DFIN's common stock from December 31, 2016 through December 31, 2021, with (i) the cumulative total return of the Russell 2000 Index, (ii) the cumulative return of the Standard & Poor's ("S&P") SmallCap 600 Index, and (iii) S&P Composite 1500 Diversified Financials Index, a business industry index of which DFIN is a constituent.

The comparison assumes all dividends have been reinvested and an initial investment of \$100 on December 31, 2016. The stock price performance on the following graph is not necessarily indicative of future stock price performance.

Performance Table



Company Name/Index	Base Period 12/31/2016	December 31, 2017	December 31, 2018	December 31, 2019	December 31, 2020	December 31, 2021
Donnelley Financial Solutions	100	84.81	61.05	45.56	73.85	205.13
Russell 2000 Index	100	114.65	102.02	128.06	153.62	176.39
S&P SmallCap 600 Index	100	113.23	103.63	127.24	141.60	179.58
S&P Composite 1500 Diversified Financials Index	100	125.37	112.54	140.18	156.19	211.83

This performance graph and other information furnished under Item 5 of Part II of this Annual Report on Form 10-K shall not be deemed to be "soliciting material" or to be "filed" with the SEC or subject to Regulation 14A or 14C, or to the liabilities of Section 18 of the Exchange Act.

ITEM 6. [RESERVED]

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") should be read together with the Company's audited Consolidated Financial Statements and the notes thereto, as well as "Item 1. Business" included in this Annual Report on Form 10-K.

MD&A contains a number of forward-looking statements, all of which are based on the Company's current expectations and could be affected by the risks and uncertainties, as well as other factors, described throughout this Annual Report on Form 10-K, particularly in "Item 1A. Risk Factors" and "Special Note Regarding Forward-Looking Statements."

Business

For a description of the Company's business and services and products offerings, refer to Item 1. Business of Part I of this Annual Report on Form 10-K.

The Company separately reports its net sales and related cost of sales for its software solutions, tech-enabled services and print and distribution offerings. The Company's software solutions consist of Venue, ActiveDisclosure, eBrevia, Arc Suite and others. The Company's tech-enabled services offerings consist of document composition, compliance-related SEC EDGAR filing services and transaction solutions. The Company's print and distribution offerings primarily consist of conventional and digital printed products and related shipping.

Segments

The Company operates its business through four operating and reportable segments: Capital Markets – Software Solutions, Capital Markets – Compliance and Communications Management, Investment Companies – Software Solutions and Investment Companies – Compliance and Communications Management. Corporate is not an operating segment and consists primarily of unallocated SG&A activities and associated expenses including, in part, executive, legal, finance and certain facility costs. In addition, certain costs and earnings of employee benefit plans, such as pension and other postretirement benefits plan expense (income) as well as share-based compensation expense, are included in Corporate and not allocated to the operating segments. For a description of the Company's operating segments, refer to Item 1. Business of Part I of this Annual Report on Form 10-K.

Executive Overview

2021 Overview

Net sales for the year ended December 31, 2021 increased by \$98.8 million, or 11.0%, as compared to the year ended December 31, 2020, including a \$5.4 million, or 0.6%, increase due to changes in foreign exchange rates. Net sales increased primarily due to higher capital markets transactional and compliance volumes and higher software solutions volumes in Venue, Arc Suite and ActiveDisclosure, partially offset by lower insurance and investment companies compliance print volumes as a result of the impact of SEC Rules 30e-3 and 498A on the Company's business.

Income from operations for the year ended December 31, 2021 increased \$215.7 million as compared to the year ended December 31, 2020. Income from operations increased primarily due to higher sales volumes, a \$65.6 million reduction in restructuring, impairment, and other charges, net, a favorable sales mix, cost savings as a result of consolidation of the print platform and a \$13.6 million decrease in LSC multiemployer pension plan obligation expense, partially offset by higher selling expense as a result of increased sales volume, higher incentive compensation expense and higher share-based compensation expense.

Redemption of 8.25% Senior Notes Due 2024 and Partial Prepayment of the Term Loan A Facility

On October 15, 2021, the Company redeemed the remaining outstanding Notes balance of \$233.0 million at the redemption price of 102.063, plus accrued and unpaid interest of \$9.6 million, using \$200.0 million of proceeds from the Company's Term Loan A Facility and cash. The Company recorded a pre-tax loss on the extinguishment of the Notes of \$6.8 million in the fourth quarter of 2021.

In the fourth quarter of 2021, the Company prepaid \$75.0 million of the original principal amount of the Term Loan A Facility and recorded a pre-tax loss on the extinguishment of debt of \$0.6 million.

COVID-19

As further described in Part 1—Item 1. *Business—COVID-19*, in December 2019, COVID-19 was identified in China and has since extensively impacted the global health and economic environment. On March 11, 2020, WHO characterized COVID-19 as a pandemic. Although COVID-19 has adversely impacted the Company's financial condition, results of operations and overall financial performance, the extent of that impact is currently uncertain and depends on factors including the impact on the Company's customers, employees and vendors.

The COVID-19 pandemic has had and may continue to have a material adverse impact on certain of the Company's customers' financial results, which has and may continue to force those clients to alter their plans for purchasing the Company's services and products. In addition, the global markets were disrupted due to the COVID-19 pandemic, which had a temporary negative impact on the Company's transactional offerings. This stabilized in the third quarter of 2020 and the Company continues to experience a high volume of transactional offerings. However, there remains uncertainty for future periods with the COVID-19 pandemic, including potentially new strains of COVID-19, resulting in renewal of mitigation measures, including targeted shutdowns. Some of this volatility is mitigated through the Company's compliance offerings, supporting the quarterly and annual public company reporting processes, as well as its investment companies regulatory and stockholder communications offerings. If the Company's customers reduce, defer or cancel their spending with DFIN, it would materially adversely impact the Company's business, results of operations and overall financial performance.

Some of the Company's operations also have been affected by a range of external factors related to the COVID-19 pandemic that are not within the Company's control. For example, many jurisdictions imposed a wide range of restrictions on the physical movement of the Company's employees and vendors to limit the spread of COVID-19, although most of these restrictions have been rescinded, in whole or in part. If any of these external factors or widespread geographic shutdowns are renewed, or if the COVID-19 pandemic and related mitigation measures otherwise have a substantial impact on the Company's or vendors' employee attendance or productivity, the Company's operations are expected to be adversely affected, and in turn the Company's business, results of operations, liquidity and overall financial performance would be harmed. Furthermore, the Company's insurance costs may increase.

In response to the COVID-19 pandemic, the Company has taken numerous steps, and will continue to take further actions to ensure the safety of the Company's employees. At the beginning of the pandemic, the Company reviewed and implemented an updated business continuity plan, required all non-essential employees to work from home, prohibited non-essential travel and conducted client and employee meetings virtually. During the third quarter of 2021, the Company implemented a flexible model that allows employees the option to continue to work from home, with the exception of essential employees whose roles require them to be on site. In the Company's manufacturing locations, the Company is following all federal, state and local safety requirements including social distancing where possible, wearing masks and increased cleaning. The Company continues to evaluate these measures on an ongoing basis to ensure continuity of the Company's business operations and the safety of the Company's workforce. Incremental expenses incurred related to the COVID-19 pandemic included incremental vendor costs and premium wages paid to certain employees as well as costs to clean and disinfect the Company's facilities more frequently. The Company could incur such costs in future periods, however, the impact of such costs on the Company's business, results of operations, liquidity and overall financial performance cannot be predicted at this time. As a result of the incremental expenses, starting in the second quarter of 2020, the Company invoiced certain customers COVID-19-related sales surcharges to recoup some of the expenses. The invoicing of sales surcharges subsided during 2021. In the second half of 2020, the Company also received certain government subsidies in connection with COVID-19, primarily related to employee wages at certain international locations. The Company recorded \$1.0 million of COVID-19 recoveries, net, primarily related to an insurance reimbursement for COVID-19 expenses during the year ended December 31, 2021, and incurred \$0.5 million of incremental expense, net of sales surcharges and government subsidies, during the year ended December 31, 2020. The Company also continues to work closely with its clients to support them as they implement their own contingency plans, helping them access the Company's services and products and continue to meet their regulatory requirements.

The Company believes that implementing cost reduction efforts helped mitigate the impact that reduced revenues in the first half of 2020 had on income from operations. The Company has reduced expenses and may take further actions that alter its business operations as the situation evolves. The ultimate impact of the COVID-19 pandemic and the effects on the Company's business, results of operations, liquidity and overall financial performance cannot be predicted at this time.

Multiemployer Pension Plans Obligation

On April 13, 2020, LSC announced that it, along with most of its U.S. subsidiaries, voluntarily filed for business reorganization under Chapter 11 of the U.S. Bankruptcy Code ("LSC Chapter 11 Filing"). In the second quarter of 2020, the Company became aware that, subsequent to the LSC Chapter 11 Filing, LSC failed to make certain required monthly and quarterly withdrawal liability payments to multiemployer pension plans ("MEPP") from which RRD had withdrawn prior to the Separation. Responsibility for certain pre-Separation withdrawal liability obligations, resulting in such monthly and quarterly payment obligations (the "LSC MEPP Liabilities"), had been assigned to LSC pursuant to the September 14, 2016 Separation and Distribution Agreement among the Company, RRD and LSC (the "Separation Agreement"), however, the Company and RRD remained jointly and severally liable for the LSC MEPP Liabilities pursuant to laws and regulations governing multiemployer pension plans. The Company believes the total undiscounted LSC MEPP Liabilities for which LSC was responsible at the time of the LSC Chapter 11 Filing were approximately \$103 million (or approximately \$57 million on a discounted basis, assuming a blended discount rate of approximately 10%) and were payable over approximately a 15-year period (through 2034), with annual payments ranging from \$1.6 million to \$8.5 million at the time.

On July 24, 2020, the Company and RRD signed an agreement agreeing to submit to mediation and, if required, arbitration to determine the final liability allocation between the Company and RRD with respect to the LSC MEPP Liabilities. DFIN and RRD also agreed to share all required monthly and quarterly withdrawal liability payment obligations that become due during the mediation/arbitration period, with an adjustment and repayment to be made for any such payments according to the final allocation.

The Company is required to record a liability when it is probable that a loss has been incurred and the amount can be reasonably estimated. In 2020, the Company recorded charges of \$19.0 million and had \$15.2 million accrued as of December 31, 2020 for its estimated payments related to the LSC MEPP Liabilities, including the Company's low end of the range of potential outcomes as well as the Company's estimated shared payments until a final allocation was determined.

In March 2021 and April 2021, the Company and RRD reached settlements with two of the three LSC multiemployer pension plan funds, which represented approximately \$59 million of the estimated \$103 million total undiscounted LSC MEPP Liabilities at the time of the LSC Chapter 11 filing. The Company and RRD each made lump sum payments in the second quarter of 2021 to settle all obligations related to these funds, which were also subject to adjustment and repayment according to the final liability allocation determination.

In November 2021, arbitration proceedings were completed and the final allocation of the LSC MEPP Liabilities of 1/3 to the Company and 2/3 to RRD was determined by the arbitration panel. As a result of the final liability allocation, the Company received a reimbursement from RRD of \$7.1 million in December 2021 for payments made in excess of the Company's allocated share of the LSC MEPP Liabilities, including the lump sum payments made associated with the March 2021 and April 2021 settlements, and adjusted its accruals for the Company's portion of the LSC MEPP Liabilities.

As of December 31, 2021, the Company's undiscounted LSC MEPP Liabilities were \$12.3 million, \$1.1 million of which is payable in each of the five succeeding years and the remainder thereafter through 2033, with annual payments ranging from \$0.8 million to \$1.1 million. For the year ended December 31, 2021, the Company recorded net expense of \$5.4 million and had \$10.1 million accrued as of December 31, 2021, on a discounted basis, assuming a blended discount rate of approximately 3.5%. The expense associated with the LSC MEPP Liabilities and the reimbursement from RRD have been recorded in SG&A expenses within the Corporate segment in the Company's audited Consolidated Statements of Operations for the years ended December 31, 2021 and 2020.

There can be no assurance that the Company's actual future liabilities relating to MEPP liabilities (including MEPP liabilities where the Company and RRD remain jointly and severally liable) will not differ materially from the amount recorded in the Company's audited Consolidated Financial Statements. If RRD fails to make required payments in respect of the remaining LSC MEPP Liabilities, or RRD fails to make required payments in respect to RRD's MEPP liabilities, the Company may become obligated to make such payments. In addition, the Company's MEPP liabilities could be affected by the financial stability of other employers participating in such plans and decisions by those employers to withdraw from such plans in the future.

Financial Review

In the financial review that follows, the Company discusses its consolidated results of operations, financial condition, cash flows and certain other information. This discussion and analysis should be read in conjunction with the Company's audited Consolidated Financial Statements and related notes thereto.

A discussion of the Company's financial condition, changes in financial condition and results of operations for the year ended December 31, 2020 as compared to the year ended December 31, 2019, can be found in Part II, "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" of DFIN's Annual Report on Form 10-K for the year ended December 31, 2020, filed with the SEC on February 25, 2021.

Results of Operations for the Year Ended December 31, 2021 as Compared to the Year Ended December 31, 2020

The following table shows the results of operations for the years ended December 31, 2021 and 2020:

	Year Ended I			
	2021	2020	\$ Change	% Change
	(i	pt percentages)		
Net sales				
Tech-enabled services		\$ 409.2		27.0%
Software solutions	270.0	200.2	69.8	34.9%
Print and distribution	203.8	285.1	(81.3)	(28.5%)
Total net sales	993.3	894.5	98.8	11.0%
Tech-enabled services	162.3	176.1	(13.8)	(7.8%)
Software solutions	105.3	93.9	11.4	12.1%
Print and distribution	145.5	226.0	(80.5)	(35.6%)
Total cost of sales	413.1	496.0	(82.9)	(16.7%)
Selling, general and administrative expenses (a)	307.7	264.8	42.9	16.2%
Depreciation and amortization	40.3	50.9	(10.6)	(20.8%)
Restructuring, impairment and other charges, net	13.6	79.2	(65.6)	(82.8%)
Other operating income, net	(0.7)		(0.7)	nm
Income from operations	219.3	3.6	215.7	nm
Interest expense, net	26.6	22.8	3.8	16.7%
Investment and other income, net	(5.1)	(1.7)	(3.4)	nm
Earnings (loss) before income taxes	197.8	(17.5)	215.3	nm
Income tax expense	51.9	8.4	43.5	nm
Net earnings (loss)	\$ 145.9	<u>\$ (25.9)</u>	\$ 171.8	nm

nm - Not meaningful

Consolidated

Net sales of tech-enabled services of \$519.5 million for the year ended December 31, 2021 increased \$110.3 million, or 27.0%, as compared to the year ended December 31, 2020. Net sales of tech-enabled services increased primarily due to increased capital markets transactional and compliance volumes, partially offset by lower insurance and investment companies compliance volumes.

Net sales of software solutions of \$270.0 million for the year ended December 31, 2021 increased \$69.8 million, or 34.9%, as compared to the year ended December 31, 2020. Net sales of software solutions increased primarily due to increased Venue, ArcDigital, ActiveDisclosure and ArcPro volumes.

Net sales of print and distribution of \$203.8 million for the year ended December 31, 2021 decreased \$81.3 million, or 28.5%, as compared to the year ended December 31, 2020. Net sales of print and distribution decreased primarily due to lower insurance and investment companies compliance volumes as a result of the impact of SEC Rules 30e-3 and 498A on the Company's business, partially offset by higher capital markets transactional print volumes.

⁽a) Exclusive of depreciation and amortization

Tech-enabled services cost of sales of \$162.3 million for the year ended December 31, 2021 decreased \$13.8 million, or 7.8%, as compared to the year ended December 31, 2020, primarily due to a favorable sales mix and cost control initiatives, partially offset by the impact of higher sales volumes, a higher allocation of overhead costs and higher incentive compensation expense. As a percentage of tech-enabled services net sales, tech-enabled services cost of sales decreased 11.8%, primarily driven by a favorable sales mix and cost control initiatives, partially offset by a higher allocation of overhead costs and higher incentive compensation expense.

Software solutions cost of sales of \$105.3 million for the year ended December 31, 2021 increased \$11.4 million, or 12.1%, as compared the year ended December 31, 2020, primarily due to increased sales volume, a higher allocation of overhead costs and higher incentive compensation expense, partially offset by a favorable sales mix and cost control initiatives. As a percentage of software solutions net sales, software solutions costs of sales decreased 7.9%, primarily driven by a favorable sales mix and cost control initiatives, partially offset by a higher allocation of overhead costs and higher incentive compensation expense.

Print and distribution cost of sales of \$145.5 million for the year ended December 31, 2021 decreased \$80.5 million, or 35.6%, as compared to the year ended December 31, 2020, primarily due to the impact of lower sales volumes as a result of the impact of SEC Rules 30e-3 and 498A on the Company's business, cost savings as a result of the consolidation of the print platform and a lower allocation of overhead costs, partially offset by higher incentive compensation expense. As a percentage of print and distribution net sales, print and distribution cost of sales decreased 7.9%, primarily driven by cost savings as a result of the consolidation of the print platform and a lower allocation of overhead costs, partially offset by higher incentive compensation expense.

SG&A expenses of \$307.7 million for the year ended December 31, 2021 increased \$42.9 million, or 16.2%, as compared to the year ended December 31, 2020, primarily due to higher selling expense as a result of increased sales volume, higher incentive compensation expense and higher share-based compensation expense, partially offset by a \$13.6 million decrease in LSC multiemployer pension plan obligation expense. As a percentage of net sales, SG&A expenses increased from 29.6% for the year ended December 31, 2020 to 31.0% for the year ended December 31, 2021, primarily due to higher selling expense as a result of increased sales volume, higher incentive compensation expense and higher share-based compensation expense, partially offset by a decrease in LSC multiemployer pension plan obligation expense.

Depreciation and amortization of \$40.3 million for the year ended December 31, 2021 decreased \$10.6 million, or 20.8%, as compared to the year ended December 31, 2020. Depreciation and amortization decreased primarily due to intangible assets that were fully amortized by the end of fiscal year 2020. Depreciation and amortization included \$1.1 million and \$12.4 million of amortization of other intangible assets for the years ended December 31, 2021 and 2020, respectively.

Restructuring, impairment and other charges, net of \$13.6 million for the year ended December 31, 2021 decreased \$65.6 million, or 82.8%, as compared to the year ended December 31, 2020. For the year ended December 31, 2021, these charges included impairment charges of \$9.2 million, primarily related to the impairment of an equity investment and the demolition of an office building, and \$3.4 million for employee termination costs for approximately 175 employees. For the year ended December 31, 2020, these charges included a \$40.6 million non-cash goodwill impairment charge within the IC-CCM reporting unit, \$15.6 million of employee termination costs for approximately 470 employees, impairment charges of \$20.0 million primarily related to operating lease ROU assets and \$3.0 million of other charges, primarily related to the realignment of the Company's operating segments.

Other operating income, net of \$0.7 million for the year ended December 31, 2021 included a net gain on the sale of machinery and equipment from facilities being exited.

Income from operations of \$219.3 million for the year ended December 31, 2021 increased \$215.7 million as compared to the year ended December 31, 2020, primarily due to higher sales volumes, a \$65.6 million reduction in restructuring, impairment, and other charges, net, a favorable sales mix, cost savings as a result of consolidation of the print platform and a \$13.6 million decrease in LSC multiemployer pension plan obligation expense, partially offset by higher selling expense as a result of increased sales volume, higher incentive compensation expense and higher share-based compensation expense.

Interest expense, net of \$26.6 million for the year ended December 31, 2021 increased \$3.8 million, or 16.7%, as compared to the year ended December 31, 2020, primarily due to \$7.4 million of losses on debt extinguishments recorded during 2021 compared to a \$2.3 million gain on debt extinguishment recorded during 2020, partially offset by a lower average Revolving Facility balance during 2021 compared to 2020, and the prepayment of the Notes during the fourth quarter of 2021, which were replaced by the Term Loan A that has a lower interest rate.

Investment and other income, net of \$5.1 million for the year ended December 31, 2021 increased \$3.4 million as compared to the year ended December 31, 2020, primarily due to an increase in net pension plan income.

The effective income tax rate was 26.2% for the year ended December 31, 2021 compared to (48.0%) for the year ended December 31, 2020. The change in the effective tax rate was primarily driven by the nondeductible goodwill impairment charge recorded in 2020, increased earnings in 2021 and a reduction in the valuation allowances. Refer to Note 9, *Income Taxes*, for further details.

Information by Segment

The following tables summarize net sales, income (loss) from operations and certain items impacting comparability within each of the operating segments and Corporate.

Capital Markets - Software Solutions

	Year Ende	d December 31,	_		
	2021	2020	\$ Char	nge % Ch	ıange
		(in millions, excep	t percentag	ges)	
Net sales	\$ 181.0	\$ 133.2	\$	47.8 3.	5.9%
Income from operations	30.4	8.5	i	21.9	nm
Operating margin	16.89	% 6.4	.%		
Items impacting comparability					
Restructuring, impairment and other charges, net	0.4	1.0)	(0.6) (60.6)	(0.0%)
Non-income tax, net	(1.0)) 3.4		(4.4)	nm
Accelerated rent expense	_	0.5		(0.5) $(10$	0.0%)

nm - Not meaningful

Net sales of \$181.0 million for the year ended December 31, 2021 increased \$47.8 million, or 35.9%, as compared to the year ended December 31, 2020. Net sales increased primarily due to higher Venue, ActiveDisclosure and other compliance software solutions volumes.

Income from operations of \$30.4 million for the year ended December 31, 2021 increased \$21.9 million as compared to the year ended December 31, 2020, primarily due to higher sales volumes, a favorable sales mix, a reduction of non-income tax, net expense, and cost savings initiatives, partially offset by higher selling expense as a result of increased sales volumes, a higher allocation of overhead costs and higher incentive compensation expense.

Operating margin increased from 6.4% for the year ended December 31, 2020 to 16.8% for the year ended December 31, 2021, primarily due to a favorable sales mix, a reduction of non-income tax, net expense, which had a positive impact on the change in operating margin of 2.4%, and cost savings initiatives, partially offset by higher selling expense as a result of increased sales volumes, a higher allocation of overhead costs and higher incentive compensation expense.

	Year Ended December 31,					
	2021		2020	\$ Change		% Change
		(in m	illions, excep	t per	centages)	
Net sales	\$	561.5 \$	424.0	\$	137.5	32.4%
Income from operations		242.6	120.6		122.0	nm
Operating margin		43.2%	28.4%)		
Items impacting comparability						
Restructuring, impairment and other charges, net		3.5	22.2		(18.7)	(84.2%)
COVID-19 related recoveries, net		(0.2)	(2.2)		2.0	(90.9%)
Non-income tax, net		(0.2)	0.6		(0.8)	nm
Accelerated rent expense		`—	1.2		(1.2)	(100.0%)

nm - Not meaningful

Net sales of \$561.5 million for the year ended December 31, 2021 increased \$137.5 million, or 32.4%, as compared to the year ended December 31, 2020. Net sales increased primarily due to higher transactional and compliance volumes.

Income from operations of \$242.6 million for the year ended December 31, 2021 increased \$122.0 million as compared to the year ended December 31, 2020, primarily due to higher sales volume, a favorable sales mix, a decrease in restructuring, impairment, and other charges, net, a reduction in depreciation and amortization and cost savings initiatives, partially offset by higher selling expense as a result of increased sales volume, a higher allocation of overhead costs and higher incentive compensation expense.

Operating margin increased from 28.4% for the year ended December 31, 2020 to 43.2% for the year ended December 31, 2021, primarily due to higher sales volume, a favorable sales mix, a decrease in restructuring, impairment, and other charges, net, which had a positive impact on operating margin of 3.3%, a reduction in depreciation and amortization and cost savings initiatives, partially offset by higher selling expense as a result of increased sales volume, a higher allocation of overhead costs and higher incentive compensation expense.

Investment Companies - Software Solutions

	Y	Year Ended December 31,				
		2021		2020	\$ Change	% Change
		(in	mil	lions, except	percentages)	
Net sales	\$	89.0	\$	67.0	\$ 22.0	32.8%
Income (loss) from operations		8.9		(1.7)	10.6	nm
Operating margin		10.0%		(2.5%)		
Items impacting comparability						
Restructuring, impairment and other charges, net		0.1		3.0	(2.9)	(96.7%)
Non-income tax, net		(0.3)		1.0	(1.3)	nm
Accelerated rent expense		_		0.1	(0.1)	(100.0%)

nm - Not meaningful

Net sales of \$89.0 million for the year ended December 31, 2021 increased \$22.0 million, or 32.8%, as compared to the year ended December 31, 2020. Net sales increased primarily due to higher ArcDigital volume resulting from the TCM offering, which supports compliance with SEC Rules 30e-3 and 498A regulatory requirements, and higher ArcPro volumes driven by iXBRL requirements.

Income from operations of \$8.9 million for the year ended December 31, 2021 increased \$10.6 million as compared to an operating loss of \$1.7 million for the year ended December 31, 2020, primarily due to higher sales volumes, a favorable sales mix and a decrease in restructuring, impairment, and other charges, net, partially offset by a higher allocation of overhead costs and higher incentive compensation expense.

Operating margin increased from a negative margin of 2.5% for the year ended December 31, 2020 to 10.0% for the year ended December 31, 2021, primarily due to higher sales volume, a favorable net sales mix, along with a decrease in restructuring, impairment, and other charges, net, which had a positive impact on operating margin of 3.3%, partially offset by a higher allocation of overhead costs and higher incentive compensation expense.

	Yea	ar Ended Dec	ember 31,			
	2	2021	2020	\$ Change		% Change
		(in n	nillions, exce	pt perc	entages)	
Net sales	\$	161.8 \$	270.3	\$	(108.5)	(40.1%)
Income (loss) from operations		15.0	(43.1)		58.1	nm
Operating margin		9.3%	(15.9%	6)		
Items impacting comparability						
Restructuring, impairment and other charges, net		2.9	46.2		(43.3)	(93.7%)
COVID-19 related (recoveries) expenses, net		(0.8)	2.4		(3.2)	nm
Gain on sale of long-lived assets, net		(0.7)	_		(0.7)	nm
Non-income tax, net		(0.1)	0.2		(0.3)	nm
Accelerated rent expense		_	0.3		(0.3)	(100.0%)

nm - Not meaningful

Net sales of \$161.8 million for the year ended December 31, 2021 decreased \$108.5 million, or 40.1%, as compared to the year ended December 31, 2020. Net sales decreased primarily due to lower insurance and investment companies compliance volumes as a result of SEC Rules 30e-3 and 498A eliminating print requirements and lower transactional and commercial volumes.

Income from operations of \$15.0 million for the year ended December 31, 2021 increased \$58.1 million as compared to an operating loss of \$43.1 million for the year ended December 31, 2020, primarily due to a decrease in restructuring, impairment and other charges, net, which included a \$40.6 million goodwill impairment charge in 2020, cost savings as a result of the print platform consolidation, a lower allocation of overhead costs, a reduction in depreciation and amortization expense and a decrease in COVID-19 related expenses, net, partially offset by lower sales volume and higher incentive compensation expense.

Operating margin increased from a negative margin of 15.9% for the year ended December 31, 2020 to 9.3% for the year ended December 31, 2021, primarily due to a decrease in restructuring, impairment and other charges, net, as well as a decrease in COVID-19 related expenses, net, which combined had a positive impact on operating margin of 28.7%, cost savings as a result of the print platform consolidation, a lower allocation of overhead costs and a reduction in depreciation and amortization expense, partially offset by higher incentive compensation expense.

Corporate

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

	Year Ended December 31,			
	2021			2020
		llions)		
Operating expenses	\$	77.6	\$	80.7
Items impacting comparability				
Share-based compensation expense		19.5		13.6
Restructuring, impairment and other charges, net		6.7		6.8
LSC multiemployer pension plans obligation		5.4		19.0
COVID-19 related expenses, net		_		0.3
eBrevia contingent consideration		_		(0.8)
Accelerated rent expense		_		0.1

Corporate operating expenses of \$77.6 million for the year ended December 31, 2021 decreased \$3.1 million as compared to the year ended December 31, 2020, primarily due to a \$13.6 million decrease in LSC multiemployer pension plan obligation expense and lower legal expenses, partially offset by higher incentive compensation, share-based compensation and consulting expenses.

Non-GAAP Measures

The Company believes that certain Non-GAAP measures, such as Non-GAAP adjusted EBITDA ("Adjusted EBITDA"), provide useful information about the Company's operating results and enhance the overall ability to assess the Company's financial performance. The Company uses these measures, together with other measures of performance prepared in accordance with accounting principles generally accepted in the United States ("GAAP"), to compare the relative performance of operations in planning, budgeting and reviewing the performance of its business. Adjusted EBITDA allows investors to make a more meaningful comparison between the Company's core business operating results over different periods of time. The Company believes that Adjusted EBITDA, when viewed with the Company's results under GAAP and the accompanying reconciliations, provides useful information about the Company's business without regard to potential distortions. By eliminating potential differences in results of operations between periods caused by factors such as historic cost and age of assets, restructuring, impairment and other charges, acquisition-related expenses, and gain or loss on certain equity investments and asset sales as well as other items, as described below, the Company believes that Adjusted EBITDA can provide a useful additional basis for comparing the current performance of the underlying operations being evaluated.

Adjusted EBITDA is not presented in accordance with GAAP and has important limitations as an analytical tool. These measures should not be considered as a substitute for analysis of the Company's results as reported under GAAP. In addition, these measures are defined differently by different companies and, accordingly, such measures may not be comparable to similarly-titled measures of other companies.

In addition to the factors listed above, the following items are excluded from Adjusted EBITDA:

- Share-based compensation expense. Although share-based compensation is a key incentive offered to certain of the Company's employees, business performance is evaluated excluding share-based compensation expenses. Depending upon the size, timing and the terms of grants, non-cash compensation expense may vary but will recur in future periods.
- COVID-19 related (recoveries) expenses, net. Recoveries recognized and incremental expenses incurred as a result of the COVID-19 pandemic. Incremental expenses included incremental vendor costs and premium wages paid to certain employees as well as costs to clean and disinfect the Company's facilities more frequently. As a result of these incremental expenses, the Company invoiced certain customers COVID-19 related surcharges as well as received an insurance reimbursement associated with certain COVID-19 related expenses. In 2020, the Company also received certain government subsidies, primarily related to employee wages at certain international locations.

A reconciliation of net earnings (loss) to Adjusted EBITDA for the years ended December 31, 2021 and 2020 is presented in the following table:

	Year Ended December 31,				
	2021	2020			
	(in m	illions)			
Net earnings (loss)	\$ 145.9	\$ (25.9)			
Restructuring, impairment and other charges, net	13.6	79.2			
Share-based compensation expense	19.5	13.6			
LSC multiemployer pension plans obligation	5.4	19.0			
Non-income tax, net	(1.6)	5.2			
COVID-19 related (recoveries) expenses, net	(1.0)	0.5			
Gain on sale of long-lived assets, net	(0.7)	<u> </u>			
Gain on equity investments, net	(0.4)	—			
Accelerated rent expense	_	2.2			
eBrevia contingent consideration	_	(0.8)			
Depreciation and amortization	40.3	50.9			
Interest expense, net	26.6	22.8			
Investment and other income, net	(4.7)	(1.7)			
Income tax expense	51.9	8.4			
Adjusted EBITDA	\$ 294.8	\$ 173.4			

Restructuring, impairment and other charges, net—The year ended December 31, 2021 included employee termination costs of \$3.4 million and impairment charges of \$9.2 million, primarily related to a partial impairment of an investment in equity securities and the demolition of an office building, as further described in Note 1, Overview, Basis of Presentation and Significant Accounting Policies. The year ended December 31, 2020 included employee termination costs of \$15.6 million, non-cash impairment charges of \$60.6 million, primarily related to IC-CCM goodwill and operating lease ROU assets and \$3.0 million of other charges, primarily related to the realignment of the Company's operating segments. Refer to Note 6, Restructuring, Impairment and Other Charges, for additional information.

Share-based compensation expense—Included charges of \$19.5 million and \$13.6 million for the years ended December 31, 2021 and 2020, respectively.

LSC multiemployer pension plans obligation—Included charges of \$5.4 million and \$19.0 million for the years ended December 31, 2021 and 2020, respectively, for the Company's accrual related to the LSC MEPP Liabilities. The charge for the year ended December 31, 2021 is net of a \$7.1 million reimbursement from RRD as a result of the final allocation of the liability. Refer to Note 8, *Commitments and Contingencies*, for additional information.

Non-income tax, net—Included income of \$1.6 million for the year ended December 31, 2021 and a charge of \$5.2 million for the year ended December 31, 2020, related to the Company's accrual for certain estimated non-income tax exposures. Refer to Note 8, *Commitments and Contingencies*, for additional information.

COVID-19 related (recoveries) expenses, net—Included net recoveries of \$1.0 million for the year ended December 31, 2021, primarily related to an insurance reimbursement of COVID-19 expenses, and net charges of \$0.5 million for the year ended December 31, 2020, primarily related to incremental vendor costs, premium wages and incentive compensation paid to certain employees, net of COVID-19 related sales surcharges invoiced to certain customers and government subsidies, as described above.

Gain on sale of long-lived assets, net—Included a net gain of \$0.7 million for the year ended December 31, 2021, primarily related to the sale of machinery and equipment from facilities being exited as a result of restructuring actions.

Gain on equity investments, net—Included a net unrealized gain of \$0.4 million for the year ended December 31, 2021. Gain on equity investments, net is included in investment and other income, net in the audited Consolidated Statements of Operations.

Accelerated rent expense—Included a charge of \$2.2 million for the year ended December 31, 2020, primarily related to the acceleration of rent expense associated with abandoned operating leases.

eBrevia contingent consideration—Included a gain of \$0.8 million for the year ended December 31, 2020, as a result of a decrease in the contingent consideration for the former owners of eBrevia.

Selected Financial Data

		Year Ended December 31,				
	2021			2020		
		(in millions, exce	pt per	share data)		
Consolidated Statements of Operations data:						
Net sales	\$	993.3	\$	894.5		
Net earnings (loss)		145.9		(25.9)		
Net earnings (loss) per share						
Basic		4.36		(0.76)		
Diluted		4.14		(0.76)		
Consolidated Balance Sheets data:						
Total assets		883.3		865.6		
Long-term debt		124.0		230.5		

The following table includes the pre-tax and after-tax impact of certain Non-GAAP items for the years ended December 31, 2021 and 2020:

	Year Ended Dece	mber 31, 2021
	Pre-tax	After-tax
	(in milli	ons)
Non-income tax, net	(1.6) §	(1.2)
COVID-19 related recoveries, net	(1.0)	(0.7)
Gain on sale of long-lived assets, net	(0.7)	(0.5)
Gain on equity investments, net	(0.4)	(0.3)
Share-based compensation expense	19.5	9.9
Restructuring, impairment and other charges, net	13.6	9.9
Loss on debt extinguishments	7.4	5.4
LSC multiemployer pension plans obligation	5.4	3.9

	Year Ended De	ecember 31, 2020
	Pre-tax	After-tax
	(in m	illions)
Gain on debt extinguishments	\$ (2.3)) \$ (1.7)
eBrevia contingent consideration	(0.8)	(0.8)
Restructuring, impairment and other charges, net	79.2	67.9
LSC multiemployer pension plans obligation	19.0	13.9
Share-based compensation expense	13.6	11.1
Non-income tax, net	5.2	3.8
Accelerated rent expense	2.2	1.7
COVID-19 related expenses, net	0.5	0.2

Liquidity and Capital Resources

The Company believes it has sufficient liquidity to support its ongoing operations and to invest in future growth to create value for its stockholders. Cash on hand, operating cash flows and the Company's Revolving Facility are the primary sources of liquidity and are expected to be used for, among other things, payment of interest and principal on the Company's debt obligations, capital expenditures necessary to support productivity improvement and growth, acquisitions and completion of restructuring programs.

The Company maintains cash pooling structures that enable participating international locations to draw on the pools' cash resources to meet local liquidity needs. Foreign cash balances may be loaned from certain cash pools to U.S. operating entities on a temporary basis in order to reduce the Company's short-term borrowing costs or for other purposes. The Company has the ability to repatriate foreign cash, associated with foreign earnings previously subjected to U.S. tax, with minimal additional tax consequences. The Company maintains its assertion of indefinite reinvestment on all foreign earnings and other outside basis differences to indicate that the Company remains indefinitely reinvested in operations outside of the U.S., with the exception of the previously taxed foreign earnings already subject to U.S. tax. The Company repatriated excess cash at its foreign subsidiaries to the U.S. during the years ended December 31, 2021 and December 31, 2019 and did not make cash repatriations during 2020. The Company is evaluating whether to make any cash repatriations in the future.

The Company currently expects capital expenditures to be approximately \$50 million to \$55 million in 2022, as compared to \$42.3 million in 2021. The Company is also evaluating additional investment opportunities that could increase 2022 capital expenditures by an incremental \$10 million to \$15 million. The increase in capital expenditures related to the amount currently expected and the incremental opportunities being evaluated are primarily related to investments in the Company's software portfolio.

As of December 31, 2021, cash and cash equivalents were \$54.5 million, a decrease of \$19.1 million as compared to December 31, 2020. As of December 31, 2021, cash and cash equivalents included \$24.5 million in the U.S. and \$30.0 million at international locations.

The following describes the Company's cash flows for the years ended December 31, 2021 and 2020.

	Year Ended December 31,					
	2021			2020		
		_				
Net cash provided by operating activities	\$	180.0	\$	154.2		
Net cash used in investing activities		(45.0)		(19.8)		
Net cash used in financing activities		(154.9)		(77.5)		
Effect of exchange rate on cash and cash equivalents		0.8		(0.5)		
Net (decrease) increase in cash and cash equivalents	\$	(19.1)	\$	56.4		

Cash Flows Provided By Operating Activities

Operating cash inflows and outflows are largely attributable to sales of the Company's services and products as well as recurring expenditures for labor, rent, raw materials and other operating activities.

2021 compared to 2020

Net cash provided by operating activities was \$180.0 million for the year ended December 31, 2021, as compared to \$154.2 million for the year ended December 31, 2020. The increase in cash provided by operating activities of \$25.8 million was primarily due to the significant increase in net earnings, partially offset by the timing of payments, an increase in income taxes paid and a decrease in collections due to timing of customer payments. Accounts payable and accrued liabilities and other increased operating cash flows by \$16.8 million for the year ended December 31, 2021, as compared to a \$74.9 million increase in operating cash flows for the year ended December 31, 2020, primarily due to higher incentive compensation and commission payments during 2021 and timing of vendor payments. The Company's income tax payments increased by \$43.3 million to \$65.0 million for the year ended December 31, 2021 from \$21.7 million, primarily due to federal and state income tax payments made in the year ended December 31, 2021. Accounts receivable decreased operating cash flow by \$28.8 million for the year ended December 31, 2021, as compared to \$14.8 million for the year ended December 31, 2020.

Cash Flows Used In Investing Activities

Net cash used in investing activities was \$45.0 million for the year ended December 31, 2021, and primarily consisted of capital expenditures of \$42.3 million, mostly driven by investment in software development, and the acquisition of Guardum.

Net cash used in investing activities was \$19.8 million for the year ended December 31, 2020, and primarily consisted of capital expenditures of \$31.1 million, mostly driven by investment in software development, partially offset by \$12.8 million of proceeds from the sale of one of the Company's investments in equity securities.

Cash Flows Used In Financing Activities

Net cash used in financing activities for the year ended December 31, 2021 was \$154.9 million. During the year ended December 31, 2021, the Company received \$278.0 million of proceeds from the Revolving Facility borrowings, offset by \$278.0 million of payments on the Revolving Facility borrowings. The Company made \$312.8 million of payments on long-term debt, including the redemption of \$233.0 million of the Notes, which were partially paid for with proceeds of \$200.0 million from the Term Loan A Facility during the year ended December 31, 2021, and \$75.0 million of prepayments on the Term Loan A Facility. The Company's common stock repurchases for the year ended December 31, 2021 totaled \$40.9 million, which included \$32.2 million of repurchases under the stock repurchase program and \$8.7 million associated with vesting of the Company employees' equity awards.

Net cash used in financing activities for the year ended December 31, 2020 was \$77.5 million. During the year ended December 31, 2020, the Company received \$369.0 million of proceeds from the Revolving Facility borrowings, offset by \$369.0 million of payments on the Revolving Facility borrowings. The Company made payments of \$63.8 million for the purchase and retirement of certain of the Company's notes. The Company's common stock repurchases for the year ended December 31, 2020 totaled \$11.8 million.

Contractual Cash Obligations and Other Commitments and Contingencies

As of December 31, 2021, the Company had total future contractual and other obligations of approximately \$464 million, with approximately \$206 million of the future contractual and other obligations due during 2022. The future contractual obligations primarily consist of outstanding debt and related interest, operating and finance lease payments, outsourced services relating to information technology, maintenance and other services, sales commissions, incentive compensation, deferred compensation, multi-employer pension plan obligations, pension and other postretirement benefits plans contributions as well as other miscellaneous obligations. Refer to Note 1, *Overview, Basis of Presentation and Significant Accounting Policies*; Note 5, *Leases*; Note 6, *Restructuring, Impairment and Other Charges*; Note 7, *Retirement Plans*; Note 8, *Commitments and Contingencies* and Note 10, *Debt* to the audited Consolidated Financial Statements for additional information.

Debt

The Company's debt as of December 31, 2021 and 2020 consisted of the following (in millions):

	December 31,				
	2021		2020		
Term Loan A Facility	125.0	\$	_		
8.25% senior notes due October 15, 2024	_		233.0		
Unamortized debt issuance costs	 (1.0)		(2.5)		
Total long-term debt	\$ 124.0	\$	230.5		

The Company's debt maturity and interest payments schedule as of December 31, 2021 is shown in the table below:

			Pa	yments Due	In		
_	Total	2022	2023	2024	2025	2026	2027 and thereafter
				(in millions)			
Term Loan A Facility (a)\$	125.0	\$ —	\$ —	\$ - \$	_	\$ 125.0	\$ —
Interest due on Term Loan A							
Facility (b)	11.8	2.6	2.6	2.6	2.6	1.4	
Total as of December 31, 2021 \$	136.8	\$ 2.6	\$ 2.6	\$ 2.6 \$	2.6	\$ 126.4	\$

⁽a) Excludes unamortized debt issuance costs of \$1.0 million, which do not represent contractual commitments with a fixed amount or maturity date.

8.25% Senior Notes Due 2024—On September 30, 2016, DFIN issued \$300.0 million of 8.25% senior unsecured notes due October 15, 2024 (the "Notes"). The Company's Notes were issued pursuant to an indenture (the "Indenture") where certain wholly-owned domestic subsidiaries of the Company guaranteed the Notes (the "Guarantors"). On October 15, 2021, the Company redeemed the remaining outstanding Notes balance of \$233.0 million at the redemption price of 102.063, plus accrued and unpaid interest of \$9.6 million using \$200.0 million of proceeds from the Company's Term Loan A Facility and cash. The Company recorded a pre-tax loss on the extinguishment of the Notes of \$6.8 million in the fourth quarter of 2021. During 2020, the Company purchased and retired \$67.0 million (notional amount) of the Notes and recognized a pre-tax gain on the extinguishment of debt of \$2.3 million, which was net of unamortized debt issuance costs. The loss (gain) on debt extinguishment is reflected within interest expense, net in the audited Consolidated Statements of Operations.

⁽b) Includes estimated interest for the Term Loan A Facility based on the interest rate at December 31, 2021. Estimated interest payments may differ in the future based on changes in floating interest rates, timing of additional prepayments or other factors or events.

Prior to the repayment and the resulting release of all Guarantors, the Notes were fully and unconditionally as well as jointly and severally guaranteed, on an unsecured basis, by the Guarantors, which were comprised of each of the Company's direct and indirect wholly-owned U.S. subsidiaries that guaranteed the Company's obligations under the Credit Facilities, including Donnelley Financial, LLC and DFS International Holdings, Inc. The Notes were not guaranteed by the Company's foreign subsidiaries or unrestricted subsidiaries ("Nonguarantors"). The Indenture governing the Notes contained certain covenants applicable to the Company and its restricted subsidiaries, including limitations on: (1) liens; (2) indebtedness; (3) mergers, consolidations and acquisitions; (4) sales, transfers and other dispositions of assets; (5) loans and other investments; (6) dividends and other distributions, stock repurchases and redemptions and other restricted payments; (7) restrictions affecting subsidiaries; (8) transactions with affiliates; and (9) designations of unrestricted subsidiaries. Each of these covenants was subject to important exceptions and qualifications. The Notes and the related guarantees were the Company and the Guarantors', respective, senior unsecured obligations and ranked equally in right of payment to all senior debt, including the obligations under the Company's Credit Facilities, senior in right of payment to all subordinated debt, and effectively subordinated in right of payment to any of the Company and the Guarantors' secured debt, to the extent of the value of the assets securing such debt.

Credit Agreement—On May 27, 2021 (the "Restatement Effective Date"), the Company amended and restated its credit agreement dated as of September 30, 2016 (as in effect prior to such amendment and restatement, the "Credit Agreement," and the Credit Agreement, as so amended and restated, the "Amended and Restated Credit Agreement"), to, among other things extend the maturity of the \$300.0 million Revolving Facility to May 27, 2026 and modify certain financial maintenance and negative covenants in the Credit Agreement. The Amended and Restated Credit Agreement also provided for a \$200.0 million delayed-draw Term Loan A Facility. On October 14, 2021, the Company drew \$200.0 million from the Term Loan A Facility and used the proceeds to redeem the Company's Notes on October 15, 2021, as further described above. Under the Credit Agreement, the Term Loan A Facility bears interest at a rate equal to the sum of the London Interbank Offered Rate ("LIBOR") plus a margin ranging from 2.00% to 2.50% based upon the Company's Consolidated Net Leverage Ratio. Prior to the prepayment of quarterly installments, as described below, the principal amount of loans under the Term Loan A Facility were due and payable in equal quarterly installments of 1.25% of the original principal amount of the loans during the first three years after the Restatement Effective Date, commencing on March 31, 2022, and 2.50% of the original principal amount of the loans thereafter.

In the fourth quarter of 2021, the Company prepaid \$75.0 million of the original principal amount of the Term Loan A Facility and recognized a pre-tax loss on extinguishment of debt of \$0.6 million. As a result, quarterly installments of the original principal amount are no longer required and the entire unpaid principal amount of the Term Loan A Facility is due and payable on May 27, 2026. Voluntary prepayments of the Term Loan A Facility are permitted at any time without premium or penalty.

The Amended and Restated Credit Agreement contains a number of covenants, including a minimum Interest Coverage Ratio and the Consolidated Net Leverage Ratio, as defined in and calculated pursuant to the Credit Agreement, that, in part, restrict the Company's ability to incur additional indebtedness, create liens, engage in mergers and consolidations, make restricted payments and dispose of certain assets. The Credit Agreement generally allows annual dividend payments of up to \$20.0 million in the aggregate, though additional dividends may be allowed subject to certain conditions. Each of these covenants is subject to important exceptions and qualifications.

As of December 31, 2021, there were no outstanding borrowings under the Revolving Facility. Based on the Company's results of operations for the year ended December 31, 2021 and existing debt, the Company would have had the ability to utilize \$297.8 million of the Revolving Facility and not have been in violation of the terms of the agreement.

The current availability under the Revolving Facility and net available liquidity as of December 31, 2021 is shown in the table below:

	D	December 31, 2021
Availability		(in millions)
Revolving Facility		300.0
	\$	300.0
Usage		
Borrowings under the Revolving Facility	\$	_
Impact on availability related to outstanding letters of credit		2.2
	\$	2.2
Current availability at December 31, 2021	\$	297.8
Cash and cash equivalents		54.5
Net Available Liquidity	\$	352.3

The Company was in compliance with its debt covenants as of December 31, 2021, and expects to remain in compliance based on management's estimates of operating and financial results for 2022 and the foreseeable future. However, declines in market and economic conditions or demand for certain of the Company's services and products could impact the Company's ability to remain in compliance with its debt covenants in future periods.

The failure of a financial institution supporting the Revolving Facility would reduce the size of the Company's committed facility unless a replacement institution was added. As of December 31, 2021, the Revolving Facility is supported by fifteen U.S. and international financial institutions. As of December 31, 2021, the Company had \$3.2 million in outstanding letters of credit and bank guarantees, of which \$2.2 million reduced the availability under the Revolving Facility.

As of December 31, 2021, the Company met all the conditions required to borrow under the Revolving Facility and management expects the Company to continue to meet the applicable borrowing conditions.

Acquisitions and Dispositions

On December 13, 2021, the Company completed the acquisition of Guardum, a leading data security and privacy software provider that helps companies locate, secure and control data. The acquisition enhances the Company's Venue offering. By safeguarding privacy and improving data accuracy, Guardum's data security is a competitive differentiator. Prior to the acquisition, the Company held a 33.0% investment in Guardum. The purchase price for the remaining equity of Guardum was \$3.6 million, net of cash acquired of \$0.1 million.

The Company's acquisition of eBrevia closed on December 18, 2018. During the year ended December 31, 2019, the Company paid \$4.5 million for the acquisition of eBrevia. An additional \$1.9 million of the purchase price, which was held in the event of potential claims, was paid during the year ended December 31, 2020 pursuant to the terms of the acquisition agreement.

During the year ended December 31, 2018, the Company sold its Language Solutions business for net proceeds of \$77.5 million in cash, all of which was received as of December 31, 2019. During the year ended December 31, 2019, the Company paid \$4.0 million related to the disposition of the Language Solutions business.

OTHER INFORMATION

Litigation and Contingent Liabilities

For a discussion of certain litigation and contingent liabilities involving the Company, see Note 8, *Commitments and Contingencies*, to the audited Consolidated Financial Statements.

Critical Accounting Estimates

The preparation of financial statements in conformity with GAAP requires the extensive use of management's estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from these estimates. Estimates are used when accounting for items and matters including, but not limited to, revenue recognition, goodwill, asset valuations and useful lives, pension and income taxes.

Revenue Recognition

The Company manages highly-customized data and materials, such as the Exchange Act, the Securities Act and the Investment Company Act filings with the SEC on behalf of the Company's customers, manages virtual data rooms and performs XBRL and related services. Clients are provided with EDGAR filing services, XBRL compliance services and translation, editing, interpreting, proof-reading and multilingual typesetting services, among other services. The Company's software solutions include Venue, the Arc Suite software platform, ActiveDisclosure, data and analytics and others. The Company also provides digital document creation, online content management and print and distribution solutions to public and private companies, mutual funds and other regulated investment firms to serve their regulatory and compliance needs.

Revenue is recognized upon transfer of control of promised services or products to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those services or products. The Company's services include software solutions and tech-enabled services whereas the Company's products are comprised of print and distribution offerings. The Company's arrangements with customers often include promises to transfer multiple services or products to a customer. Determining whether services and products are considered distinct performance obligations that should be accounted for separately requires significant judgment. Certain customer arrangements have multiple performance obligations as certain promises are both capable of being distinct and are distinct within the context of the contract. Other customer arrangements have a single performance obligation as the promise to transfer the individual goods or services is not separately identifiable from other promises in the contracts, and therefore is not distinct. Billings for shipping and handling costs as well as certain postage costs and out-of-pocket expenses are recorded gross. In accordance with the practical expedient within ASC Topic 606, Revenue from Contracts with Customers, the Company expenses incremental costs to obtain the contract, primarily commissions, as incurred when the amortization period of the asset is one year or less. Sales commissions associated with multi-year contracts beyond the initial year are subject to an employee service requirement and are not capitalized as they are not considered incremental costs to obtain a contract. For arrangements with multiple performance obligations, the transaction price is allocated to the separate performance obligations. As the Company provides customer specific solutions, observable standalone selling price is rarely available. As such, standalone selling price is more frequently determined using an estimate of the standalone selling price of each distinct service or product, taking into consideration the historical selling price by customer for each distinct service or product, if available. These estimates may vary from the final amounts invoiced to the customer and are adjusted upon completion of all performance obligations.

The timing of revenue recognition may differ from the timing of invoicing to customers and these timing differences result in unbilled receivables, contract assets or contract liabilities. Contract assets represent revenue recognized for performance obligations completed before an unconditional right to payment exists and therefore invoicing has not yet occurred. The Company generally estimates contract assets based on the historical selling price adjusted for its current experience and expected resolution of the variable consideration of the completed performance obligation. When the Company's contracts contain variable consideration, the variable consideration is recognized only to the extent that it is probable that a significant revenue reversal will not occur in a future period. As a result, the estimated revenue and contract assets may be constrained until the uncertainty associated with the variable consideration is resolved, which generally occurs in less than one year. Generally, the contract asset balance is impacted by the recognition of additional revenue, amounts invoiced to customers and changes in the level of the constraint applied to variable consideration. Unbilled receivables are recorded when there is an unconditional right to payment and invoicing has not yet occurred. The Company estimates the value of unbilled receivables based on a combination of historical customer selling price and management's assessment of realizable selling price. Unbilled receivables can vary significantly from period to period as a result of seasonality, volume and market conditions. Unbilled receivables and contract assets are included in accounts receivable on the audited Consolidated Balance Sheets. Contract liabilities consist of deferred revenue and progress billings which are included in accrued liabilities on the audited Consolidated Balance Sheets.

Because substantially all of the Company's products are customized, product returns are not significant; however, the Company accrues for the estimated amount of customer credits at the time of sale. Refer to Note 1, *Overview, Basis of Presentation and Significant Accounting Policies*, to the audited Consolidated Financial Statements for further discussion.

Goodwill

The Company's methodology for allocating the purchase price of acquisitions is based on established valuation techniques that reflect the consideration of several factors, including valuations performed by third-party appraisers when appropriate. Goodwill is measured as the excess of the cost of an acquired entity over the fair value assigned to identifiable assets acquired and liabilities assumed. Goodwill is either assigned to a specific reporting unit or allocated between reporting units based on the relative fair value of each reporting unit.

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

The Company has four reporting units for which cash flows are determinable, however, only the CM-SS, CM-CCM and IC-SS reporting units had goodwill as of October 31, 2021.

In applying the goodwill impairment test, the Company has the option to perform a qualitative test (also known as "Step 0") or a quantitative test ("Step 1"). Under the Step 0 test, the Company first assesses qualitative factors to determine whether it is more likely than not that the fair value of the reporting units is less than its carrying value. If after assessing these qualitative factors, the Company determines it is not "more-likely-than-not" that the fair value of the reporting unit is less than the carrying value, then performing the Step 1 quantitative test is not required.

Step 1 of the quantitative test requires comparison of the fair value of each of the reporting units to the respective carrying value. If the carrying value of the reporting unit is less than the fair value, no impairment exists. If the carrying amount of a reporting unit exceeded the estimated fair value, an impairment loss is generally recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to that reporting unit.

Qualitative Assessment for Impairment—For the CM-CCM and IC-SS reporting units, the Company performed a qualitative assessment to determine whether it was more likely than not that the fair values of the reporting units were less than their carrying values. In performing this analysis, the Company considered various qualitative factors, including, economic conditions, industry and market considerations, cost factors, overall financial performance of the reporting unit and other entity and reporting unit specific events.

Based on its qualitative assessments, management concluded that as of October 31, 2021, it was not more likely than not that the fair values of the CM-CCM and IC-SS reporting units were less than their carrying values. The goodwill balances of the CM-CCM and IC-SS reporting units as of December 31, 2021 were \$253.1 million and \$53.2 million, respectively.

Quantitative Assessment for Impairment—For the remaining reporting unit with goodwill, CM-SS, a quantitative assessment was completed. The analysis performed included estimating the fair value of the reporting unit using both the income and market approaches. The income approach requires management to estimate a number of factors, including projected future operating results, economic projections, anticipated future cash flows, discount rates and the allocation of shared or corporate items. The market approach estimates fair value using comparable marketplace fair value data from within a comparable industry grouping. The Company weighted both the income and market approach equally to estimate the concluded fair value of the reporting unit.

The determination of fair value in the quantitative assessment requires the Company to make significant estimates and assumptions. These estimates and assumptions primarily include, but are not limited to: the selection of appropriate peer group companies and an appropriate market multiple, the discount rate; terminal growth rates; and forecasts of revenue, operating income, restructuring charges and capital expenditures.

As a result of the quantitative assessment for CM-SS, the estimated fair value exceeded the carrying value and no goodwill impairment charge was recorded for the year ended December 31, 2021. The goodwill balance of the CM-SS reporting unit as of December 31, 2021 was \$103.7 million.

Goodwill Impairment Assumptions—Although the Company believes its estimates of fair value are reasonable, actual financial results could differ from those estimates due to the inherent uncertainty involved in making such estimates. Changes in assumptions concerning future financial results or other underlying assumptions could have a significant impact on either the fair value of the reporting units, the amount of the goodwill impairment charge, or both.

One measure of the sensitivity of the amount of goodwill impairment charges to key assumptions is the amount by which each reporting unit "passed" (fair value exceeds carrying amount, a "cushion") or "failed" (the carrying amount exceeds fair value) the quantitative assessment. As of October 31, 2021, the CM-SS reporting unit's estimated fair value was far in excess of the carrying value.

The Company believes that its estimates of future cash flows and discount rates are reasonable, but future changes in the underlying assumptions could differ due to the inherent uncertainty in making such estimates. Additionally, lower volumes, unfavorable regulatory developments or lower than expected growth or profitability of software solutions could have a significant impact on the fair values of the reporting units.

Other Long-Lived Assets

The Company evaluates the recoverability of other long-lived assets, including operating lease right-of-use assets ("ROU"), property, plant and equipment, software and definite-lived intangible assets, whenever events or changes in circumstances indicate that the carrying value of an asset or asset group may not be recoverable. The Company assesses its asset groups for indicators of impairment on a recurring basis. Factors which could trigger an impairment review include significant underperformance relative to historical or projected future operating results, significant changes in the manner of use of the assets or the strategy for the overall business, a significant decrease in the market value of the assets or significant negative industry or economic trends. When the Company determines that the carrying value of one of its asset groups may not be recoverable based upon the existence of one or more of the indicators, the assets are assessed for impairment based on the estimated future undiscounted cash flows expected to result from the use of the asset group and its eventual disposition. If the carrying value of an asset group exceeds its estimated future undiscounted cash flows, an impairment loss is recorded for the excess of the asset group's carrying value over its fair value.

During the year ended December 31, 2021, the Company recorded non-cash impairment charges of \$3.3 million associated with its other long-lived assets, primarily related to the demolition of an office building in the CM-CCM segment.

Pension and Other Postretirement Benefits Plans

The Company's primary defined benefit plan was frozen effective December 31, 2011. No new employees are permitted to enter the Company's frozen plan and participants will earn no additional benefits. Benefits are generally based upon years of service and compensation. These defined benefit retirement income plans are funded in conformity with the applicable government regulations. The Company funds at least the minimum amount required for all funded plans using actuarial cost methods and assumptions acceptable under government regulations.

The annual income and expense amounts relating to the pension plan are based on calculations which include various actuarial assumptions including mortality expectations, discount rates and expected long-term rates of return. The Company reviews its actuarial assumptions on an annual basis as of December 31 (or more frequently if a significant event requiring remeasurement occurs) and modifies the assumptions based on current rates and trends when it is appropriate to do so. The effects of modifications are recognized immediately on the audited Consolidated Balance Sheets, but are amortized into operating earnings over future periods, with the deferred amount recorded in accumulated other comprehensive income (loss). The Company believes that the assumptions utilized in recording its obligations under its plans are reasonable based on its experience, market conditions and input from its actuaries and investment advisors. The weighted-average discount rate to determine the pension benefit obligation at December 31, 2021 was 2.9%.

A 1.0% change in the discount rates as of December 31, 2021 would increase/(decrease) the accumulated benefit obligation and projected benefit obligation:

	1.0% Increase		1.0% Decrease
	(in milli	ions)	
Accumulated benefit obligation	\$ (31.2)	\$	37.6
Projected benefit obligation	\$ (31.2)	\$	37.6

The Company's defined benefit plan has a risk management approach for its pension plan assets. The overall investment objective of this approach is to further reduce the risk of significant decreases in the plan's funded status by allocating a larger portion of the plan's assets to investments expected to hedge the impact of interest rate risks on the plan's obligation.

The expected long-term rate of return for the plan assets is based upon many factors including expected asset allocations, historical asset returns, current and expected future market conditions and risk. In addition, the Company considered the impact of the current interest rate environment on the expected long-term rate of return for certain asset classes, particularly fixed income. The target asset allocation percentage for the pension plan was approximately 70% for fixed income investments and 30% for return seeking investments. The expected long-term rate of return on plan assets assumption used to calculate net pension plan income in 2021 was 6.0% for the Company's pension plans. The expected long-term rate of return on plan assets assumption that will be used to calculate net pension plan income in 2022 is 4.75%.

A 0.25% change in the expected long-term rate of return on plan assets as of December 31, 2021 would increase/ (decrease) pension plan income for the year ending December 31, 2022 as follows:

	 Year Ending December 31, 2022	
	(in millions)	
0.25% increase	\$	0.6
0.25% decrease	\$	(0.6)

Accounting for Income Taxes

In the Company's audited Consolidated Financial Statements, income tax expense and deferred tax balances have been calculated on a separate income tax return basis.

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

The Company has recorded deferred tax assets related to future deductible items, including domestic and foreign tax loss and credit carryforwards. The Company evaluates these deferred tax assets by tax jurisdiction. The utilization of these tax assets is limited by the amount of taxable income expected to be generated within the allowable carryforward period and other factors. Accordingly, management has provided a valuation allowance to reduce certain of these deferred tax assets when management has concluded that, based on the weight of available evidence, it is more likely than not that the deferred tax assets will not be fully realized. If actual results differ from these estimates, or the estimates are adjusted in future periods, adjustments to the valuation allowance might need to be recorded. As of December 31, 2021 and 2020, valuation allowances of \$4.8 million and \$7.5 million, respectively, were recorded in the Company's audited Consolidated Balance Sheets. Refer to Note 9, *Income Taxes*, to the audited Consolidated Financial Statements for further detail on the accounting for income taxes.

New Accounting Pronouncements and Pending Accounting Standards

Recently issued accounting standards and their estimated effect on the Company's audited Consolidated Financial Statements are described in Note 1, *Overview, Basis of Presentation and Significant Accounting Policies*, to the audited Consolidated Financial Statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market Risk

The Company is exposed to potential fluctuations in earnings, cash flows, and the fair value of certain assets and liabilities due to changes in interest rates and foreign currency exchange rates. The Company manages exposure to these market risks through regular operating and financial activities and, when deemed appropriate, through the use of derivative financial instruments for risk management purposes. As a result, the Company does not anticipate any material losses from these risks. The Company was not a party to any derivative financial instrument as of December 31, 2021 and 2020.

The Company discusses risk management in various places throughout this Annual Report on Form 10-K, including discussions concerning liquidity and capital resources.

Foreign Exchange Risk

While the substantial majority of the Company's business is conducted within the U.S., approximately 14% of the Company's net sales during the year ended December 31, 2021 were earned outside of the U.S. The Company has operations internationally that are denominated in foreign currencies, primarily the Hong Kong dollar, British Pound and Canadian dollar, exposing the Company to foreign currency exchange risk which may adversely impact financial results. The exposure to foreign currency movements is limited in many countries because the operating revenues and expenses of the Company's various subsidiaries and business units are substantially in the local currency of the country in which they operate. To the extent that borrowings, sales, purchases, revenues, expenses or other transactions are not in the local currency of the subsidiary, the Company is exposed to currency risk and may enter into foreign exchange spot and forward contracts to hedge the currency risk. The Company does not use derivative financial instruments for trading or speculative purposes.

For the year ended December 31, 2021, a hypothetical 10% strengthening of the U.S. dollar relative to multiple currencies would have resulted in a decrease in the Company's earnings (loss) before income taxes of approximately \$2.4 million. A hypothetical 10% strengthening of the U.S. dollar relative to multiple currencies as of December 31, 2021 would have resulted in a decrease in total assets of approximately \$6.4 million.

Interest Rate Risk

The Company assesses market risk based on changes in interest rates utilizing a sensitivity analysis that measures the potential loss in earnings, fair values and cash flows based on a hypothetical 10% change in interest rates. Using this sensitivity analysis, such changes would not have a material effect on interest income or expense and cash flows.

A hypothetical 10% change in yield as of December 31, 2021 would change the fair value of the Term Loan A Facility by approximately \$12.4 million, or 10.0%.

Credit Risk

The Company is exposed to credit risk on accounts receivable balances. This risk is mitigated due to the Company's large, diverse customer base, dispersed over various geographic regions and industrial sectors. No single customer comprised more than 10% of the Company's net sales for the years ended December 31, 2021, 2020 and 2019. The Company maintains provisions for potential credit losses and such losses to date have normally been within the Company's expectations. The Company evaluates the solvency of its customers on an ongoing basis to determine if additional allowance for expected losses needs to be recorded. Significant economic disruptions or a slowdown in the economy could result in significant additional charges.

Commodities

The primary raw materials used by the Company and its printing vendors are paper and ink. Price increases experienced by our vendors could be passed onto the Company. To reduce price risk caused by market fluctuations, the Company has incorporated price adjustment clauses in certain sales contracts. Management believes a hypothetical 10% change in the price of paper and other raw materials would not have a significant effect on the Company's results of operations or cash flows, as some of these costs are generally passed through to its customers. However, such an increase could have an impact on the Company's customers' demand for printed products, and the Company is not able to quantify the impact of such potential change in demand on the Company's results of operations or cash flows.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial information required by Item 8 is located beginning on page F-1 of this Annual Report.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Disclosure controls and procedures.

Management, together with the Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(b) and Rule 15d-15(e) of the Securities Exchange Act of 1934) as of December 31, 2021. Based on that evaluation the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective as of December 31, 2021.

(b) Changes in internal control over financial reporting.

Changes in Internal Control Over Financial Reporting. There were no changes in the Company's internal control over financial reporting (as defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended December 31, 2021 that have materially affected or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Management's Annual Report on Internal Control Over Financial Reporting. Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2021 based on the guidelines established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on the results of our evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2021.

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

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Donnelley Financial Solutions, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Donnelley Financial Solutions, Inc. and subsidiaries (the "Company") as of December 31, 2021, based on criteria established in *Internal Control — Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, 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 financial statements as of and for the year ended December 31, 2021, of the Company and our report dated February 22, 2022, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Management's Annual 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.

/s/ DELOITTE & TOUCHE LLP

Chicago, Illinois

February 22, 2022

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF DONNELLEY FINANCIAL SOLUTIONS, INC. AND CORPORATE GOVERNANCE

Information regarding directors and executive officers of the Company is incorporated herein by reference to the descriptions under "Proposal 1: Election of Directors," "The Board's Committees and their Functions" and "Section 16(a) Beneficial Ownership Reporting Compliance" of the Company's Proxy Statement for the Annual Meeting of Stockholders scheduled to be held May 18, 2022 (the "2022 Proxy Statement").

The Company has adopted a policy statement entitled *Code of Ethics* that applies to its chief executive officer and senior financial officers. In the event that an amendment to, or a waiver from, a provision of the *Code of Ethics* is made or granted, the Company intends to post such information on its web site, *www.dfinsolutions.com*. A copy of the Company's *Code of Ethics* has been filed as Exhibit 14.1 to the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

EXECUTIVE OFFICERS OF DONNELLEY FINANCIAL SOLUTIONS, INC.

Name, Age and Position with the Company	Officer Since	Business Experience
Daniel N. Leib 55, Chief Executive Officer	2016	Served as RRD's Executive Vice President and Chief Financial Officer from May 2011 to October 2016. Served as RRD's Group Chief Financial Officer and Senior Vice President, Mergers and Acquisitions since August 2009 and Treasurer from June 2008 to February 2010 and as RRD's Senior Vice President, Treasurer, Mergers and Acquisitions and Investor Relations since July 2007. Prior to this, from May 2004 to 2007, served in various capacities in financial management, corporate strategy and investor relations for RRD.
David A. Gardella 52, Chief Financial Officer	2016	Served as RRD's Senior Vice President, Investor Relations & Mergers and Acquisitions from 2011 to October 2016. Served as RRD's Vice President, Investor Relations from 2009 to 2011 and as RRD's Vice President, Corporate Finance from 2008 to 2009. From 1992 to 2004 and then from 2005 to 2008, served in various capacities in financial management and financial planning & analysis for RRD.
Jennifer B. Reiners 55, General Counsel	2016	Served as RRD's Senior Vice President, Deputy General Counsel from 2008 to October 2016 and as Vice President, Deputy General Counsel from 2005 to 2008. Prior to this, served in various capacities in the RRD legal department from 1997 to 2008.
Kami S. Turner 47, Controller and Chief Accounting Officer	2016	Served as RRD's Assistant Controller from December 2012 to October 2016. Prior to this, served as RRD's Vice President, External Reporting in 2012 and from 2009 to 2011 served in various capacities in finance at RRD.
Craig Clay	2021	Served as RRD's Executive Vice President, Capital Markets and Global Sourcing from 2007 to 2016. Prior to this, served as RRD's Senior Vice President of Global Capital Markets Sales and Service from 2005 to 2007, and from 1995 to 2005 served in various capacities in sales, pricing and finance for RRD.
Eric J. Johnson	2021	Served as RRD's Executive Vice President, Global Investment Markets from 2010 to 2016. Prior to this, served as RRD's Group Senior Vice President from 2006 to 2010, and from 1992 to 2006 served in various capacities in sales, pricing, financial management and financial planning and analysis for RRD.

ITEM 11. EXECUTIVE COMPENSATION

Information regarding executive and director compensation is incorporated by reference to the material under the captions "Compensation Discussion and Analysis," "Human Resources Committee Report," "Executive Compensation," "Potential Payments Upon Termination or Change in Control," and "Director Compensation" of the 2022 Proxy Statement.

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

Information regarding security ownership of certain beneficial owners and management is incorporated herein by reference to the material under the heading "Stock Ownership" of the 2022 Proxy Statement.

Equity Compensation Plan Information

Information as of December 31, 2021 concerning compensation plans under which DFIN's equity securities are authorized for issuance was as follows:

Equity Compensation Plan Information

			Number of Securities
	Number of Securities		Remaining Available for
	to Be Issued upon		Future Issuance under
	Exercise of	Weighted-Average	Equity Compensation Plans
	Outstanding Options,	(b)	
	Restricted Stock Units,	Outstanding	(Excluding Securities
	Warrants and Rights	Options, Warrants	Reflected in Column (1))
	(in thousands)	and Rights (a)	(in thousands)
Plan Category	(1)	(2)	(3)
Equity compensation plans approved by security holders	2,951	\$ 18.30	4,276

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

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Information regarding certain relationships and related transactions and director independence is incorporated herein by reference to the material under the heading "Certain Transactions," "The Board's Committees and Their Functions" and "Corporate Governance—Independence of Directors" of the 2022 Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Information regarding principal accounting fees and services is incorporated herein by reference to the material under the heading "The Company's Independent Registered Public Accounting Firm" of the 2022 Proxy Statement.

All of these shares are available for issuance under the Donnelley Financial Solutions Performance Incentive Plan. The Donnelley Financial Solutions Performance Incentive Plan allows grants in the form of cash or bonus awards, stock options, stock appreciation rights, restricted stock, stock units or combinations thereof. The maximum number of shares of common stock that may be granted with respect to bonus awards, including performance awards or fixed awards in the form of restricted stock or other form, is 10,295,000 in the aggregate, of which 4,276,180 remain available for issuance.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) 1. Financial Statements

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

(b) Exhibits

The exhibits listed on the accompanying index (pages E-1 through E-4) are filed as part of this Annual Report on Form 10-K

(c) Financial Statement Schedules omitted

Certain schedules have been omitted because the required information is included in the audited Consolidated Financial Statements and Notes thereto or because they are not applicable or not required.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

ITEM 15(a). INDEX TO FINANCIAL STATEMENTS

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Consolidated Statements of Comprehensive Income (Loss) for each of the three years ended December 31,	
2021	F-3
Consolidated Balance Sheets as of December 31, 2021 and 2020	F-4
Consolidated Statements of Cash Flows for each of the three years ended December 31, 2021	F-5
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Donnelley Financial Solutions, Inc. and Subsidiaries ("DFIN") Consolidated Statements of Operations (in millions, except per share data)

	Year Ended December 31,							
	2021	2020			2019			
Net sales								
Tech-enabled services	\$ 519.5	\$	409.2	\$	364.7			
Software solutions	270.0		200.2		189.3			
Print and distribution	203.8		285.1		320.7			
Total net sales	993.3		894.5		874.7			
Cost of sales (a)								
Tech-enabled services	162.3		176.1		183.0			
Software solutions	105.3		93.9		101.8			
Print and distribution	145.5		226.0		257.6			
Total cost of sales	413.1		496.0		542.4			
Selling, general and administrative expenses (a)	307.7		264.8		205.8			
Depreciation and amortization	40.3		50.9		49.6			
Restructuring, impairment and other charges, net	13.6		79.2		13.6			
Other operating income, net	(0.7)				(15.2)			
Income from operations	219.3		3.6		78.5			
Interest expense, net	26.6		22.8		38.1			
Investment and other income, net	(5.1)		(1.7)		(11.7)			
Earnings (loss) before income taxes	197.8		(17.5)		52.1			
Income tax expense	51.9		8.4		14.5			
Net earnings (loss)	\$ 145.9	\$	(25.9)	\$	37.6			
Net earnings (loss) per share:								
Basic	\$ 4.36	\$	(0.76)	\$	1.10			
Diluted	\$ 4.14	\$	(0.76)	\$	1.10			
Weighted-average number of common shares outstanding:								
Basic	33.5		33.9		34.1			
Diluted	35.2		33.9		34.3			

⁽a) Exclusive of depreciation and amortization

Donnelley Financial Solutions, Inc. and Subsidiaries ("DFIN") Consolidated Statements of Comprehensive Income (Loss) (in millions)

	Year Ended December 31,							
		2021	2020			2019		
Net earnings (loss)	\$	145.9	\$	(25.9)	\$	37.6		
Other comprehensive income (loss), net of tax: Translation adjustments		(0.7)		0.5		3.0		
Adjustment for net periodic pension and other postretirement benefits		(0.7)		0.5		5.0		
plans		3.2		3.3		(4.9)		
Other comprehensive income (loss), net of tax		2.5		3.8		(1.9)		
Comprehensive income (loss)	\$	148.4	\$	(22.1)	\$	35.7		

Donnelley Financial Solutions, Inc. and Subsidiaries ("DFIN") Consolidated Balance Sheets (in millions, except per share data)

	December 31,				
		2021		2020	
ASSETS					
Cash and cash equivalents	\$	54.5	\$	73.6	
\$10.5)		199.1		173.5	
Inventories		5.6		4.9	
Prepaid expenses and other current assets		17.9		9.7	
Assets held for sale		2.6		5.5	
Total current assets		279.7		267.2	
Property, plant and equipment, net		18.7		12.0	
Operating lease right-of-use assets		42.6		52.5	
Software, net		63.7		51.2	
Goodwill		410.0		409.9	
Other intangible assets, net		8.7 31.7		9.8 34.0	
Other noncurrent assets		28.2		29.0	
Total assets	\$	883.3	\$	865.6	
LIABILITIES		_			
Accounts payable	\$	36.3	\$	54.2	
Operating lease liabilities		17.9		19.7	
Accrued liabilities		207.2		164.6	
Total current liabilities		261.4		238.5	
Long-term debt		124.0		230.5	
Deferred compensation liabilities		19.8		20.8	
Pension and other postretirement benefits plan liabilities		40.6		51.0	
Noncurrent operating lease liabilities		39.4		51.0	
Other noncurrent liabilities		21.1		26.0	
Total liabilities		506.3		617.8	
Commitments and Contingencies (Note 8)					
EQUITY Performed stock \$0.01 man value					
Preferred stock, \$0.01 par value Authorized: 1.0 shares; Issued: None					
Common stock, \$0.01 par value		_		_	
Authorized: 65.0 shares;					
Issued and Outstanding: 35.9 shares and 33.0 shares in 2021 (2020 -					
34.9 shares and 33.3 shares)		0.4		0.3	
Treasury stock, at cost: 2.9 shares in 2021 (2020 - 1.6 shares)		(57.1)		(16.0)	
Additional paid-in capital		260.6		238.8	
Retained earnings		251.4		105.5	
Accumulated other comprehensive loss		(78.3)		(80.8)	
Total equity		377.0		247.8	
Total liabilities and equity	\$	883.3	\$	865.6	

Donnelley Financial Solutions, Inc. and Subsidiaries ("DFIN") Consolidated Statements of Cash Flows (in millions)

	Year	31,				
	2021	202			2019	
OPERATING ACTIVITIES						
Net earnings (loss)	\$ 145.9	\$	(25.9)	\$	37.6	
Adjustments to reconcile net earnings (loss) to net cash provided by operating activities:						
Depreciation and amortization	40.3		50.9		49.6	
Provision for expected losses on accounts receivable	2.8		3.8		3.2	
Impairment charges	9.2		60.6		3.0	
Share-based compensation	19.5		13.6		8.9	
Non-cash loss (gain) on debt extinguishments	2.6		(2.3)		4.1	
Deferred income taxes	(0.3)		(26.4)		2.5	
Net pension plan (income) expense	(4.2)		(2.0)		1.8	
Gain on equity investments, net	(0.4)				(13.6)	
Net loss on disposition of Language Solutions business	(0.7)		_		(19.2) 4.0	
Net loss on disposition of Language Solutions business	17.3		23.3		22.1	
Other	17.3		1.1		3.1	
Changes in operating assets and liabilities, net of acquisition:	1.7		1.1		3.1	
Accounts receivable, net	(28.8)		(14.8)		8.7	
Inventories	(0.8)		6.2		1.0	
Prepaid expenses and other current assets	(5.4)		2.2		2.6	
Accounts payable	(19.8)		(4.4)		(13.6)	
Income taxes payable and receivable	(13.5)		12.3		(13.0)	
Accrued liabilities and other	36.6		79.3		(13.5)	
Operating lease liabilities	(20.8)		(22.2)		(23.8)	
Pension and other postretirement benefits plan contributions	(1.4)		(1.1)		(1.0)	
Net cash provided by operating activities	180.0		154.2		54.5	
INVESTING ACTIVITIES						
Capital expenditures	(42.3)		(31.1)		(44.8)	
Proceeds from sale of building, machinery and equipment	0.9		_		30.6	
Acquisitions, net of cash acquired	(3.6)		_		(4.5)	
Purchase of investments	_		(1.2)		(2.3)	
Proceeds from sale of investment	_		12.8		12.8	
Payments for disposition of Language Solutions business	_		(0.2)		(4.0)	
Other investing activities			(0.3)			
Net cash used in investing activities	(45.0)		(19.8)		(12.2)	
FINANCING ACTIVITIES						
Revolving facility borrowings	278.0		369.0		515.5	
Payments on revolving facility borrowings	(278.0)		(369.0)		(515.5)	
Proceeds from issuance of long-term debt	200.0		_		_	
Payments on long-term debt	(312.8)		(63.8)		(72.5)	
Debt issuance costs	(2.8)		(11.0)		(0.2)	
Treasury share repurchases	(40.9)		(11.8)		(1.8)	
Proceeds from exercise of stock options	2.3		_		_	
Finance lease payments	(0.8) 0.1		(1.9)		_	
Net cash used in financing activities	(154.9)		(77.5)		(74.5)	
		-		_		
Effect of exchange rate on cash and cash equivalents	0.8		(0.5)		2.1	
Net (decrease) increase in cash and cash equivalents Cash and cash equivalents at beginning of year	(19.1) 73.6		56.4 17.2		(30.1) 47.3	
Cash and cash equivalents at end of period	\$ 54.5	\$	73.6	\$	17.2	
		<u>·</u>		=		
Supplemental cash flow information:	¢ 650	¢	21.7	Ф	25.0	
Income taxes paid (net of refunds)	\$ 65.0 \$ 21.8	\$ \$	21.7 24.5	\$ \$	25.0 31.9	
Interest paid	φ ∠1.δ	φ	24.3	φ	31.9	
Other investing activities	\$	\$	0.7	\$	_	
Conversion of note receivable to equity of investee	\$ — \$ —	\$	(1.0)	\$	_	
and the second s	•	-	(1.0)	4		

Donnelley Financial Solutions, Inc. and Subsidiaries ("DFIN") Consolidated Statements of Equity (in millions)

	Commo	Common Stock		Treasury Stock			Additional Paid-in Capital		Paid-in Retained		Accumulated Other Comprehensive Loss		Total Equity
	Shares	Amount	Shares	An	Amount								
Balance at January 1, 2019	34.2	\$ 0.3	0.1	\$	(2.4)	\$	216.5	\$	94.3	\$ (82.7)	\$	226.0	
Net earnings		_	_						37.6	_		37.6	
Other comprehensive loss	_	_	_				_		_	(1.9))	(1.9)	
Share-based compensation	_	_	_				8.9		_	_		8.9	
Issuance of share-based awards,													
net of withholdings and other	0.3		0.2		(1.8)		(0.2)				_	(2.0)	
Balance at December 31, 2019	34.5	\$ 0.3	0.3	\$	(4.2)	\$	225.2	\$	131.9	\$ (84.6)	\$	268.6	
Net loss		_	_						(25.9)	_		(25.9)	
Other comprehensive income		_	_						_	3.8		3.8	
Adoption of ASU 2016-13		_	_						(0.5)	_		(0.5)	
Share-based compensation		_	_				13.6		_	_		13.6	
Common stock repurchases		_	1.1		(10.3)				_	_		(10.3)	
Issuance of share-based awards,													
net of withholdings and other	0.4		0.2		(1.5)						_	(1.5)	
Balance at December 31, 2020	34.9	\$ 0.3	1.6	\$	(16.0)	\$	238.8	\$	105.5	\$ (80.8)	\$	247.8	
Net earnings		_	_		_		_		145.9	_		145.9	
Other comprehensive income		_	_						_	2.5		2.5	
Share-based compensation	_	_	_				19.5		_	_		19.5	
Common stock repurchases	_	_	1.0		(32.4)		_			_		(32.4)	
Issuance of share-based awards,													
net of withholdings and other	1.0	0.1	0.3		(8.7)		2.3				_	(6.3)	
Balance at December 31, 2021	35.9	\$ 0.4	2.9	\$	(57.1)	\$	260.6	\$	251.4	\$ (78.3)	\$	377.0	

Note 1. Overview, Basis of Presentation and Significant Accounting Policies

Description of Business

Donnelley Financial Solutions, Inc. and subsidiaries ("DFIN" or the "Company") is a leading global risk and compliance solutions company. The Company provides regulatory filing and deal solutions via its software, technology-enabled services and print and distribution solutions to public and private companies, mutual funds and other regulated investment firms, to serve its clients' regulatory and compliance needs. DFIN helps its clients comply with applicable regulations where and how they want to work in a digital world, providing numerous solutions tailored to each client's precise needs. The prevailing trend is toward clients choosing to utilize the Company's software solutions, in conjunction with its tech-enabled services, to meet their document and filing needs, while at the same time shifting away from physical print and distribution of documents, except for cases where it is still regulatorily required or requested by stockholders.

The Company serves its clients' regulatory and compliance needs throughout their respective life cycles. For its capital markets clients, the Company offers solutions that allow public companies to comply with applicable U.S. Securities and Exchange Commission ("SEC") regulations including filing agent services, digital document creation and online content management tools that support their corporate financial transactions and regulatory reporting; solutions to facilitate clients' communications with their stockholders; and virtual data rooms and other deal management solutions. For investment companies, including mutual fund, insurance-investment and alternative investment companies, the Company provides solutions for creating, compiling and filing regulatory communications as well as solutions for investors designed to improve the access to and accuracy of their investment information.

Segments

The Company's four operating and reportable segments are: Capital Markets – Software Solutions ("CM-SS"), Capital Markets – Compliance and Communications Management ("CM-CCM"), Investment Companies – Software Solutions ("IC-SS") and Investment Companies – Compliance and Communications Management ("IC-CCM"). *Corporate* is not an operating segment and consists primarily of unallocated selling, general and administrative ("SG&A") activities and associated expenses. See Note 15, *Segment Information*, for additional information.

Basis of Presentation

The consolidated financial statements include the accounts of DFIN and all majority-owned subsidiaries and have been prepared in accordance with accounting principles generally accepted in the United States ("GAAP") and in accordance with the rules and regulations of the SEC. All intercompany transactions have been eliminated in consolidation.

Significant Accounting Policies

Use of Estimates — The preparation of consolidated financial statements in conformity with GAAP requires the extensive use of management's estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes thereto. Actual results could differ from these estimates. Estimates are used when accounting for items and matters including, but not limited to, allowance for expected losses on accounts receivable, pension, goodwill and other intangible assets, asset valuations and useful lives, income taxes and other provisions and contingencies.

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

Fair Value Measurements—Certain assets and liabilities are required to be recorded at fair value on a recurring basis. Fair value is determined based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. The Company records the fair value of its pension plan assets on a recurring basis. See Note 7, Retirement Plans, for the fair value of the Company's pension plan assets as of December 31, 2021.

In addition to assets and liabilities that are recorded at fair value on a recurring basis, the Company is required to record certain assets and liabilities at fair value on a nonrecurring basis, generally as a result of acquisitions or the remeasurement of assets resulting in impairment charges. Assets measured at fair value on a nonrecurring basis include long-lived assets held and used, long-lived assets held for sale, goodwill and other intangible assets. The fair value of cash and cash equivalents, accounts receivable and accounts payable approximate their carrying values. The three-tier fair value hierarchy, which prioritizes valuation methodologies based on the reliability of the inputs, is as follows:

- **Level 1** Valuations based on quoted prices for identical assets and liabilities in active markets.
- Level 2 Valuations based on observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.
- **Level 3** Valuations based on unobservable inputs reflecting the Company's own assumptions, consistent with reasonably available assumptions made by other market participants.

Revenue Recognition — The Company manages highly-customized data and materials to enable filings on behalf of its customers with the SEC related to the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the Securities Act of 1933, as amended (the "Securities Act") and the Investment Company Act of 1940, as amended (the "Investment Company Act") as well as performs eXtensible Business Reporting Language ("XBRL") and other services. Clients are provided with SEC Electronic Data Gathering, Analysis, and Retrieval ("EDGAR") filing services and translation, editing, interpreting, proof-reading and multilingual typesetting services, among other services. The Company also manages virtual data rooms and provides digital document creation, online content management and print and distribution solutions to public and private companies, mutual funds and other regulated investment firms to serve their regulatory and compliance needs.

The Company separately reports its net sales and related cost of sales for its software solutions, tech-enabled services and print and distribution offerings. The Company's software solutions offerings include the Venue® Virtual Data Room ("Venue"), the Arc Suite software platform ("Arc Suite"), ActiveDisclosure®, eBrevia, and data and analytics, among others. The Company's tech-enabled services offerings consist of document composition, compliance-related EDGAR filing services and transaction solutions. The Company's print and distribution offerings primarily consist of conventional and digital printed products and related shipping. Refer to Note 2, *Revenue*, for a discussion of the Company's revenue recognition.

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

Receivables — Receivables are stated net of expected losses and primarily include trade receivables as well as miscellaneous receivables from suppliers. The Company's credit loss reserves primarily relate to trade receivables, unbilled receivables and contract assets. The Company established the provision at differing rates, which are region or country-specific, and are based upon the age of the trade receivable, the Company's historical collection experience in each region or country and lines of business, where appropriate. Provisions for unbilled receivables and contract assets are established based on rates which management believes to be appropriate considering its historical experience. Specific customer provisions are made when a review of significant outstanding amounts, utilizing information about customer creditworthiness and current economic trends, indicates that collection is doubtful. No single customer comprised more than 10% of net sales for the years ended December 31, 2021, 2020 or 2019.

Allowance for Expected Losses — Transactions affecting the current expected credit loss ("CECL") reserve and the allowance for doubtful accounts for the years ended December 31, 2021, 2020 and 2019 were as follows:

	2021		 2020	2019	
Balance, beginning of year	\$	10.5	\$ 7.7	\$	7.9
Adoption of ASU 2016-13 (a)		_	0.5		_
Provisions charged to expense		2.8	3.8		3.2
Write-offs, reclassifications and other		(0.6)	 (1.5)		(3.4)
Balance, end of year (b)	\$	12.7	\$ 10.5	\$	7.7

⁽a) On January 1, 2020, the Company adopted ASU 2016-13, Financial Instruments - Credit Losses (Topic 326) Measurement of Credit Losses on Financial Instruments, and recorded a \$0.5 million cumulative-effect adjustment to retained earnings.

Inventories — Inventories include material, labor and factory overhead and are stated at the lower of cost or market, net of excess and obsolescence reserves for raw materials. Provisions for excess and obsolete inventories are made at differing rates, utilizing historical data and current economic trends, based upon the age and type of the inventory or based on specific identification of inventories that will not be utilized in production or sold. Inventory is valued using the First-In, First-Out ("FIFO") method.

The components of the Company's inventories at December 31, 2021 and 2020 were as follows:

	December 31,				
		2021		2020	
Raw materials and manufacturing supplies	\$	2.8	\$	2.5	
Work in process		2.8		2.4	
Total	\$	5.6	\$	4.9	

Prepaid Expenses — Prepaid expenses as of December 31, 2021 and 2020 were \$11.0 million and \$7.2 million, respectively.

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

Property, plant and equipment and Sale of Real Estate — Property, plant and equipment are recorded at cost and depreciated on a straight-line basis over their estimated useful lives. Useful lives range from 5 to 40 years for buildings, the lesser of 7 years or the lease term for leasehold improvements and from 3 to 13 years for machinery and equipment. Maintenance and repair costs are charged to expense as incurred. Major overhauls that extend the useful lives of existing assets are capitalized. When property, plant or equipment is retired or disposed, the costs and accumulated depreciation are eliminated and the resulting profit or loss is recognized in the results of operations.

⁽b) As of December 31, 2021, the CECL reserve balance is comprised of a \$12.0 million provision for accounts receivable and a \$0.7 million provision for unbilled receivables and contract assets, all of which are included in receivables, net on the audited Consolidated Balance Sheets. As of December 31, 2020, the CECL reserve balance is comprised of a \$10.1 million provision for accounts receivable and a \$0.4 million provision for unbilled receivables and contract assets, all of which are included in receivables, net on the audited Consolidated Balance Sheets. As of December 31, 2019, prior to the adoption of ASU 2016-13, the reserve balance was comprised of a \$7.7 million allowance for doubtful accounts.

The components of the Company's property, plant and equipment at December 31, 2021 and 2020 were as follows:

	December 31,					
		2021		2020		
Land	\$	0.3	\$	0.3		
Buildings		20.8		24.1		
Machinery and equipment		68.5		98.4		
		89.6		122.8		
Less: Accumulated depreciation		(70.9)		(110.8)		
Total	\$	18.7	\$	12.0		

During the year ended December 31, 2021, as a result of the completion of certain restructuring activities, as further described in Note 6, *Restructuring*, *Impairment and Other Charges*, the Company wrote off certain fully depreciated buildings, machinery and equipment as well as associated accumulated depreciation. During the years ended December 31, 2021, 2020 and 2019 depreciation expense was \$6.4 million, \$8.1 million and \$7.7 million, respectively.

On September 27, 2019, the Company entered into a sale-leaseback agreement in which it sold a building and land at fair market value for proceeds of \$30.6 million, and entered into an operating lease of the property through September 2029 with the option to terminate after three years. The Company recorded a net gain of \$19.2 million on the sale of the property for the year ended December 31, 2019, which is reflected in other operating income, net in the audited Consolidated Statements of Operations and is included within the IC-CCM segment.

Assets Held for Sale —As of December 31, 2021 and 2020, the Company had land and land with an office building held for sale with a carrying value of \$2.6 million and \$5.5 million, respectively. On August 20, 2021, the Company entered into an agreement to sell the land for \$12.9 million, which includes consideration for the Company completing the demolition of an office building located on the property. The closing of this transaction is subject to a due diligence period, a period to obtain needed entitlements and customary closing conditions and there is no assurance that this sale will be completed. As a result of the demolition of the building, the Company recorded a non-cash impairment charge of \$2.8 million for the remaining carrying value of the building during the year ended December 31, 2021. The impairment charge was recorded in restructuring, impairment and other charges, net in the audited Consolidated Statement of Operations in the CM-CCM segment.

Software — The Company incurs costs to develop software applications for internal-use. These costs include both direct costs from third-party vendors and eligible salaries and payroll-related costs of employees. The Company capitalizes costs associated with internal-use software when management with the relevant authority authorizes and commits to the funding of the software project and it is probable that the project will be completed and the software will be used to perform the functions intended. Costs associated with upgrades and enhancements are capitalized only if such modifications result in additional functionality of the software, whereas costs incurred for preliminary project stage activities, training, project management and maintenance are expensed as incurred.

Capitalized software development costs are amortized over their estimated useful life using the straight-line method, up to a maximum of three years. Amortization expense related to internally-developed software, excluding amortization expense related to other intangible assets, was \$32.8 million, \$30.4 million and \$27.6 million for the years ended December 31, 2021, 2020 and 2019, respectively.

Investments — The carrying value of the Company's investments in equity securities was \$8.0 million and \$13.4 million as of December 31, 2021 and 2020, respectively. The Company measures its equity securities that do not have a readily determinable fair value at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer.

The following table summarizes realized and unrealized gains on equity securities recorded in investment and other income, net in the audited Consolidated Statement of Operations for the years ended December 31, 2021, 2020 and 2019:

	Year Ended December 31,							
	2	021		2020		2019		
Net gain on equity securities	\$	0.4	\$		\$	13.6 (6.8)		
Unrealized net gain recognized on equity securities still held at the reporting date	\$	0.4	\$		\$	6.8		

The Company performs an assessment on a quarterly basis to assess whether triggering events for impairment exist and to identify any observable price changes. In the fourth quarter of 2021, the Company recorded a non-cash impairment charge of \$5.9 million related to an investment in equity securities. The remaining carrying value of the investment as of December 31, 2021 was \$5.1 million. Future changes in the estimated fair value could result in further impairment charges. During the year ended December 31, 2021, the Company recorded a net unrealized gain of \$0.4 million resulting from observable price changes in orderly transactions for the identical or similar investments. In the fourth quarter of 2019, the Company recorded a non-cash impairment charge of \$2.0 million to impair the entire balance of an investment in equity securities. These non-cash impairment charges are included in restructuring, impairment and other charges, net in the audited Consolidated Statements of Operations.

During the year ended December 31, 2019, the Company sold 50% of its holdings of an investment and received proceeds of \$12.8 million. The Company remeasured its remaining investment in the security and recorded an unrecognized gain of \$6.8 million. In the second quarter of 2020, the Company sold the remaining 50% of its investment and received proceeds of \$12.8 million, which approximated the carrying value of the investment.

Goodwill and Other Intangible Assets — Goodwill is either assigned to a specific reporting unit or, in certain circumstances, allocated between reporting units based on the relative fair value of each reporting unit.

Goodwill is reviewed for impairment annually as of October 31 or more frequently if events or changes in circumstances indicate that it is more likely than not that the fair value of a reporting unit is below its carrying amount. The Company also performs an interim review for indicators of impairment at each quarter-end to assess whether an interim impairment review is required for any reporting unit.

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

For the years ended December 31, 2021 and 2020, each of the reporting units with goodwill was reviewed for impairment using either a qualitative or a quantitative assessment. For reporting units where the Company utilized a qualitative method, the Company considered various factors, as described above, and concluded that it is more likely than not that the fair value of the reporting unit is greater than its carrying value and therefore there is no impairment. For reporting units where the Company utilized a quantitative method, the Company compared each reporting unit's fair value, estimated based on comparable company market valuations and expected future discounted cash flows to be generated by the reporting unit, to its carrying amount. If the carrying amount exceeded the reporting unit's fair value, the Company recognized an impairment loss for the amount by which the carrying amount exceeded the fair value. The quantitative assessment as of October 31, 2021 resulted in no impairment. The quantitative assessment of goodwill impairment as of October 31, 2020, resulted in a \$40.6 million impairment of goodwill for the IC-CCM reporting unit. No other reporting units were impaired. See Note 6, *Restructuring, Impairment and Other Charges*, for further discussion of the impairment.

Other long-lived intangible assets are recognized separately from goodwill and are amortized on a straight-line basis over their estimated useful lives. See Note 4, *Goodwill and Other Intangible Assets*, for further discussion of other intangible assets and the related amortization expense.

Share-Based Compensation — The Company recognizes share-based compensation expense based on estimated fair values for all share-based awards made to employees and directors, including non-qualified stock options ("stock options"), restricted stock units ("RSUs"), performance-based restricted stock ("PBRS") and performance share units ("PSUs"). Share-based compensation expense is recognized on straight-line or graded basis, depending on the type of an award. Certain of the Company's awards vest on an annual basis whereas others cliff vest. See Note 12, Share-based Compensation, for further discussion.

Pension and Other Post-Retirement Benefit Plans — DFIN engages outside actuaries to assist in the determination of the obligations and costs under these plans, which were frozen to new participants effective December 31, 2011. The annual income and expense amounts relating to the pension and other postretirement benefit plans are based on calculations which include various actuarial assumptions including mortality expectations, discount rates and expected long-term rates of return. The Company reviews its actuarial assumptions on an annual basis and makes modifications to the assumptions based on current rates and trends when it is deemed appropriate to do so. The effects of modifications on the value of plan obligations and assets is recognized immediately within other comprehensive income (loss) and amortized into operating earnings over future periods. The Company believes that the assumptions utilized in recording its obligations under its plans are reasonable based on its experience, market conditions and input from its actuaries and investment advisors. Refer to Note 7, Retirement Plans, for further discussion.

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

The Company maintains an income taxes payable or receivable account in each jurisdiction. The Company classifies interest expense and any related penalties related to income tax uncertainties as a component of income tax expense.

The Company is regularly audited by foreign and domestic tax authorities. These audits occasionally result in proposed assessments where the ultimate resolution might result in the Company owing additional taxes, including in some cases, penalties and interest. The Company recognizes a tax position in its financial statements when it is more likely than not (i.e., a likelihood of more than fifty percent) that the position would be sustained upon examination by tax authorities. This recognized tax position is then measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement. Although management believes that its estimates are reasonable, the final outcome of uncertain tax positions may be materially different from that which is reflected in the Company's audited Consolidated Financial Statements. The Company adjusts such reserves upon changes in circumstances that would cause a change to the estimate of the ultimate liability, upon effective settlement or upon the expiration of the statute of limitations, in the period in which such event occurs. See Note 9, *Income Taxes*, for further discussion.

Commitments and Contingencies — The Company is subject to lawsuits, investigations and other claims and can be involved in various legal, regulatory and arbitration proceedings concerning matters arising in the ordinary course of business, including those noted in Note 8, Commitments and Contingencies. The Company routinely reviews the status of each significant matter and assesses the potential financial exposure. A liability is recorded when it is probable that a loss has been incurred and the amount can be reasonably estimated. When there is a range of possible losses with equal likelihood, a liability is recorded based on the low end of such range. Because of uncertainties related to these and other matters, accruals are based on the best information available at the time. The amount of such reserves may change in the future due to new developments or changes in approach, such as a change in settlement strategy. The inherent uncertainty related to the outcome of these matters can result in amounts materially different from the amounts accrued in the Company's audited Consolidated Financial Statements.

Restructuring — The Company records restructuring charges associated with management-approved restructuring plans, which could include the elimination of job functions, closure or relocation of facilities, reorganization of operations, changes in management structure, workforce reductions or other actions. Restructuring charges may include ongoing and enhanced termination benefits related to employee separations, contract termination costs, and other related costs associated with exit or disposal activities. Severance benefits are provided to employees primarily under the Company's ongoing benefit arrangements. These severance costs are accrued once management commits to a plan of termination and it becomes probable that employees will be separated and entitled to benefits at amounts that can be reasonably estimated. In some instances, the Company enhances its ongoing termination benefits with one-time termination benefits and employee severance costs to be incurred in relation to these restructuring activities are recognized when employees are notified of their enhanced termination benefits. See Note 6, Restructuring, Impairment and Other Charges, for further discussion.

Accrued Liabilities — The components of the Company's accrued liabilities at December 31, 2021 and 2020 were as follows:

	December 31,						
		2021		2020			
Accrued sales commissions	\$	66.5	\$	39.0			
Accrued incentive compensation		61.2		39.7			
Customer-related liabilities		36.8		23.4			
Other employee-related liabilities		23.8		19.7			
Other		18.9		42.8			
Accrued liabilities	\$	207.2	\$	164.6			

Other employee-related liabilities consists primarily of employee benefit and payroll accruals. Customer-related liabilities consists primarily of deferred revenue, progress billings and volume discount accruals. Other accrued liabilities includes miscellaneous operating accruals, restructuring liabilities, interest liabilities and other tax liabilities.

Recently Adopted Accounting Pronouncements

In December 2019, the Financial Accounting Standards Board ("FASB") issued ASU No. 2019-12, "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes" ("ASU 2019-12"), which modifies ASC 740, Income Taxes, to simplify the accounting for income taxes by removing certain exceptions for recognizing deferred taxes for investments, performing intraperiod allocation and calculating income taxes in interim periods. ASU 2019-12 also adds guidance to reduce complexity in certain areas, including recognizing deferred taxes for goodwill and allocating taxes to members of a consolidated group. The standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020. The Company adopted the standard prospectively on January 1, 2021. The adoption of this standard did not have a material impact on the Company's audited Consolidated Financial Statements.

Recently Issued Accounting Pronouncements

In October 2021, the FASB issued ASU No. 2021-08, "Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers" ("ASU 2021-08"), which requires that an entity recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with Topic 606, Revenue from Contracts with Customers ("Topic 606"), as if it had originated the contracts, rather than at fair value. The standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2022. Adoption of this standard is not expected to have a material impact on the Company's audited Consolidated Financial Statements.

Note 2. Revenue

Revenue Recognition

As further described in Note 1, *Overview, Basis of Presentation and Significant Accounting Policies*, the Company manages highly-customized data and materials to enable filings with the SEC on behalf of its customers as well as performs XBRL and other services. Clients are provided with EDGAR filing services, XBRL compliance services and translation, editing, interpreting, proof-reading and multilingual typesetting services, among other services. The Company provides software solutions to public and private companies, mutual funds and other regulated investment firms to serve their regulatory and compliance needs, including Venue, Arc Suite, ActiveDisclosure and data and analytics, among others, and provides digital document creation, online content management and print and distribution solutions.

Revenue is recognized upon transfer of control of promised services or products to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those services or products. The Company's services include software solutions and tech-enabled services whereas the Company's products are comprised of print and distribution offerings. The Company's arrangements with customers often include promises to transfer multiple services or products to a customer. Determining whether services and products are considered distinct performance obligations that should be accounted for separately requires significant judgment. Certain customer arrangements have multiple performance obligations as certain promises are both capable of being distinct and are distinct within the context of the contract. Other customer arrangements have a single performance obligation as the promise to transfer the individual goods or services is not separately identifiable from other promises in the contracts, and therefore is not distinct.

Revenue for the Company's tech-enabled services, software solutions and print and distribution offerings is recognized either over time or at a point in time, as outlined below.

Over time

The Company recognizes revenue for certain services over time.

• The Company's software solutions, including Venue, Arc Suite, ActiveDisclosure, data and analytics and others, are generally provided on a subscription basis and allow customers access to use software over the contract period. As a result, software solutions revenue is predominantly recognized over time as the customer receives the benefit throughout the contract period. The timing of invoicing varies, however, the customer may be invoiced before the end of the contract period, resulting in a deferred revenue balance.

Point in time

Certain revenue arrangements, primarily for tech-enabled services and print and distribution offerings, are recognized at a point in time and are primarily invoiced upon completion of all services or upon shipment to the customer.

- Certain arrangements include multiple performance obligations and revenue is recognized upon completion of each performance obligation, such as when a document is filed with a regulatory agency and upon completion of printing the related document. For arrangements with multiple performance obligations, the transaction price is allocated to the separate performance obligations. The Company provides customer specific solutions and as such, observable standalone selling price is rarely available. Standalone selling price is determined using an estimate of the standalone selling price of each distinct service or product, taking into consideration historical selling price by customer for each distinct service or product, if available. These estimates may vary from the final amounts invoiced to the customer and are adjusted upon completion of all performance obligations. Customers may be invoiced subsequent to the recognition of revenue for completed performance obligations, resulting in contract asset balances.
- Revenue for arrangements without a regulatory filing generally have a single performance obligation. As the services and products provided are not distinct within the context of the contract, the revenue is recognized upon completion of the services performed or upon completion of printing of the related product.
- Warehousing, fulfillment services and shipping and handling are each separate performance obligations. As a
 result, when the Company provides warehousing and future fulfillment services, revenue for the composition
 services performed and printing of the product is recognized upon completion of the performance
 obligation(s), as control of the inventory has transferred to the customer and the inventory is being stored at
 the customer's request.

Because substantially all of the Company's products are customized, product returns are not significant; however, the Company accrues for the estimated amount of customer credits at the time of sale.

The Company records deferred revenue when amounts are invoiced but the revenue recognition criteria are not yet met. Revenue is recognized when all criteria are subsequently met.

Certain revenues earned by the Company require significant judgment to determine if revenue should be recorded gross, as a principal, or net of related costs, as an agent. Billings for shipping and handling costs as well as certain postage costs, and out-of-pocket expenses are recorded gross. Revenue is not recognized for customer-supplied postage. The Company's printing operations process paper that may be supplied directly by customers or may be purchased by the Company from third parties and sold to customers. Revenue is not recognized for customer-supplied paper; however, revenues for Company-supplied paper are recognized on a gross basis. Revenue is recognized net of any taxes collected from customers, which are subsequently remitted to authorities. In accordance with the practical expedient within ASC Topic 606, the Company expenses incremental costs to obtain the contract, primarily commissions, as incurred when the amortization period of the asset is one year or less. Sales commissions associated with multi-year contracts beyond the initial year are subject to an employee service requirement and are not capitalized as they are not considered incremental costs to obtain a contract.

Disaggregation of Revenue

The following table disaggregates revenue between tech-enabled services, software solutions and print and distribution by reportable segment for the years ended December 31, 2021, 2020 and 2019:

			2021			2	2020		2019					
	Tech- enabled Services	Software Solutions	Print and Distribution	Total	Tech- enabled Services	Software Solutions	Print and Distribution	Total	Tech- enabled Services	Software Solutions	Print and Distribution	n Total		
Capital Markets - Software Solutions Capital Markets - Compliance and	\$ —	\$ 181.0	\$ —	\$ 181.0	\$ —	\$ 133.2	\$ _	\$ 133.2	\$ —	\$ 126.7	\$ —	\$ 126.7		
Communications Management Investment Companies -	443.1	_	118.4	561.5	314.4	_	109.6	424.0	269.0	_	120.7	389.7		
Software Solutions Investment Companies - Compliance and	-	89.0	_	89.0	_	67.0	_	67.0	-	62.6	_	62.6		
Communications Management Total net sales	76.4 \$ 519.5	\$ 270.0	\$ 5.4 \$ 203.8	\$ 993.3	94.8	\$ 200.2	175.5 \$ 285.1	270.3 \$ 894.5	95.7 \$ 364.7	\$ 189.3	\$ 320.7	295.7 \$ 874.7		

Unbilled Receivables and Contract Balances

The timing of revenue recognition may differ from the timing of invoicing to customers and these timing differences result in unbilled receivables, contract assets or contract liabilities. Contract assets represent revenue recognized for performance obligations completed before an unconditional right to payment exists and therefore invoicing has not yet occurred. The Company generally estimates contract assets based on historical selling price adjusted for its current experience and expected resolutions of the variable consideration of the completed performance obligation. When the Company's contracts contain variable consideration, the variable consideration is recognized only to the extent that it is probable that a significant revenue reversal will not occur in a future period. As a result, the estimated revenue and contract assets may be constrained until the uncertainty associated with the variable consideration is resolved, which generally occurs in less than one year. Contract assets were \$24.9 million and \$18.5 million at December 31, 2021 and 2020, respectively. Generally, the contract asset balance is impacted by the recognition of additional revenue, amounts invoiced to customers and changes in the level of constraint applied to variable consideration. Unbilled receivables are recorded when there is an unconditional right to payment and invoicing has not yet occurred. The Company estimates the value of unbilled receivables based on a combination of historical customer selling price and management's assessment of realizable selling price. Unbilled receivables were \$46.7 million and \$39.1 million at December 31, 2021 and 2020, respectively. Unbilled receivables and contract assets are included in accounts receivable on the audited Consolidated Balance Sheets.

For the year ended December 31, 2021, amounts recognized as revenue exceeded the estimates for performance obligations satisfied as of December 31, 2020 by approximately \$29.5 million, primarily due to changes in the Company's estimated variable consideration and the application of the constraint.

Substantially all of the Company's contracts with significant remaining performance obligations have an initial expected duration of one year or less. As of December 31, 2021, the future estimated revenue related to unsatisfied or partially satisfied performance obligations under contracts with an original contractual term in excess of one year was approximately \$93 million, of which approximately 43% is expected to be recognized as revenue over the succeeding twelve months, and the remainder recognized thereafter.

Contract liabilities consist of deferred revenue and progress billings which are included in accrued liabilities on the audited Consolidated Balance Sheets. During the year ended December 31, 2021, the Company recognized \$20.4 million of revenue that was included in the deferred revenue balance as of January 1, 2021. Changes in contract liabilities were as follows:

Balance at January 1, 2021	\$ 21.7
Deferral of revenue	138.5
Revenue recognized	 (124.2)
Balance at December 31, 2021	\$ 36.0
Balance at January 1, 2020	13.1
Deferral of revenue	
Revenue recognized	 (47.4)
Balance at December 31, 2020	\$ 21.7

Note 3. Acquisitions and Dispositions

Acquisitions

On December 13, 2021, the Company completed the acquisition of Guardum, a leading data security and privacy software provider that helps companies locate, secure and control data. The acquisition enhances the Company's Venue offering. By safeguarding privacy and improving data accuracy, Guardum's data security is a competitive differentiator. Prior to the acquisition, the Company held a 33.0% investment in Guardum. The purchase price for the remaining equity of Guardum was \$3.6 million, net of cash acquired of \$0.1 million. As substantially all of the fair value of the assets acquired was concentrated in the software, the acquisition was accounted for as an asset acquisition and is included within the CM-SS operating segment.

On December 18, 2018, the Company acquired eBrevia, Inc. ("eBrevia"), a leading provider of artificial intelligence-based data extraction and contract analytics software solutions. The Company previously held a 12.8% investment in eBrevia prior to the acquisition. The purchase price for the remaining equity of eBrevia, which includes the Company's estimate of contingent consideration, was \$23.3 million, net of cash acquired of \$0.2 million. During the year ended December 31, 2019, the Company paid \$4.5 million related to the acquisition of eBrevia. An additional \$1.9 million of the purchase price, which was held in the event of potential claims, was paid during the year ended December 31, 2020. The eBrevia acquisition was recorded by allocating the cost of the acquisition to the assets acquired, including other intangible assets, based on their estimated fair values at the acquisition date. The excess of the cost of the acquisition over the net amounts assigned to the fair value of the assets acquired was recorded as goodwill. The operations of eBrevia are included within the CM-SS operating segment.

Disposition

On July 22, 2018, the Company sold its Language Solutions business, which helped companies adapt their business content into different languages for specific countries, markets and regions, for net proceeds of \$77.5 million in cash, all of which was received as of December 31, 2018, resulting in a gain of \$53.8 million. During the year ended December 31, 2019, the Company recognized a \$4.0 million loss related to the disposition of the Language Solutions business which is reflected in other operating income, net in the audited Consolidated Statement of Operations.

Note 4. Goodwill and Other Intangible Assets

DFIN's four operating segments are the same as its reporting units: CM-SS, CM-CCM, IC-SS and IC-CCM.

In the fourth quarter of 2021, the Company completed its annual goodwill impairment analysis and concluded that there was no goodwill impairment. In the fourth quarter of 2020, the Company completed its annual goodwill impairment analysis and recorded a non-cash impairment charge of \$40.6 million to reflect a full impairment of goodwill within the IC-CCM reporting unit. Refer to Note 6, *Restructuring*, *Impairment and Other Charges* for further discussion.

The balances of goodwill by reporting unit are presented below:

	Gross book value at March 31, 2020 ^(a)		Accumulated impairment charges at December 31, 2020		Foreign exchange and other adjustments		va Dece	et book alue at mber 31, 2020	exchar ot	reign nge and her tments	Net book value at December 31, 2021	
Capital Markets -		100 (0.4		400 =				400 =
Software Solutions Capital Markets -	\$	103.6	\$	_	\$	0.1	\$	103.7	\$	_	\$	103.7
Compliance and												
Communications												
Management		252.5		_		0.5		253.0		0.1		253.1
Investment Companies - Software Solutions		53.0				0.2		53.2				53.2
Investment Companies -		33.0				0.2		33.2				33.2
Compliance and												
Communications												
Management		40.6		(40.6)								
Total	\$	449.7	\$	(40.6)	\$	0.8	\$	409.9	\$	0.1	\$	410.0

⁽a) As a result of a change in segmentation, which was effective in the first quarter of 2020, goodwill was reassigned to the Company's reporting units in the first quarter of 2020.

The components of other intangible assets at December 31, 2021, and 2020 were as follows:

		1	Decemb	er 31, 2021	l		December 31, 2020					
	Gross Carrying Amount		Carrying Accumulated Net Bo		t Book alue	Ca	Gross rrying nount	Accumulated Amortization			et Book Value	
Customer relationships (useful life of 15												
years)	\$	10.4	\$	(2.1)	\$	8.3	\$	10.4	\$	(1.4)	\$	9.0
Trade names (useful life of 5 years)		1.0		(0.6)		0.4		1.0		(0.4)		0.6
Software license (useful life of 3 years)		_		_		_		0.3		(0.1)		0.2
Total other intangible assets	\$	11.4	\$	(2.7)	\$	8.7	\$	11.7	\$	(1.9)	\$	9.8

Impairment of Other Intangible Assets—For the year ended December 31, 2019, the Company recognized impairment charges of \$1.0 million related to customer relationship intangible assets in the Company's CM-CCM and IC-SS reporting units.

Other Intangible Assets—Amortization expense for other intangible assets was \$1.1 million, \$12.4 million and \$14.3 million for the years ended December 31, 2021, 2020 and 2019, respectively. The weighted-average remaining useful life for the unamortized intangible assets as of December 31, 2021 is approximately twelve years.

The following table outlines the estimated annual amortization expense related to other intangible assets:

For the year ending December 31,	Amount	
2022	\$	0.9
2023		0.9
2024		0.7
2025		0.7
2026		0.7
2027 and thereafter		4.8
Total	\$	8.7

Note 5. Leases

The Company determines if an arrangement is a lease at inception. The Company must consider whether the contract conveys the right to control the use of an identified asset. Certain arrangements require significant judgment to determine if an asset is specified in the contract and if the Company directs how and for what purpose the asset is used during the term of the contract.

The Company has operating leases for certain service centers, office space, warehouses and equipment. Operating lease right-of-use ("ROU") assets and operating lease liabilities are recognized based on the present value of future minimum lease payments over the lease term at commencement date. Operating lease expense is recognized on a straight-line basis over the expected lease term. The Company's incremental borrowing rate is used in determining the present value of future payments at the commencement date of the lease. Balances related to operating leases are included in operating lease ROU assets, operating lease liabilities and noncurrent operating lease liabilities on the audited Consolidated Balance Sheets.

The Company has finance leases primarily related to certain IT equipment. For finance leases, the Company records interest expense on the lease liability based on the incremental borrowing rate and amortizes the ROU assets on a straight-line basis over the shorter of the lease term or the useful life of the ROU assets. Balances related to finance leases are included in property, plant and equipment, net, accrued liabilities and other noncurrent liabilities on the audited Consolidated Balance Sheets.

The Company's original lease terms generally range from one year to thirty-five years. The remaining terms of the Company's leases range from less than a year to eight years. All real estate leases are recorded on the audited Consolidated Balance Sheets. Equipment and other non-real estate leases with an initial term of twelve months or less are not recorded on the audited Consolidated Balance Sheets. Lease agreements for some locations provide for rent escalations and renewal options. Lease terms include the option to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. Certain real estate leases require payment for taxes, insurance and maintenance which are considered non-lease components. The Company accounts for real estate leases and the related fixed non-lease components together as a single component.

The Company has non-cancelable sublease rental arrangements which did not reduce the future maturities of the operating lease liabilities at December 31, 2021 and 2020. The Company's future rental commitments for leases with subleases were approximately \$17.3 million and \$20.6 million for the years ended December 31, 2021 and 2020, respectively. The Company remains secondarily liable under these leases in the event that the sub-lessee defaults under the sublease terms. The Company does not believe that material payments will be required as a result of the secondary liability provisions of the primary lease agreements.

The components of lease expense for the years ended December 31, 2021, 2020 and 2019 were as follows:

	Year Ended December 31,								
		2021		2020		2019			
Operating lease expense:									
Operating lease expense	\$	19.2	\$	26.6	\$	26.2			
Sublease income		(4.3)		(4.5)		(5.1)			
Net operating lease expense	\$	14.9	\$	22.1	\$	21.1			
Finance lease expense:									
Amortization of ROU asset	\$	0.8	\$		\$				
Interest on lease liability		0.1							
Total finance lease expense	\$	0.9	\$		\$				

The Company's finance lease liabilities as of December 31, 2021 are presented within the Company's audited Consolidated Balance Sheet as follows:

	December	r 31, 2021
Property, plant and equipment, net	\$	7.5
Accrued liabilities		1.6 5.9
Total	\$	7.5

Other information related to operating and finance leases for the years ended December 31, 2021, 2020 and 2019 and as of December 31, 2021 and 2020 was as follows:

	Year Ended December 31,							
		2021		2020		2019		
Supplemental cash flow information Cash paid related to operating leases Cash paid related to finance leases	\$	23.2 0.8	\$	25.5	\$	27.9		
Non-cash disclosure: Increase in operating lease liability due to new ROU assets Increase (decrease) in operating lease liability due to lease	\$	4.2	\$	6.0	\$	9.9		
modifications and remeasurements		3.2 8.3		6.0		(7.9)		
		0.0		Decem	ber 3	31,		
				2021		2020		
Weighted-average remaining lease term: Operating leases Finance leases Weighted-average remaining lease term:				1.0 years 1.4 years		4.6 years —		
Weighted-average discount rate: Operating leases Finance leases				3.8% 2.3%		4.1%		

As of December 31, 2021, future maturities of lease liabilities were as follows:

	Operating Leases	Finance Leases
2022	\$ 19.4	\$ 1.8
2023	15.3	1.8
2024	12.4	1.8
2025	8.5	1.7
2026	3.5	0.9
2027 and thereafter	2.4	
Total lease payments	61.5	8.0
Less: Interest	(4.2)	(0.5)
Present value of lease liabilities	\$ 57.3	\$ 7.5

During the years ended December 31, 2021 and 2020, the Company recorded impairment charges of \$0.5 million and \$18.2 million, respectively, on operating lease ROU assets, as further described in Note 6, *Restructuring*, *Impairment and Other Charges*. The Company also recorded charges of \$2.2 million for acceleration of rent expense associated with abandoned leases during the year ended December 31, 2020. Acceleration of rent expense charges were recorded in either cost of sales or SG&A in the Company's audited Consolidated Statement of Operations, depending on the nature of the property.

Note 6. Restructuring, Impairment and Other Charges

Restructuring, Impairment and Other Charges recognized in Results of Operations

For the year ended December 31, 2021, the Company recorded the following net restructuring, impairment and other charges by segment:

	Employee Terminations	Other Restructuring Charges	Impairment Charges	Other Charges	Total
Year Ended December 31, 2021					
Capital Markets - Software Solutions	\$ 0.4	\$ —	\$ —	\$ —	\$ 0.4
Capital Markets - Compliance and					
Communications Management	0.5	_	2.8	0.2	3.5
Investment Companies - Software	0.1				0.1
Solutions	0.1	_	_	_	0.1
Investment Companies - Compliance and Communications Management	2.1	0.8			2.9
		0.8		_	
Corporate	0.3		6.4		6.7
Total	\$ 3.4	\$ 0.8	\$ 9.2	\$ 0.2	\$ 13.6

For the year ended December 31, 2021, the Company recorded net restructuring charges of \$3.4 million for employee termination costs for approximately 175 employees, substantially all of whom were terminated as of December 31, 2021. The restructuring actions were primarily the result of the implementation of SEC Rule 30e-3 and amendments to SEC Rule 498A.

For the year ended December 31, 2021, the Company recorded \$9.2 million of impairment charges, primarily related to a partial impairment of an investment in equity securities and the demolition of an office building, as further described in Note 1, *Overview, Basis of Presentation and Significant Accounting Policies*.

For the year ended December 31, 2020, the Company recorded the following net restructuring, impairment and other charges by segment:

	Employee Terminations		I	mpairment Charges	Other Charges			Total
Year Ended December 31, 2020								
Capital Markets - Software Solutions	\$	1.0	\$	_	\$	_	\$	1.0
Capital Markets - Compliance and								
Communications Management		5.8		16.1		0.3		22.2
Investment Companies - Software Solutions		0.4		2.6		_		3.0
Investment Companies - Compliance and								
Communications Management		5.6		40.6		_		46.2
Corporate		2.8		1.3		2.7		6.8
Total	\$	15.6	\$	60.6	\$	3.0	\$	79.2

For the year ended December 31, 2020, the Company recorded net restructuring charges of \$15.6 million for employee termination costs for approximately 470 employees, substantially all of whom were terminated as of December 31, 2020. The restructuring actions were the result of the implementation of SEC Rule 30e-3 and amendments to SEC Rule 498A, both of which significantly reduced print volumes beginning January 1, 2021, and the reorganization of certain capital markets operations and selling and administration functions.

As a result of the Company's annual goodwill impairment test in the fourth quarter of 2020, the Company recorded a \$40.6 million non-cash charge during the year ended December 31, 2020 to recognize the impairment of goodwill in the IC-CCM reporting unit. The goodwill impairment charge resulted from a reduction in the estimated fair value of the IC-CCM reporting unit due to lower expectations for future sales and profitability, primarily driven by an increase in the estimated shift of future revenues from IC-CCM to software solutions. The goodwill impairment charge was determined using Level 3 inputs, including a discounted cash flow analysis, comparable marketplace fair value data and management's assumptions.

In addition, the Company abandoned certain operating leases during the year ended December 31, 2020 with the intent to sublease. As the fair value of the ROU assets was less than the carrying value, the Company recognized impairments of ROU assets of \$18.2 million during the year ended December 31, 2020, reducing the carrying value of the ROU assets to an estimated combined fair value of \$0.3 million subsequent to the impairments. The fair value of these assets was estimated utilizing inputs from market comparables in order to estimate future cash flows expected from sublease income over the remaining lease terms. Future changes in the estimated amount or timing of sublease arrangements could result in further impairment charges. For the year ended December 31, 2020, the Company recorded \$1.8 million of net impairment charges related to certain software assets.

For the year ended December 31, 2020, the Company also incurred \$3.0 million of other charges, primarily related to the realignment of the Company's operating segments, which became effective in the first quarter of 2020.

For the year ended December 31, 2019, the Company recorded the following net restructuring, impairment and other charges by segment:

_	Employee Terminations	Impairment Charges	Other Charges	Total
Year Ended December 31, 2019				
Capital Markets - Software Solutions	1.4 \$	<u> </u>	\$ —	\$ 1.4
Capital Markets - Compliance and				
Communications Management (a)	5.0	0.8	0.2	6.0
Investment Companies - Software Solutions (a)	0.4	0.2	_	0.6
Investment Companies - Compliance and				
Communications Management	1.5	_	_	1.5
Corporate (b)	0.8	2.4	0.9	4.1
Total	9.1	3.4	\$ 1.1	\$ 13.6

⁽a) See Note 4, Goodwill and Other Intangible Assets, for further discussion regarding other intangible assets impairment charges.

For the year ended December 31, 2019, the Company recorded net restructuring charges of \$9.1 million for employee termination costs for approximately 270 employees, substantially all of whom were terminated as of December 31, 2019. These charges primarily related to the reorganization of certain operations and certain administrative functions. During the year ended December 31, 2019, the Company also incurred \$3.4 million of impairment charges, primarily related to an impairment of an equity investment, and \$1.1 million of other charges. Upon adoption of ASU No. 2016-02, "Leases (Topic 842)" on January 1, 2019, the restructuring liabilities related to lease terminations of \$1.1 million were recorded as a reduction to the related ROU assets.

Restructuring Reserve - Employee Terminations

The Company's employee terminations liability is included in accrued liabilities in the Company's audited Consolidated Balance Sheets. The other restructuring reserves as of December 31, 2021 and 2020 were not material.

Changes in the accrual for employee terminations during the year ended December 31, 2021, were as follows:

	December 31,		Restructuring				December 31,
		2020		Charges		Cash Paid	2021
Employee terminations	\$	8.5	\$	3.4	\$	(9.5)	\$ 2.4

Changes in the accrual for employee terminations during the year ended December 31, 2020, were as follows:

	Dece	ember 31,	R	estructuring					Dec	ember 31,
		2019		Charges		Reversals	_C	ash Paid	2020	
Employee terminations	\$	1.9	\$	15.7	\$	(0.1)	\$	(9.0)	\$	8.5

⁽b) See Note 1, Overview, Basis of Presentation and Significant Accounting Policies, for further discussion regarding the impairment charges related to an equity investment.

Note 7. Retirement Plans

Subsequent to the Separation (as defined below), certain pension plan liabilities and assets were transferred from RRD to the Company upon the legal split of those plans.

The Company's primary defined benefit plan was frozen effective December 31, 2011. No new employees are permitted to enter the Company's frozen plan and participants will earn no additional benefits. Benefits are generally based upon years of service and compensation. These defined benefit retirement income plans are funded in conformity with the applicable government regulations. The Company funds at least the minimum amount required for all funded plans using actuarial cost methods and assumptions acceptable under government regulations.

In 2019, the Company communicated to certain former employees the option to receive a lump-sum pension payment. Payments to certain participants who elected to receive a lump-sum pension payment were funded from existing pension plan assets and constituted a complete settlement of pension liabilities with respect to these participants. As a result, plan assets and plan liabilities were remeasured, resulting in a net actuarial loss of \$6.4 million recorded within accumulated other comprehensive loss, and a \$3.9 million non-cash pension settlement charge recorded within investment and other income, net during the year ended December 31, 2019.

The annual income and expense amounts relating to the pension plan are based on calculations, which include various actuarial assumptions including, mortality expectations, discount rates and expected long-term rates of return. The Company reviews its actuarial assumptions on an annual basis as of December 31 (or more frequently if a significant event requiring remeasurement occurs, such as a settlement) and modifies the assumptions based on current rates and trends when it is appropriate to do so. The effects of modifications are recognized immediately on the audited Consolidated Balance Sheets, but are amortized into operating earnings over future periods, with the deferred amount recorded in accumulated other comprehensive loss. Total pension (income) expense was \$(4.2) million, \$(2.0) million and \$1.8 million for the years ended December 31, 2021, 2020 and 2019, respectively, which is included within investment and other income, net in the audited Consolidated Statements of Operations.

During the year ended December 31, 2021, the Company used the Society of Actuaries Pri-2012 base rate mortality table and MP-2021 projection scale in the calculation of the Company's U.S. pension plan obligations.

The Company made cash contributions of \$1.2 million and \$0.2 million to its pension and other postretirement benefits plans, respectively, during the year ended December 31, 2021. The Company expects to make cash contributions of approximately \$1.8 million and \$0.1 million to its pension and other postretirement benefits plans, respectively, in 2022.

The pension plan obligations are calculated using generally accepted actuarial methods and are measured as of December 31. Actuarial gains and losses for frozen plans are amortized using the corridor method over the average remaining expected life of plan participants.

The components of the estimated net pension plan (income) expense for DFIN's pension plans for the years ended December 31, 2021, 2020 and 2019 were as follows:

	Year Ended December 31,							
		2021		2020		2019		
Interest cost	\$	6.2	\$	8.8	\$	10.9		
Expected return on assets		(14.2)		(13.9)		(14.8)		
Amortization, net		3.8		3.1		1.8		
Settlements						3.9		
Net pension plan (income) expense	\$	(4.2)	\$	(2.0)	\$	1.8		
Weighted-average assumption used to calculate net pension plan (income) expense:								
Discount rate		2.6%	6	3.2%	ó	3.3%		
Expected return on plan assets		6.0%	6	6.0%	ó	6.3%		

Reconciliation of funded status

	Pension Benefits					Other Postretirement Benef			
		2021		2020		2021		2020	
Benefit obligation at beginning of year	\$	325.6	\$	311.3	\$	1.8	\$	1.6	
Interest cost		6.2		8.7		_		0.1	
Actuarial (gain) loss		(0.4)		24.9		_		0.1	
Foreign currency translation loss		_		_		_		0.1	
Benefits paid		(17.4)		(19.3)		(0.2)		(0.1)	
Benefit obligation at end of year (a)	\$	314.0	\$	325.6	\$	1.6	\$	1.8	
Fair value of plan assets at beginning of year	\$	274.9	\$	252.7	\$	_	\$	_	
Actual return on assets		14.4		40.5		_		_	
Employer contributions		1.2		1.0		0.2		0.1	
Benefits paid		(17.4)		(19.3)		(0.2)		(0.1)	
Fair value of plan assets at end of year	\$	273.1	\$	274.9	\$		\$		
Under funded status at end of year	\$	(40.9)	\$	(50.7)	\$	(1.6)	\$	(1.8)	

⁽a) As the Company's defined benefit plan is frozen and participants do not earn additional service benefits, the projected benefit obligation and accumulated benefit obligation are the same.

The decrease in benefit obligation during the year ended December 31, 2021 was primarily due to benefits paid during the year ended December 31, 2021, partially offset by interest costs.

The accumulated benefit obligation for all defined benefit pension and other postretirement benefits plans was \$315.6 million and \$327.4 million at December 31, 2021 and 2020, respectively.

	Pension Benefits			Other Postretirement Benefits				
		December 31,			December 31,			
		2021		2020		2021		2020
Accrued benefit cost (included in accrued liabilities) Pension and other postretirement benefits plans liabilities	\$	(1.8) (39.1)	\$	(1.4) (49.3)	\$	(0.1) (1.5)	\$	(0.1) (1.7)
Net liabilities recognized in the Consolidated Balance Sheets	\$	(40.9)	\$	(50.7)	\$	(1.6)	\$	(1.8)

The amounts included in accumulated other comprehensive loss in the audited Consolidated Balance Sheets, excluding tax effects, that have not been recognized as components of net periodic benefit cost at December 31, 2021 and 2020 were as follows:

	Pension Benefits			Other Postretirement Ben			t Benefits
	December 31,				December 31,		
	2021		2020		2021		2020
Accumulated other comprehensive loss: Net actuarial loss	\$ (87.6)	\$	(91.9)	\$	(0.6)	\$	(0.6)

The pre-tax amounts recognized in other comprehensive income (loss) during the years ended December 31, 2021, 2020 and 2019 were as follows:

	I	Pens	sion Benefits	S		Other Postretirement Benefits						
	Year Ended December 31,					Year En	r 31,					
<u> </u>	2021		2020		2019	2021	2020	2019				
Amortization of:												
Net actuarial loss \$	3.7	\$	3.1	\$	1.8 \$	0.1 \$	- \$	_				
Amounts arising during the												
period:												
Settlements					3.9							
Net actuarial gain (loss)	0.6		1.7		(11.8)		(0.2)	(0.6)				
Total <u>\$</u>	4.3	\$	4.8	\$	(6.1) \$	0.1 \$	(0.2) \$	(0.6)				

Actuarial gains and losses in excess of 10.0% of the greater of the projected benefit obligation or the market-related value of plan assets were recognized as a component of net pension plan (income) expense over the average remaining service period of the plan's active employees. As a result of the plan being frozen, the actuarial gains and losses are recognized as a component of net pension plan (income) expense over the average remaining expected life of plan participants.

The weighted average assumptions used to determine the benefit obligation at December 31 were as follows:

	Pension Ben	efits	Other Postretirement Benefits				
	December	31,	December 31,				
	2021	2020	2021	2020			
Discount rate	2.9%	2.6%	2.7%	2.2%			
Interest crediting rate	2.4%	1.9%	N/A	N/A			

Benefit payments are expected to be paid as follows:

	Pension Benefits	Other Postretirement Benefits		
2022	\$ 18.2	\$	0.1	
2023	18.4		0.1	
2024	19.0		0.1	
2025	18.5		0.1	
2026	19.3		0.1	
2027-2031	89.3		0.5	

Plan Assets

The Company's U.S. pension plans are frozen and the Company has a risk management approach for its U.S. pension plan assets. The overall investment objective of this approach is to reduce the risk of significant decreases in the plan's funded status by allocating a larger portion of the plan's assets to investments expected to hedge the impact of interest rate risks on the plan's obligation. The expected long-term rate of return for plan assets is based upon many factors including asset allocations, historical asset returns, current and expected future market conditions, risk and active management premiums. The target asset allocation percentage as of December 31, 2021, for the primary U.S. pension plan was approximately 70% for fixed income investments and approximately 30% for return seeking investments.

The fair values of the Company's pension plan assets at December 31, 2021 and 2020, by asset category were as follows:

		Dece	mber 31, 2021	
Asset Category	Total		Level 1	Level 2
Cash and cash equivalents	\$ 2.8	\$	1.5	\$ 1.3
Fixed Income	25.6		_	25.6
Assets measured at NAV	244.7		_	_
Total	\$ 273.1	\$	1.5	\$ 26.9
		Dece	mber 31, 2020	
Asset Category	Total			T1.2
Asset Category	Iotai		Level 1	Level 2
	\$ 	\$	1 Level 1 0.6	\$ 2.7
Cash and cash equivalents	\$ 	\$		\$
Cash and cash equivalents	\$ 3.3	\$		\$ 2.7
Cash and cash equivalents	\$ 3.3 10.2	\$		\$ 2.7 10.2

The Company segregated its plan assets by the following major categories and levels for determining their fair value as of December 31, 2021 and 2020:

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

Real estate funds—Real estate fund assets are valued by third-party appraisers utilizing valuation approaches based upon current cost to reproduce, discounted cash flows or relative sales value of comparable properties. Key inputs and assumptions used to determine fair value include rental revenue and expenses, revenue and expense growth rates, terminal capitalization rates and discount rates. As the value of these assets was determined based on observable inputs obtained by third parties, the Company classified these assets as Level 2.

Fixed Income—Fixed income securities are primarily in a diversified portfolio of long duration governmental instruments. They are primarily valued using a market approach, using matrix pricing and considering a security's relationship to other securities for which quoted prices in an active market may be available. Inputs used in developing fair value estimates include reported trades, broker quotes, benchmarks, and spreads. As the value of these assets was determined based on observable inputs obtained by third parties, the Company classified these assets as Level 2.

Assets measured at NAV—The Company invests in certain funds that are valued at calculated net asset value per share ("NAV"), but are not quoted on active markets such as certain equity common funds, fixed income funds, hedge funds and corporate bond funds. The Company believes that the NAV is representative of fair value at the reporting date, as there are no significant restrictions on redemption of these investments or other reasons to indicate that the investment would be redeemed at an amount different than the NAV.

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

The valuation methodologies described above may generate a fair value calculation that may not be indicative of net realizable value or future fair values. While the Company believes the methodologies used are appropriate, the use of different methodologies or assumptions in calculating fair value could result in different amounts.

Employer 401(k) Savings Plan —For the benefit of most of its U.S. employees, the Company maintains a defined contribution retirement savings plan ("401(k)") that is intended to be qualified under Section 401(a) of the Internal Revenue Code. Under this plan, employees may contribute a percentage of eligible compensation on both a before-tax and after-tax basis. The Company provided a 401(k) discretionary match to participants in 2021 and 2020, payable to participants' accounts in the first quarter of 2022 and 2021, respectively. The total expense attributable to the match was \$17.3 million and \$5.3 million for the years ended December 31, 2021 and 2020, respectively. The Company did not provide a 401(k) discretionary match to participants for the year ended December 31, 2019.

Note 8. Commitments and Contingencies

As of December 31, 2021, the Company had noncancelable contractual commitments of approximately \$73 million for outsourced services and other miscellaneous obligations, primarily relating to information technology, professional, maintenance and other services.

Litigation

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

Multiemployer Pension Plans Obligation

On October 1, 2016, DFIN became an independent publicly traded company through the distribution by R.R. Donnelley & Sons Company ("RRD") of shares of DFIN common stock to RRD stockholders (the "Separation"). On October 1, 2016, RRD also completed the separation of LSC Communications, Inc. ("LSC"), its publishing and retail-centric print services and office products business.

On April 13, 2020, LSC announced that it, along with most of its U.S. subsidiaries, voluntarily filed for business reorganization under Chapter 11 of the U.S. Bankruptcy Code ("LSC Chapter 11 Filing"). In the second quarter of 2020, the Company became aware that, subsequent to the LSC Chapter 11 Filing, LSC failed to make certain required monthly and quarterly withdrawal liability payments to multiemployer pension plans ("MEPP") from which RRD had withdrawn prior to the Separation. Responsibility for certain pre-Separation withdrawal liability obligations, resulting in such monthly and quarterly payment obligations (the "LSC MEPP Liabilities"), had been assigned to LSC pursuant to the September 14, 2016 Separation and Distribution Agreement among the Company, RRD and LSC (the "Separation Agreement"), however, the Company and RRD remained jointly and severally liable for the LSC MEPP Liabilities pursuant to laws and regulations governing multiemployer pension plans. The Company believes the total undiscounted LSC MEPP Liabilities for which LSC was responsible at the time of the LSC Chapter 11 Filing were approximately \$103 million (or approximately \$57 million on a discounted basis, assuming a blended discount rate of approximately 10%) and were payable over approximately a 15-year period (through 2034), with annual payments ranging from \$1.6 million to \$8.5 million at the time.

On July 24, 2020, the Company and RRD signed an agreement agreeing to submit to mediation and, if required, arbitration to determine the final liability allocation between the Company and RRD with respect to the LSC MEPP Liabilities. DFIN and RRD also agreed to share all required monthly and quarterly withdrawal liability payment obligations that become due during the mediation/arbitration period, with an adjustment and repayment to be made for any such payments according to the final allocation.

The Company is required to record a liability when it is probable that a loss has been incurred and the amount can be reasonably estimated. In 2020, the Company recorded charges of \$19.0 million and had \$15.2 million accrued as of December 31, 2020 for its estimated payments related to the LSC MEPP Liabilities, including the Company's low end of the range of potential outcomes as well as the Company's estimated shared payments until a final allocation was determined.

In March 2021 and April 2021, the Company and RRD reached settlements with two of the three LSC multiemployer pension plan funds, which represented approximately \$59 million of the estimated \$103 million total undiscounted LSC MEPP Liabilities at the time of the LSC Chapter 11 filing. The Company and RRD each made lump sum payments in the second quarter of 2021 to settle all obligations related to these funds, which are also subject to adjustment and repayment according to the final liability allocation determination.

In November 2021, arbitration proceedings were completed and the final allocation of the LSC MEPP Liabilities of 1/3 to the Company and 2/3 to RRD was determined by the arbitration panel. As a result of the final liability allocation, the Company received a reimbursement from RRD of \$7.1 million in December 2021 for payments made in excess of the Company's allocated share of the LSC MEPP Liabilities, including the lump sum payments made associated with March 2021 and April 2021 settlements, and adjusted its accruals for the Company's portion of the LSC MEPP Liabilities.

As of December 31, 2021, the Company's undiscounted LSC MEPP Liabilities were \$12.3 million, \$1.1 million of which is payable in each of the five succeeding years and the remainder thereafter through 2033, with annual payments ranging from \$0.8 million to \$1.1 million. For the year ended December 31, 2021, the Company recorded net expense of \$5.4 million and had \$10.1 million accrued as of December 31, 2021, on a discounted basis, assuming a blended discount rate of approximately 3.5%. The expense associated with the LSC MEPP Liabilities and the reimbursement from RRD have been recorded in SG&A expenses within the Corporate segment in the Company's audited Consolidated Statements of Operations for the years ended December 31, 2021 and 2020.

There can be no assurance that the Company's actual future liabilities relating to the MEPP liabilities (including MEPP liabilities where the Company and RRD remain jointly and severally liable) will not differ materially from the amount recorded in the Company's audited Consolidated Financial Statements. If RRD fails to make required payments in respect of the remaining LSC MEPP Liabilities, or RRD fails to make required payments in respect of RRD's MEPP liabilities, the Company may become obligated to make such payments. In addition, the Company's MEPP liabilities could be affected by the financial stability of other employers participating in such plans and decisions by those employers to withdraw from such plans in the future.

Non-Income Taxes

The Company does not collect sales, use or similar taxes on all amounts invoiced in all jurisdictions in which the Company has sales based on its understanding that certain transactions are not subject to tax. Sales, use and similar tax laws vary greatly by jurisdiction and may require judgment to determine the applicability to the Company's transactions. During 2020, the Company identified certain jurisdictions where the Company has not historically collected or remitted sales tax on certain services and that the Company believes it is probable that the jurisdiction would assess sales tax. As of December 31, 2021 and 2020, the Company has a contingent liability of \$3.5 million and \$5.2 million, respectively, for certain estimated sales tax exposures. The impact associated with the contingent liability is recorded in SG&A expense in the Company's audited Consolidated Statements of Operations. Although management believes its estimates are reasonable, the resolution of the Company's tax matters could result in tax liabilities that are higher or lower than what has been estimated by the Company.

Note 9. Income Taxes

Income taxes have been based on the following components of earnings (loss) before income taxes for the years ended December 31, 2021, 2020 and 2019:

	Year Ended December 31,								
		2021		2020		2019			
U.S	\$	173.6	\$	(28.3)	\$	54.1			
Foreign		24.2		10.8		(2.0)			
Earnings (loss) before income taxes	\$	197.8	\$	(17.5)	\$	52.1			

The components of income tax expense (benefit) for the years ended December 31, 2021, 2020 and 2019 were as follows:

	Year Ended December 31,						
		2021		2020	2019		
Current:							
U.S. Federal	\$	33.5	\$	21.1	\$	7.7	
U.S. State and Local		14.7		10.0		2.3	
Foreign		4.0		3.7		2.0	
Current income tax expense		52.2		34.8		12.0	
Deferred:							
U.S. Federal		1.2		(20.9)		2.3	
U.S. State and Local		0.4		(6.4)		0.4	
Foreign		(1.9)		0.9		(0.2)	
Deferred income tax (benefit) expense		(0.3)		(26.4)		2.5	
Total income tax expense	\$	51.9	\$	8.4	\$	14.5	

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

	Year Ended December 31,					
	2021	2020	2019			
Federal statutory tax rate	21.0%	21.0%	21.0%			
State and local income taxes, net of U.S. federal income tax						
benefit	5.9	(8.7)	6.8			
Global intangible low-taxed income provision	0.8	_	_			
Non-deductible expenses	0.5	(17.0)	4.6			
Adjustment of uncertain tax positions and interest	0.4	(3.1)	0.4			
Provision to return	0.1	0.7	(7.2)			
Changes in valuation allowances	(1.5)	(10.5)	6.4			
Foreign-derived intangible income	(0.6)	10.2	(1.9)			
Credits and incentives	(0.5)	4.7	(1.6)			
Goodwill impairment	_	(45.3)	_			
Foreign tax rate differential	_	(0.7)	(0.8)			
Tax-exempt income and expense	_	0.6	(0.1)			
Other	0.1	0.1	0.2			
Effective income tax rate	26.2%	(48.0%)	27.8%			

The effective income tax rate was 26.2% for the year ended December 31, 2021 compared to (48.0%) for the year ended December 31, 2020. The change in the effective tax rate was primarily driven by the nondeductible goodwill impairment charge recorded in 2020, increased earnings in 2021 and a reduction in the valuation allowances.

The effective income tax rate was (48.0%) for the year ended December 31, 2020 compared to 27.8% for the year ended December 31, 2019. The 2020 effective income tax rate was impacted by the nondeductible goodwill impairment and other nondeductible items, partially offset by favorable adjustments primarily related to foreign-derived intangible income and other income tax credits.

Deferred income taxes

The significant deferred tax assets and liabilities at December 31, 2021 and 2020 were as follows:

		December 31,			
	2021			2020	
Deferred tax assets:					
Accrued liabilities and other reserves	\$	28.6	\$	26.2	
Lease liabilities		14.4		15.4	
Pension and other postretirement benefit plans liabilities		11.9		15.0	
Net operating losses and other tax carryforwards		10.1		11.6	
Share-based compensation		3.9		3.2	
Allowance for doubtful accounts		3.4		2.5	
Other		1.7		0.7	
Total deferred tax assets		74.0		74.6	
Valuation allowances		(4.8)		(7.5)	
Total deferred tax assets	\$	69.2	\$	67.1	
Deferred tax liabilities:					
Accelerated depreciation	\$	(14.6)	\$	(11.3)	
Right-of-use assets		(8.5)		(10.7)	
Other intangible assets		(8.8)		(7.8)	
Prepaid assets		(1.0)		(0.4)	
Other		(4.6)		(2.9)	
Total deferred tax liabilities		(37.5)		(33.1)	
Net deferred tax assets	\$	31.7	\$	34.0	

The amounts above are included in the audited Consolidated Balance Sheets as either a net asset or liability on a jurisdiction by jurisdiction basis.

Transactions affecting the valuation allowances on deferred tax assets during the years ended December 31, 2021, 2020 and 2019 were as follows:

	2	021	2020	2019
Balance, beginning of year	\$	7.5	\$ 5.2	\$ 2.1
(Income) expense, net		(2.7)	 2.3	 3.1
Balance, end of year	\$	4.8	\$ 7.5	\$ 5.2

As of December 31, 2021, the Company had domestic and foreign net operating loss and other tax carryforward deferred tax assets of approximately \$10.1 million, of which \$5.3 million expires between 2022 and 2041. Limitations on the utilization of these deferred tax assets may apply. The Company has provided valuation allowances to reduce the carrying value of certain deferred tax assets as management has concluded that, based on the weight of available evidence, it is more likely than not that the deferred tax assets will not be fully realized.

Earnings generated by a foreign subsidiary are presumed to ultimately be transferred to the parent company. Therefore, the establishment of deferred taxes may be required with respect to the excess of the investment value for financial reporting over the tax basis of investments in those foreign subsidiaries (also referred to as book-over-tax outside basis differences). A company may overcome this presumption and forgo recording a deferred tax liability in its financial statements if it can assert that management has the intent and ability to indefinitely reinvest the earnings of its foreign subsidiaries. As a result of the transition tax incurred pursuant to the Tax Cuts and Jobs Act (H.R. 1) (the "Tax Act"), the Company has the ability to repatriate any previously taxed foreign cash associated with the foreign earnings subjected to U.S. tax to the U.S. parent with minimal additional tax consequences. Due to the changes under the Tax Act, the Company updated its assertion in 2018 related to indefinite reinvestment on all foreign earnings and other outside basis differences to indicate that the Company remains indefinitely reinvested in operations outside of the U.S. with the exception of the previously taxed foreign earnings already subject to U.S. tax. The Company began repatriating earnings up to its net earnings previously subject to U.S. tax during 2019. The Company did not make any repatriations in 2020 and repatriated \$30.0 million during 2021 out of previously taxed earnings.

Uncertain tax positions

Changes in the Company's unrecognized tax benefits at December 31, 2021, 2020 and 2019 were as follows:

	2021	2020	2019
Balance, beginning of year	\$ 1.3	\$ 0.5	\$ 0.3
Additions for tax positions of the current year	0.3	0.3	0.1
Additions for tax positions of prior years	0.7	0.5	0.1
Settlements during the year	(0.1)	 	
Balance, end of year	\$ 2.2	\$ 1.3	\$ 0.5

As of December 31, 2021, 2020 and 2019, the Company had unrecognized tax benefits of \$2.2 million, \$1.3 million and \$0.5 million, respectively. Unrecognized tax benefits of \$2.2 million as of December 31, 2021, if recognized, would have decreased income taxes and the corresponding effective income tax rate and increased net earnings. This potential impact on net earnings reflects the reduction of these unrecognized tax benefits, net of certain deferred tax assets and the federal tax benefit of state income tax items.

As of December 31, 2021, it is reasonably possible that a portion of the total amount of unrecognized tax benefits is expected to decrease within twelve months due to the resolution of audits or expirations of statutes of limitations related to U.S. federal, state or international tax positions, but the amount is immaterial.

The Company classifies interest expense and any penalties related to income tax uncertainties as a component of income tax expense. The total interest expense (benefit), net of tax benefits, related to tax uncertainties recognized in the audited Consolidated Statements of Operations was de minimis for the years ended December 31, 2021, 2020 and 2019. There were no benefits from the reversal of accrued penalties for the years ended December 31, 2021, 2020 and 2019. There were no accrued penalties related to income tax uncertainties at December 31, 2021 and 2020.

The Company has tax years from 2013 that remain open and subject to examination by certain U.S. state taxing authorities and/or certain foreign tax jurisdictions. There are no U.S. federal income tax years prior to the period ending December 31, 2018 subject to IRS examination. All U.S. federal income tax years including and subsequent to the period ending December 31, 2018 remain open and subject to IRS examination.

Note 10. Debt

The Company's debt as of December 31, 2021 and 2020 consisted of the following:

		31,		
	2021			2020
Term Loan A Facility	\$	125.0	\$	_
8.25% senior notes due October 15, 2024		_		233.0
Unamortized debt issuance costs		(1.0)		(2.5)
Total long-term debt	\$	124.0	\$	230.5

Maturities—At December 31, 2021, the Company's debt was comprised of the \$125.0 million delayed-draw term loan A facility (the "Term Loan A Facility"), which is due in full on May 27, 2026.

Fair Value—The fair value of the Term Loan A Facility was \$124.2 million at December 31, 2021, which was determined using the market approach based upon term loan borrowings with similar terms and maturities, and was determined to be Level 2 under the fair value hierarchy. As of December 31, 2020, the fair value of the 8.25% senior unsecured notes due October 15, 2024 (the "Notes") of \$247.5 million was determined using the market approach based upon interest rates available to the Company for borrowings with similar terms and maturities, and was determined to be Level 2 under the fair value hierarchy.

8.25% Senior Notes Due 2024—On October 15, 2021, the Company redeemed the remaining outstanding Notes balance of \$233.0 million at the redemption price of 102.063, plus accrued and unpaid interest of \$9.6 million, using \$200.0 million of proceeds from the Company's Term Loan A Facility and cash. The Company recorded a pre-tax loss on the extinguishment of the Notes of \$6.8 million during the fourth the quarter of 2021.

During 2020, the Company purchased and retired \$67.0 million (notional amount) of the Notes at a weighted-average price of 95.28 and recognized a pre-tax gain on the extinguishment of debt of \$2.3 million, which was net of unamortized debt issuance costs, and is recorded within interest expense, net in the audited Consolidated Statements of Operations.

Prior to the redemption, the Company's Notes were issued pursuant to an indenture (the "Indenture") where certain wholly-owned domestic subsidiaries of the Company guaranteed the Notes (the "Guarantors"). The Notes were jointly and severally guaranteed, on an unsecured basis, by the Guarantors, which were comprised of each of the Company's direct and indirect wholly-owned U.S. subsidiaries that guaranteed the Company's obligations under the Credit Facilities. All Guarantors were released subsequent to the repayment of the Notes. The Notes were not guaranteed by the Company's foreign subsidiaries or unrestricted subsidiaries. The Notes and the related guarantees were the Company and the Guarantors', respective, senior unsecured obligations and ranked equally in right of payment to all senior debt, including the obligations under the Company's Credit Facilities, senior in right of payment to all subordinated debt, and effectively subordinated in right of payment to any of the Company and the Guarantors' secured debt, to the extent of the value of the assets securing such debt. The Indenture governing the Notes contained certain covenants applicable to the Company and its restricted subsidiaries, including limitations on: (1) liens; (2) indebtedness; (3) mergers, consolidations and acquisitions; (4) sales, transfers and other dispositions of assets; (5) loans and other investments; (6) dividends and other distributions, stock repurchases and redemptions and other restricted payments; (7) restrictions affecting subsidiaries; (8) transactions with affiliates; and (9) designations of unrestricted subsidiaries. Each of these covenants was subject to important exceptions and qualifications.

Credit Agreement—On May 27, 2021 (the "Restatement Effective Date"), the Company amended and restated its credit agreement dated as of September 30, 2016 (as in effect prior to such amendment and restatement, the "Credit Agreement," and the Credit Agreement, as so amended and restated, the "Amended and Restated Credit Agreement"), by and among the Company, the lenders party thereto from time to time and JPMorgan Chase Bank, N.A., as administrative agent and collateral agent, to, among other things, provide for the Term Loan A Facility, extend the maturity of the \$300.0 million revolving facility (the "Revolving Facility") to May 27, 2026 and modify the financial maintenance and negative covenants in the Credit Agreement. The Amended and Restated Credit Agreement contains a number of covenants, including a minimum Interest Coverage Ratio and the Consolidated Net Leverage Ratio, as defined in and calculated pursuant to the Credit Agreement, that, in part, restrict the Company's ability to incur additional indebtedness, create liens, engage in mergers and consolidations, make restricted payments and dispose of certain assets. The Credit Agreement generally allows annual dividend payments of up to \$20.0 million in the aggregate.

Term Loan Credit Facility—On October 14, 2021, the Company drew \$200.0 million from the Term Loan A Facility and used the proceeds to redeem the Company's Notes on October 15, 2021, as further described above. Under the Credit Agreement, the Term Loan A Facility bears interest at a rate equal to the sum of the London Interbank Offered Rate ("LIBOR") plus a margin ranging from 2.00% to 2.50% based upon the Company's Consolidated Net Leverage Ratio. The weighted-average interest rate on borrowings under the Terms Loan A Facility was 2.1% for the year ended December 31, 2021. Prior to the prepayment of quarterly installments, as described below, the principal amount of loans under the Term Loan A Facility were due and payable in equal quarterly installments of 1.25% of the original principal amount of the loans during the first three years after the Restatement Effective Date, commencing on March 31, 2022, and 2.50% of the original principal amount of the loans thereafter.

In the fourth quarter of 2021, the Company prepaid \$75.0 million of the original principal amount of the Term Loan A Facility and recognized a pre-tax loss on extinguishment of debt of \$0.6 million. As a result, quarterly installments of the original principal amount are no longer required and the entire unpaid principal amount of the Term Loan A Facility is due and payable in full on May 27, 2026. Voluntary prepayments of the Term Loan A Facility are permitted at any time without premium or penalty.

During the year ended December 31, 2019, the Company repaid \$72.5 million associated with a term loan under the former Credit Agreement. As a result of the transaction, the Company recognized a pre-tax loss on extinguishment of debt of \$4.1 million for the year ended December 31, 2019, related to unamortized debt issuance costs and the original issuance discount, which is recorded within interest expense, net, in the audited Consolidated Statements of Operations.

Revolving Credit Facility—As of December 31, 2021 and 2020, there were no outstanding borrowings under the Revolving Facility. The weighted-average interest rate on borrowings under the Revolving Facility was 2.8% and 2.6% for the years ended December 31, 2021 and 2020, respectively.

As of December 31, 2021, the Company had \$3.2 million in outstanding letters of credit and bank guarantees, of which \$2.2 million reduced the availability under the Revolving Facility. As of December 31, 2020, the Company had \$3.7 million in outstanding letters of credit and bank guarantees, of which none reduced the availability under the Revolving Facility.

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

	Year Ended December 31,								
		2021 2020				2019			
Interest incurred	\$	19.8	\$	25.6	\$	34.3			
Loss (gain) on debt extinguishment and other interest income		6.8		(2.7)		4.1			
Less: capitalized interest				(0.1)		(0.3)			
Interest expense, net	\$	26.6	\$	22.8	\$	38.1			

Note 11. Earnings (Loss) per Share

Basic earnings (loss) per share is calculated by dividing net earnings (loss) by the weighted average number of common shares outstanding for the period. In computing diluted earnings (loss) per share, basic earnings (loss) per share is adjusted for the assumed issuance of all potentially dilutive share-based awards, including stock options, RSUs, PSUs and restricted stock. Since the Company was in a net loss position for the year ended December 31, 2020, there was no difference between the number of shares used to calculate basic and diluted loss per share.

The reconciliation of the numerator and denominator of the basic and diluted earnings (loss) per share calculation and the anti-dilutive share-based awards for the years ended December 31, 2021, 2020 and 2019, were as follows:

	Year Ended December 31,					1,
	2021			2020		2019
Net earnings (loss) per share:						
Basic	\$	4.36	\$	(0.76)	\$	1.10
Diluted		4.14		(0.76)		1.10
Numerator:						
Net earnings (loss)	\$	145.9	\$	(25.9)	\$	37.6
Denominator:						
Weighted average number of common shares outstanding		33.5		33.9		34.1
Dilutive awards		1.7				0.2
Diluted weighted average number of common shares outstanding		35.2		33.9		34.3
Weighted average number of anti-dilutive share-based awards:						
Restricted stock units		_		0.4		0.7
Stock options				0.8		0.8
Total		_		1.2		1.5

Note 12. Share-based Compensation

The Company's share-based compensation plan under which it may grant future awards, the Donnelley Financial Solutions, Inc. Amended and Restated 2016 Performance Incentive Plan (as amended, the "2016 PIP"), was approved by the Board of Directors (the "Board") and the Company's stockholders on May 18, 2017 and provides incentives to key employees of the Company. Awards under the 2016 PIP may include cash or stock bonuses, stock options, stock appreciation rights, restricted stock, PSUs, performance cash awards or RSUs. In addition, non-employee members of the Board may receive awards under the 2016 PIP. On May 30, 2019 and May 13, 2021 the Company's stockholders voted and approved 3.4 million of additional shares of common stock for issuance under the 2016 PIP, each. At December 31, 2021, there were 4.3 million remaining shares of common stock authorized and available for grant under the 2016 PIP.

For all share-based awards granted to employees and directors, including stock options, RSUs, PBRS and PSUs, the Company recognizes compensation expense based on estimated grant date fair values as well as certain assumptions as of the grant date, if applicable. The Company estimates the number of awards expected to vest based, in part, on historical forfeiture rates and also based on management's expectations of employee turnover within the specific employee groups receiving each type of award. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods, if actual forfeitures differ from those estimates. The Company recognizes compensation costs for RSUs expected to vest, on a straight-line basis over the requisite service period of the award, which is generally the vesting term of three years. The Company recognizes compensation costs for PSUs, which cliff vest, on a straight-line basis over the performance period of the award. Compensation expense for stock options is recognized on a straight-line basis over the requisite service period of the award, which is generally the vesting term of four years. Compensation expense for PBRS awards granted in 2016, which vest on a graded basis, was recognized utilizing a graded vesting schedule. Compensation expense for PBRS awards granted in 2017, which cliff vest, was recognized on a straight-line basis over the performance period of the award. The Company recognized expense for the PBRS awards of \$0.8 million for the year ended December 31, 2019; no expense was recognized for the years ended December 31, 2021 and 2020.

The stock options, RSUs, and PSUs granted during 2021, 2020 and 2019 are subject to forfeiture upon termination of employment prior to vesting, subject in some cases to early vesting upon specified events, including death or permanent disability of the grantee or a change in control of the Company. In addition, upon a change in control of the Company, PSUs will be measured at 100% attainment of the target performance metrics and will remain subject to time based vesting until the end of the vesting period; provided that the award will vest in full if, within three months prior to or two years after the date of the change in control of the Company, the grantee's employment is terminated without cause by the Company or for good reason by the grantee.

Total share-based compensation expense was \$19.5 million, \$13.6 million and \$8.9 million for the years ended December 31, 2021, 2020 and 2019, respectively. The income tax benefit related to share-based compensation expense was \$9.5 million, \$3.7 million and \$1.9 million for the years ended December 31, 2021, 2020 and 2019, respectively. As of December 31, 2021, \$19.6 million of total unrecognized compensation expense related to share-based compensation awards is expected to be recognized over a weighted-average period of 1.7 years.

Stock Options

The fair value of each stock option award was estimated on each grant date using the Black-Scholes option pricing model. The Company used the following methods to determine its underlying assumptions:

- Expected volatility was estimated based on a weighted-average of historical volatilities for the Company's peer group
- The risk-free interest rate was based on the U.S Treasury yield curve in effect on the date of grant
- The expected term of options granted was based on the simplified method of using the mid-point between the vesting term and the original contractual term
- The expected dividend yield was based on the Company's current dividend rate

In 2021 and 2020, the Company did not grant any stock options. The weighted-average fair value of options granted during the year ended December 31, 2019 was \$4.67. The following table summarizes the annual weighted-average assumptions for the year ended December 31, 2019:

	2019
Expected volatility	27.47%
Risk-free interest rate	2.58%
Expected life (years)	6.25
Expected dividend yield	0.00%

2010

The weighted-average fair value of options exercised during the year ended December 31, 2021 was \$4.10. There were no options exercised during the years ended December 31, 2020 and 2019.

Stock option awards outstanding as of December 31, 2021 and 2020, and changes during the year ended December 31, 2021, were as follows:

	Shares Under Option (thousands)	 Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (years)	 Aggregate Intrinsic Value (millions)
Outstanding at December 31, 2020	715	\$ 18.91	6.3	\$ 0.5
Exercised	(128)	19.13	_	1.8
Cancelled/forfeited/expired	(25)	31.03		
Outstanding at December 31, 2021	562	18.30	5.9	16.2
Vested and expected to vest at December 31, 2021	560	\$ 18.31	5.9	\$ 16.1
Exercisable at December 31, 2021	403	\$ 19.27	5.6	\$ 11.2

As of December 31, 2021, \$0.3 million of unrecognized compensation expense related to stock options is expected to be recognized over a weighted average period of 1.0 years.

Restricted Stock Units

The fair value of RSUs was determined based on the Company's stock price on the grant date. The weighted-average grant date fair value of RSUs granted during the years ended December 31, 2021, 2020 and 2019 was \$28.38, \$8.70 and \$13.94, respectively.

RSUs outstanding as of December 31, 2021 and 2020, and changes during the year ended December 31, 2021, were as follows:

	Shares (Thousands)	Weighted- Average Grant Date Fair Value
Nonvested at December 31, 2020	1,376	\$ 10.53
Granted	499	28.38
Vested	(653)	10.71
Forfeited	(63)	18.01
Nonvested at December 31, 2021	1,159	\$ 17.71

As of December 31, 2021, \$12.2 million of unrecognized share-based compensation expense related to RSUs is expected to vest over a weighted-average period of 1.9 years.

Performance Share Units

The fair value of PSUs was determined based on the Company's stock price on the grant date. The weighted-average grant date fair value of PSUs granted during the years ended December 31, 2021, 2020 and 2019 was \$27.84, \$8.73 and \$14.15, respectively.

PSUs outstanding as of December 31, 2021 and 2020, and changes during the year ended December 31, 2021, were as follows:

	Shares (Thousands)	 Weighted- Average Grant Date Fair Value
Nonvested at December 31, 2020	872	\$ 12.13
Granted	336	27.84
Vested	(244)	15.25
Forfeited	(11)	8.98
Nonvested at December 31, 2021	953	\$ 16.77

During 2021, 335,830 PSUs were granted to certain executive officers and senior management, 315,400 of which related to the 2021 performance grant and 20,430 of which related to additional shares issued due to the achievement of certain targets for the year ended December 31, 2020. As of December 31, 2021, the total potential payout for the 2021 PSU awards ranged from zero to 631,000 shares.

The 2020 and 2021 PSU awards consist of four independent performance periods, including three annual performance periods and one three-year cumulative period, and one 2020 award consists of a cumulative 2021 - 2022 performance period. The performance period for the shares awarded in 2019 is January 1, 2019 through December 31, 2021.

Year Granted	Performance/ Service Period	Estimated or Actual Attainment	PSUs Outstanding as of December 31, 2021 (Thousands)	Estimated PSU Attainment or Actual PSUs Earned (Thousands)
2021	2021	200%(a)	84	168
2021	2022	(b)	77	_
2021	2023	(b)	77	_
2021	2021-2023	100% ^(c)	77	77
			315	245
2020	2020	138% ^(a)	80	110
2020	2021	$200\%^{(a)}$	80	160
2020	2022	(b)	80	_
2020	2020-2022	163%(c)	80	130
2020	2021-2022	100%	20	20
			340	420
2019	2019-2021	$128\%^{(a)}$	298	380

⁽a) Amounts represent actual attainment and actual PSUs earned as the performance period is complete.

As of December 31, 2021, there was \$7.1 million of unrecognized compensation expense related to PSUs, which is expected to be recognized over a weighted average period of 1.5 years.

Note 13. Capital Stock

The Company has 65 million shares of \$0.01 par value common stock authorized for issuance. DFIN's common stock is currently traded under the ticker symbol "DFIN" on the New York Stock Exchange.

The Company has one million shares of \$0.01 par value preferred stock authorized for issuance. The Board may divide the preferred stock into one or more series and fix the redemption, dividend, voting, conversion, sinking fund, liquidation and other rights. The Company has no present plans to issue any preferred stock.

Common Stock Repurchases—On February 4, 2020, the Board authorized a stock repurchase program, under which the Company is authorized to repurchase up to \$25.0 million of its outstanding common stock from time to time in one or more transactions on the open market or in privately negotiated purchases in accordance with all applicable securities laws. During the year ended December 31, 2020, the Company repurchased 1,149,489 shares in open market transactions for \$10.3 million at an average price of \$8.92 per share. As of December 31, 2020, the remaining authorized amount was \$14.7 million.

On February 18, 2021, the Board authorized an increase to its stock repurchase program to bring the total remaining available repurchase authorization for shares on or after February 18, 2021 to \$50.0 million. During the year ended December 31, 2021, the Company repurchased 972,881 shares for \$32.4 million at an average price of \$33.30 per share. As of December 31, 2021, the remaining amount under the authorization was \$17.7 million.

On February 17, 2022, the Board authorized an increase to its stock repurchase program to bring the total remaining available repurchase authorization for shares on or after February 17, 2022 to \$150 million and extended the expiration date of the repurchase program through December 31, 2023. The stock repurchase program may be suspended or discontinued at any time. The timing and amount of any shares repurchased are determined by the Company based on its evaluation of market conditions and other factors and may be completed from time to time in one or more transactions on the open market or in privately negotiated purchases in accordance with all applicable securities laws and regulations and all repurchases in the open market will be made in compliance with Rule 10b-18 under the Exchange Act. Repurchases may also be made under a Rule 10b5-1 plan, which would permit shares to be repurchased when the Company might otherwise be precluded from doing so.

⁽b) As the performance period has not yet commenced, expense is not being recognized.

⁽c) Expense for the cumulative performance/service period is recognized at 100% of estimated attainment until the end of the second service year.

Note 14. Comprehensive Income (Loss)

The components of other comprehensive income (loss) and income tax expense (benefit) allocated to each component for the years ended December 31, 2021, 2020 and 2019 were as follows:

		2021			2020			2019	
	Before Tax	Income Tax	Net of Tax	Before Tax	Income Tax	Net of Tax	Before Tax	Income Tax	Net of Tax
Translation adjustments Adjustment for net periodic pension and other postretirement	\$ (0.8)	\$ (0.1)	\$ (0.7)	\$ 0.7	\$ 0.2	\$ 0.5	\$ 3.0	\$ —	\$ 3.0
benefits plans	4.4	1.2	3.2	4.6	1.3	3.3	(6.7)	(1.8)	(4.9)
Other comprehensive income (loss)	\$ 3.6	\$ 1.1	\$ 2.5	\$ 5.3	\$ 1.5	\$ 3.8	\$ (3.7)	\$ (1.8)	\$ (1.9)

The following table summarizes changes in accumulated other comprehensive loss by component for the years ended December 31, 2021, 2020 and 2019:

	Pension and Other Postretirement Benefits Plan Cost		Translation Adjustments	Total
Balance at December 31, 2018		\$	(16.7)	\$ (82.7)
Other comprehensive income before reclassifications Amounts reclassified from accumulated other comprehensive	1.3		3.0	4.3
loss	(6.2)		<u> </u>	 (6.2)
Net change in accumulated other comprehensive loss	(4.9)		3.0	(1.9)
Balance at December 31, 2019	\$ (70.9)	\$	(13.7)	\$ (84.6)
Other comprehensive income before reclassifications Amounts reclassified from accumulated other comprehensive	_		0.5	0.5
loss	3.3	_		3.3
Net change in accumulated other comprehensive loss	3.3		0.5	3.8
Balance at December 31, 2020	\$ (67.6)	\$	(13.2)	\$ (80.8)
Other comprehensive loss before reclassifications Amounts reclassified from accumulated other comprehensive	_		(0.3)	(0.3)
loss	3.2		(0.4)	2.8
Net change in accumulated other comprehensive loss	3.2		(0.7)	2.5
Balance at December 31, 2021	\$ (64.4)	\$	(13.9)	\$ (78.3)

Reclassifications from accumulated other comprehensive loss for the years ended December 31, 2021, 2020 and 2019 were as follows:

	Year Ended December 31,					
		2021		2020		2019
Amortization of pension and other postretirement benefits plans cost:						
Net actuarial loss (a)		3.8	\$	3.1	\$	1.8
Reclassification of translation adjustment (b)		(0.5)				
Reclassifications before tax		3.3		3.1		1.8
Income tax expense		1.1		0.9		0.5
Reclassifications, net of tax	\$	2.2	\$	2.2	\$	1.3

⁽a) These accumulated other comprehensive loss components are included in the calculation of net periodic pension and other postretirement benefits plan income recognized in investment and other income, net, in the audited Consolidated Statements of Operations (see Note 7, Retirement Plans).

⁽b) Translation adjustment reclassification resulting from the liquidation of a foreign subsidiary is included in investment and other income, net in the audited Consolidated Statements of Operations.

Note 15. Segment Information

The Company operates its business through four operating and reportable segments: Capital Markets – Software Solutions, Capital Markets – Compliance and Communications Management, Investment Companies – Software Solutions and Investment Companies – Compliance and Communications Management. *Corporate* is not an operating segment and consists primarily of unallocated SG&A activities and associated expenses including, in part, executive, legal, finance and certain facility costs. In addition, certain costs and earnings of employee benefit plans, such as pension and other postretirement benefit plan expense (income) as well as share-based compensation, are included in Corporate and not allocated to the operation segments.

Capital Markets

The Company provides software solutions, tech-enabled services and print and distribution solutions to public and private companies for deal solutions and compliance to companies that are, or are preparing to become, subject to the filing and reporting requirements of the Securities Act and the Exchange Act. Capital markets clients leverage the Company's software offerings, proprietary technology, deep industry expertise and experience to successfully navigate the SEC's specified file formats when submitting compliance documents through the EDGAR system for their transactional and ongoing compliance needs. The Company assists its capital markets clients throughout the course of public and private business transactions, mergers and acquisitions, initial public offerings ("IPOs"), debt offerings and other similar transactions. In addition, the Company provides clients with compliance solutions to prepare their ongoing required Exchange Act filings that are compatible with the SEC's EDGAR system, most notably Form 10-K, Form 10-Q, Form 8-K and proxy filings. The Company's operating segments associated with its capital markets services and product offerings are as follows:

Capital Markets – Software Solutions — The Company provides software solutions to public and private companies to help manage public and private transaction processes; extract data and analyze contracts; collaborate; and tag, validate and file SEC documents.

Capital Markets – Compliance & Communications Management — The Company provides tech-enabled services and print and distribution solutions to public and private companies for deal solutions and SEC compliance requirements.

Investment Companies

The Company provides software solutions, tech-enabled services and print, distribution and fulfillment solutions to its investment companies clients that are subject to the filing and reporting requirements of the Investment Company Act, primarily mutual fund companies, alternative investment companies, insurance companies and third-party fund administrators. The Company's suite of solutions enables its investment companies clients to comply with applicable ongoing SEC regulations, as well as to create, manage and deliver accurate and timely financial communications to investors and regulators. Investment companies clients leverage the Company's proprietary technology, deep industry expertise and experience to successfully navigate the SEC's specified file formats when submitting compliance documents through the EDGAR system. The Company's operating segments associated with its investment companies services and products offerings are as follows:

Investment Companies – Software Solutions — The Company provides software solutions that enable clients to store and manage compliance and regulatory information in a self-service, central repository for documents to be easily accessed, assembled, edited, translated, rendered and submitted to regulators.

Investment Companies – Compliance & Communications Management — The Company provides its investment companies clients tech-enabled services to prepare and file registration forms, as well as XBRL-formatted filings pursuant to the Investment Company Act, through the SEC's EDGAR system. In addition, the Company provides print and distribution solutions for it clients to communicate with their investors.

Information by Segment

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

	Total Net Sales	Income (Loss) from Operations	Assets(a)	Depreciation and Amortization	Capital Expenditures
Year Ended December 31, 2021					
Capital Markets - Software Solutions	\$ 181.0	\$ 30.4	\$ 186.6	\$ 16.7	\$ 18.8
Capital Markets - Compliance and Communications Management	561.5	242.6	418.3	5.9	3.0
Solutions	89.0	8.9	91.2	12.6	13.0
Communications Management	161.8	15.0	49.3	4.7	2.9
Total operating segments	993.3	296.9	745.4	39.9	37.7
Corporate		(77.6)	137.9	0.4	4.6
Total	\$ 993.3	\$ 219.3	\$ 883.3	\$ 40.3	\$ 42.3
	Total Net Sales	Income (Loss) from Operations	Assets(a)	Depreciation and Amortization	Capital Expenditures
Year Ended December 31, 2020					
Capital Markets - Software Solutions Capital Markets - Compliance and	\$ 133.2	\$ 8.5	\$ 167.7	\$ 13.1	\$ 14.8
Communications Management	424.0	120.6	389.6	14.4	
Solutions	67.0	(1.7)	91.8	12.0	9.5
Communications Management	270.3	(43.1)	67.7	10.0	2.1
Total operating segments	894.5	84.3	716.8	49.5	29.8
Corporate		(80.7)	148.8	1.4	1.3
Total	\$ 894.5	\$ 3.6	\$ 865.6	\$ 50.9	\$ 31.1
	Total Net Sales	Income (Loss) from Operations	Assets(a)	Depreciation and Amortization	Capital Expenditures
Year Ended December 31, 2019					
Capital Markets - Software Solutions Capital Markets - Compliance and					
Communications Management	389.7	86.3	408.7	15.3	6.4
Solutions	62.6	(7.8)		12.7	15.4
Communications Management	295.7	29.4	121.7	8.9	6.9
Total operating segments	874.7	117.5	795.6	49.5	43.9
Corporate		(39.0)	91.3	0.1	0.9
Total	\$ 874.7	\$ 78.5	\$ 886.9	\$ 49.6	\$ 44.8

⁽a) Certain assets are recorded within a segment based on predominant usage, however, as they benefit more than one segment, the related operating expenses are allocated between segments.

Corporate assets primarily consisted of the following:

	December 31, 2021	December 31, 2020
Cash and cash equivalents	\$ 54.5	\$ 73.6
Prepaid expenses and other current assets	13.0	6.1
Operating lease right-of-use assets	4.4	8.3
Deferred income taxes, net of valuation allowance		34.0
Other noncurrent assets	20.5	23.0

Note 16. Geographic Area Information

The Company's net sales and long-lived assets by geographic region for the years ended December 31, 2021, 2020 and 2019 were as follows:

		U.S.		Asia	_1	Europe	_(Canada	_0	ther	Consolidated		
Year Ended December 31, 2021 Net sales	¢	856.5	\$	55.5	\$	42.0	\$	38.0	\$	1.3	¢	993.3	
Long-lived assets (a)	Ф	130.6	Ф	8.9	Ф	13.3	Þ	0.4	Ф	1.5 —	Ф	153.2	
Year Ended December 31, 2020 Net sales Long-lived assets (a)	\$	778.9 127.5	\$	51.1 8.0	\$	34.3 8.7	\$	28.6 0.5	\$	1.6	\$	894.5 144.7	
Year Ended December 31, 2019 Net sales Long-lived assets (a)	\$	761.4 178.3	\$	46.8 11.0	\$	34.5 4.2	\$	29.4 1.0	\$	2.6	\$	874.7 194.5	

⁽a) Includes property, plant and equipment, net; software, net; operating lease right-of-use assets and other noncurrent assets.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Donnelley Financial Solutions, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Donnelley Financial Solutions, Inc. and subsidiaries (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive income (loss), equity, and cash flows, for each of the three years in the period ended December 31, 2021, 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, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control — Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 22, 2022, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

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

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

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue - Unbilled Receivables and Contract Asset Balances — Refer to Note 2 to the financial statements

Critical Audit Matter Description

The timing of revenue recognition may differ from the timing of invoicing to customers and these timing differences result in unbilled receivables or contract assets. Contract assets represent revenue recognized for performance obligations completed before an unconditional right to payment exists and therefore invoicing has not yet occurred. The Company generally estimates contract assets based on historical selling price adjusted for its current experience and expected resolutions of the variable consideration of the completed performance obligation. When the Company's contracts contain variable consideration, the variable consideration is recognized only to the extent that it is probable that a significant revenue reversal will not occur in a future period.

Unbilled receivables are recorded when there is an unconditional right to payment and invoicing has not yet occurred. The Company estimates the value of unbilled receivables based on a combination of historical customer selling price by service or product and management's assessment of realizable selling price. Unbilled revenues can vary significantly from period to period as a result of seasonality, volume and market conditions. The Company's unbilled receivables balance and contract asset balance were \$46.7 million and \$24.9 million, respectively, as of December 31, 2021.

We identified the valuation of unbilled receivables and contract assets as a critical audit matter because of the high volume of transactions, the manual nature of the Company's process and the judgments necessary for management to estimate the transaction price, standalone selling price, and variable consideration. This required extensive audit effort due to the volume and complexity of these arrangements and required a high degree of auditor judgment when performing audit procedures related to management's estimates for transactions which have not been invoiced.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to management's estimate of the valuation of unbilled receivables and contract assets included the following, among others:

- We tested the effectiveness of controls over management's estimate of the valuation of unbilled receivables and contract assets.
- We evaluated management's estimation process by performing the following:
 - For revenue billed in January 2022, we compared the billed amount against the amount which was estimated as of December 31, 2021.
 - Investigated trends to assist in evaluating management's estimation process for unbilled receivables and contract assets (and the related unbilled revenue).
- We selected a sample of unbilled arrangements for both unbilled receivables and contract assets, and performed the following:
 - Compared the transaction price to the consideration expected to be received based on current rights and obligations under the arrangements.
 - Tested the methodology and mathematical accuracy of management's calculation of the estimated revenue, including the constraint of variable consideration.
 - O Tested the allocation of the transaction price to each distinct performance obligation for the contract asset selections by comparing the relative standalone selling price to selling prices of similar goods or services previously provided to the customer or other customers.

/s/ DELOITTE & TOUCHE LLP

Chicago, Illinois

February 22, 2022

We have served as the Company's auditor since 2015.

UNAUDITED INTERIM FINANCIAL INFORMATION

(In millions, except per share data) For the Year Ended December 31, 2021

	First Quarter		Second Quarter	 hird ıarter	_	ourth uarter	Fu	ll Year
Net sales	\$ 245.	3 \$	267.5	\$ 247.7	\$	232.8	\$	993.3
Income from operations	50.	9	62.0	65.0		41.4		219.3
Net earnings	35.	2	42.9	42.2		25.6		145.9
Net earnings per share:								
Basic	1.0	5	1.27	1.25		0.77		4.36
Diluted	1.0	2	1.24	1.22		0.73		4.14
Weighted-average number of common shares								
outstanding:								
Basic	33.	5	33.7	33.7		33.2		33.5
Diluted	34.	5	34.5	34.7		35.1		35.2

Includes the following significant items:

	Pre-tax							After-tax											
	First Quarter						ourth Full parter Year			First Quarter		Second Quarter		Third Quarter		Fourth Quarter		Full Year	
Share-based compensation expense Restructuring, impairment and other	\$ 3.1	\$ 5	.9 \$	5.2	\$	5.3	\$	19.5	\$	(0.7)	\$	3.3	\$	3.6	\$	3.7	\$	9.9	
charges, net	0.8	2	.8	3.3		6.7		13.6		0.6		2.0		2.4		4.9		9.9	
extinguishments LSC multiemployer	_	-	_	_		7.4		7.4		_		_		_		5.4		5.4	
pension plans obligation Non-income tax, net	7.3 0.1		.2 .0)	0.2 (0.5)		(2.3) (0.2)		5.4 (1.6)		5.2 0.1		0.3 (0.8)		0.1 (0.3)		(1.7) (0.2)		3.9 (1.2)	
recoveries, net	(0.9) (0	.1)			_		(1.0)		(0.7)		_		_		_		(0.7)	
lived assets, net Loss (gain) on equity	_	-	_	(0.7)		_		(0.7)		_		_		(0.5)		_		(0.5)	
investment	0.2	-	_	(0.6)		_		(0.4)		0.1		_		(0.4)		_		(0.3)	

INDEX TO EXHIBITS

- 3.1 Amended and Restated Certificate of Incorporation of Donnelley Financial Solutions, Inc. (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated September 30, 2016, filed on October 3, 2016)
- 3.2 Amended and Restated By-laws of Donnelley Financial Solutions, Inc. (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K dated September 30, 2016, filed on October 3, 2016)
- 4.1 Indenture, dated as of September 30, 2016, among Donnelley Financial Solutions, Inc., the subsidiary guarantors party thereto and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K dated September 30, 2016, filed on October 3, 2016)
- 4.2 Description of the Donnelley Financial Solutions, Inc. Securities Registered under Section 12 of the Exchange Act (incorporated by reference to Exhibit 4.2 to the Company's Annual Report on Form 10-K dated December 31, 2019, filed on February 26, 2020)
- Amended and Restated Credit Agreement dated as of May 27, 2021, by and among Donnelley Financial Solutions, Inc., the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative and collateral agent (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated May 27, 2021, filed on June 1, 2021)
- 2016 Donnelley Financial Solutions, Inc. Performance Incentive Plan (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K dated September 30, 2016, filed on October 3, 2016)*
- Amended and Restated Donnelley Financial Solutions, Inc. 2016 Performance Incentive Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated May 18, 2017, filed on May 23, 2017)*
- Amendment to the Donnelley Financial Solutions, Inc. Amended and Restated 2016 Performance Incentive Plan dated May 20, 2019 (incorporated herein by reference to Appendix A of the Company's definitive proxy statement on Schedule 14A (file No. 001-37728) filed April 22, 2019)*
- Amendment to Amended and Restated Donnelley Financial Solutions, Inc. 2016 Performance Incentive Plan dated June 27, 2019 (incorporated by reference to Exhibit 10.7 to the Company's Current Report on Form 10-Q dated June 30, 2019, filed on August 1, 2019)*
- 10.6 Donnelley Financial Solutions, Inc. Non-Employee Director Compensation Plan (filed herewith)*
- 10.7 Policy on Retirement Benefits, Phantom Stock Grants and Stock Options for Directors (incorporated by reference to Exhibit 10.1 to R.R Donnelley & Sons Company Quarterly Report on Form 10-Q for the quarter ended June 30, 2008, filed on August 6, 2008)*
- Donnelley Financial Solutions, Inc. Nonqualified Deferred Compensation Plan, dated as of September 22, 2016 (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K dated September 30, 2016, filed on October 3, 2016)*
- 10.9 Donnelley Financial Unfunded Supplemental Pension Plan effective October 1, 2016 (incorporated by reference to Exhibit 10.6 to the Company's Annual Report on Form 10-K dated December 31, 2016, filed on February 28, 2017)*
- 10.10 Donnelley Financial Solutions, Inc. Amended and Restated Executive Severance Plan (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated July 15, 2020, filed on July 20, 2020)*
- 10.11 Letter Agreement to Employment Agreement, dated as of April 20, 2018, between the Company and Daniel N. Leib (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated April 10, 2018, filed on April 16, 2018)*
- Amended and Restated Employment Agreement, dated as of July 13, 2017, between the Company and Daniel N. Leib (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated July 13, 2017, filed on July 14, 2017)*

- Amendment dated as of July 15, 2020 to Amended and Restated Employment Agreement dated as of July 13, 2017 between the Company and Daniel N. Leib (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K dated July 15, 2020, filed on July 20, 2020)*
- 10.14 Assignment of Employment Agreement and Acceptance of Assignment, dated as of September 29, 2016, between Donnelley Financial Solutions, Inc., R. R. Donnelley & Sons Company and David A. Gardella (incorporated by reference to Exhibit 10.7 to the Company's Current Report on Form 8-K dated September 30, 2016, filed on October 3, 2016)*
- Waiver of Severance Benefits, dated as of June 1, 2017, by and between David A. Gardella and the Company (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K dated May 30, 2017, filed on June 5, 2017)*
- 10.16 Assignment of Severance Agreement and Acceptance of Assignment, dated as of September 29, 2016, between Donnelley Financial Solutions, Inc., R. R. Donnelley & Sons Company and Jennifer B. Reiners (incorporated by reference to Exhibit 10.8 to the Company's Current Report on Form 8-K dated September 30, 2016, filed on October 3, 2016)*
- Waiver of Severance Benefits, dated as of June 1, 2017, by and between Jennifer B. Reiners and the Company (incorporated by reference to Exhibit 10.4 to the Company's Current Report on Form 8-K dated May 30, 2017, filed on June 5, 2017)*
- Donnelley Financial Solutions Annual Incentive Plan (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K dated March 2, 2018, filed on March 13, 2018)*
- Form of Performance Share Unit Award Agreement (incorporated by reference to Exhibit 10.22 to the Company's Annual Report on Form 10-K dated December 31, 2017, filed on February 28, 2018)*
- 10.20 Form of Performance Share Unit Award Agreement (for 2019) (incorporated by reference to Exhibit 10.25 to the Company's Quarterly Report on Form 10-Q dated March 31, 2018, filed on May 2, 2019)*
- Employment Agreement, dated as of March 21, 2016, between R. R. Donnelley & Sons Company and Craig Clay (filed herewith)*
- Waiver of Severance Benefits, dated as of June 16, 2017, by and between Craig Clay and Donnelley Financial Solutions, Inc. (filed herewith)*
- 10.23 Employment Agreement, dated as of June 9, 2010, between R. R. Donnelley & Sons Company and Eric Johnson (filed herewith)*
- Waiver of Severance Benefits, dated as of June 19, 2017, by and between Eric Johnson and Donnelley Financial Solutions, Inc. (filed herewith)*
- Form of Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.18 to the Company's Quarterly Report on Form 10-Q dated March 31, 2017, filed on May 4, 2017)*
- Form of Restricted Stock Unit Award (2021) (incorporated by reference to Exhibit 10.27 to the Company's Annual Report on Form 10-K dated December 31, 2020, filed on February 25, 2021)*
- Form of Stock Option Award Agreement (incorporated by reference to Exhibit 10.19 to the Company's Quarterly Report on Form 10-Q dated March 31, 2017, filed on May 4, 2017)*
- 10.28 Form of Performance Cash Award Agreement (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated March 2, 2020, filed on March 6, 2020)*
- 10.29 Form of Performance Restricted Stock Unit Award Agreement (2021) (incorporated by reference to Exhibit 10.31 to the Company's Annual Report on Form 10-K dated December 31, 2020, filed on February 25, 2021)*
- 10.30 Form of Director Restricted Stock Unit Award (deferral election) (filed herewith)*
- Form of Director Restricted Stock Unit Award (incorporated by reference to Exhibit 10.26 to the Company's Annual Report on Form 10-K dated December 31, 2016, filed on February 28, 2017)*
- Form of Restricted Stock Unit Award Agreement for directors converted from R.R. Donnelley & Sons Company to the Company pursuant to the Separation Agreement (incorporated by reference to Exhibit 10.21 to the R.R. Donnelley & Sons Company Annual Report on Form 10-K for the fiscal year ended December 31, 2004, filed on March 14, 2005)*

- Form of Restricted Stock Unit Award Agreement for directors converted from R.R. Donnelley & Sons Company to the Company pursuant to the Separation Agreement (incorporated by reference to Exhibit 10.25 to the R.R. Donnelley & Sons Company Annual Report on Form 10-K for the fiscal year ended December 31, 2007, filed on February 27, 2008)*
- Form of Restricted Stock Unit Award Agreement for directors converted from R.R. Donnelley & Sons Company to the Company pursuant to the Separation Agreement (incorporated by reference to Exhibit 10.23 to the R.R. Donnelley & Sons Company Annual Report on Form 10-K for the fiscal year ended December 31, 2008, filed on February 25, 2009)*
- Form of Amendment to Director Restricted Stock Unit Awards converted from R.R. Donnelley & Sons Company to the Company pursuant to the Separation Agreement (incorporated by reference to Exhibit 10.22 to the R.R. Donnelley & Sons Company Annual Report on Form 10-K for the fiscal year ended December 31, 2008, filed on February 25, 2009)*
- Form of Amendment to Director Restricted Stock Unit Awards dated May 21, 2009 converted from R.R. Donnelley & Sons Company to the Company pursuant to the Separation Agreement (incorporated by reference to Exhibit 10.23 to the R.R. Donnelley & Sons Company Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, filed on August 5, 2009)*
- 10.37 Form of Director Indemnification Agreement (incorporated by reference to Exhibit 10.10 to the Company's Quarterly Report on Form 10-Q dated September 30, 2016, filed on November 9, 2016)
- Agreement, dated February 17, 2019, by and among the Company, Simcoe Capital Management, LLC and, solely for purposes of Section 2(g) thereof, Jeffrey Jacobowitz (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated February 17, 2019, filed on February 19, 2019)
- Amended and Restated Agreement of Sale and Purchase, dated as of September 6, 2019, between Donnelley Financial, LLC and SECA-NJ, LLC (incorporated by reference to Exhibit 10.39 to the Company's Quarterly Report on Form 10-Q dated September 30, 2019, filed on November 5, 2019)
- First Amendment to Amended and Restated Agreement of Sale and Purchase, dated as of September 25, 2019, between Donnelley Financial, LLC and SECA-NJ, LLC (incorporated by reference to Exhibit 10.40 to the Company's Quarterly Report on Form 10-Q dated September 30, 2019, filed on November 5, 2019)
- 10.41 Second Amendment to Amended and Restated Agreement of Sale and Purchase, dated as of September 26, 2019, between Donnelley Financial, LLC and SECA-NJ, LLC (incorporated by reference to Exhibit 10.41 to the Company's Quarterly Report on Form 10-Q dated September 30, 2019, filed on November 5, 2019)
- Real Estate Sale Agreement, dated as of August 20, 2021, between Donnelley Financial, LLC and HSG Acquisitions, LL (incorporate by reference to Exhibit 10.41 to the Company's Quarterly Report on Form 10-Q dated September 30, 2021, filed on November 3, 2021)
- 14.1 Code of Ethics for the Chief Executive Officer and Senior Financial Officers (incorporated by reference to Exhibit 14.1 to the Company's Annual Report on Form 10-K dated December 31, 2016, filed on February 28, 2017)
- 21.1 Subsidiaries of the Registrant (filed herewith)
- 23.1 Consent of Deloitte & Touche LLP (filed herewith)
- 24.1 Powers of Attorney (filed herewith)
- Certification by Daniel N. Leib, President and Chief Executive Officer, required by Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934 (filed herewith)
- Certification by David A. Gardella, Executive Vice President and Chief Financial Officer, required by Rule 13a-14(a) and Rule 15d-14(a) of the Securities Exchange Act of 1934 (filed herewith)
- 32.1 Certification by Daniel N. Leib, President and Chief Executive Officer, required by Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and Section 1350 of Chapter 63 of Title 18 of the United States Code (filed herewith)

32.2	Certification by David A. Gardella, Executive Vice President and Chief Financial Officer, required by Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and Section 1350 of Chapter 63 of Title 18 of the United States Code (filed herewith)
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	The cover page for the Company's Annual Report on Form 10-K for the year ended December 31, 2021, has been formatted in Inline XBRL and contained in Exhibit 101

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

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on the 22nd day of February 2022.

DONNELLEY FINANCIAL SOLUTIONS, INC.

David A. Gardella Executive Vice President and Chief Financial Officer (Principal Financial Officer)

By: _____/S/ DAVID A. GARDELLA

Signature and Title	Signature and Title
/S/ DANIEL N. LEIB	/S/ CHARLES D. DRUCKER *
Daniel N. Leib President and Chief Executive Officer, Director (Principal Executive Officer)	Charles D. Drucker Director
/S/ DAVID A. GARDELLA	/S/ Juliet S. Ellis *
David A. Gardella ecutive Vice President and Chief Financial Officer (Principal Financial Officer)	Juliet S. Ellis Director
/S/ KAMI S. TURNER	/S/ Gary G. Greenfield *
Kami S. Turner enior Vice President and Chief Accounting Officer (Principal Accounting Officer)	Gary G. Greenfield Director
/S/ RICHARD L. CRANDALL *	/S/ Jeffrey Jacobowitz*
Richard L. Crandall Chairman of the Board, Director	Jeffrey Jacobowitz Director
/S/ Luis A. Aguilar *	/S/ Lois M. Martin *
Luis A. Aguilar Director	Lois M. Martin Director
/S/ Jennifer B. Reiners	
Jennifer B. Reiners As Attorney-in-Fact	

* By Jennifer B. Reiners as Attorney-in-Fact pursuant to Powers of Attorney executed by the directors listed above,

which Powers of Attorney have been filed with the Securities and Exchange Commission.

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

I, Daniel N. Leib, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of Donnelley Financial Solutions, 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 the registrant's board of directors (or persons performing the equivalent functions):
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 22, 2022

/s/ DANIEL N. LEIB

Daniel N. Leib

President and Chief Executive Officer

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

I, David A. Gardella, certify that:

- 1. I have reviewed this Annual Report on Form 10-K of Donnelley Financial Solutions, 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 the registrant's board of directors (or persons performing the equivalent functions):
 - (a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 22, 2022

/s/ DAVID A. GARDELLA

David A. Gardella

Executive Vice President and Chief Financial Officer

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

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

In connection with the Annual Report of Donnelley Financial Solutions, Inc. (the "Company") on Form 10-K for the period ending December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Daniel N. Leib, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 22, 2022

/S/ DANIEL N. LEIB

Daniel N. Leib

President and Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER

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

In connection with the Annual Report of Donnelley Financial Solutions, Inc. (the "Company") on Form 10-K for the period ending December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, David A. Gardella, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

February 22, 2022

/s/ DAVID A. GARDELLA

David A. Gardella

Executive Vice President and Chief Financial Officer

CORPORATE HEADQUARTERS

Donnelley Financial Solutions 35 West Wacker Drive Chicago, Illinois 60601 800-823-5304 www.dfinsolutions.com

ANNUAL MEETING OF STOCKHOLDERS

Information about the Donnelley Financial Solutions Annual Meeting of Stockholders is in our proxy statement, which is available online at www.proxydocs.com/DFIN.

STOCK EXCHANGE LISTING

New York Stock Exchange Symbol: DFIN

INVESTOR RELATIONS

Stockholders, securities analysts, portfolio managers and representatives of financial institutions seeking information about the company should contact Investor Relations at the company's address or by filling out the information request under the "Investors" section of www.dfinsolutions.com.

FORMS 10-K & 10-Q

A copy of our Annual Report on Form 10-K for fiscal 2021 is included with this document and available at our website.

STOCK TRANSFER AGENT AND REGISTRAR

Shareholder correspondence should be mailed to:

Computershare Investor Services 462 South 4th Street, Suite 1600 Louisville, KY, 40202

Overnight correspondence should be sent to:

Computershare Investor Services PO BOX 505000 Louisville, KY, 40233-5000

Shareholder website:

www.computershare.com/investor

Shareholder online inquiries:

https://www.computershare.com/ContactUs

Telephone: Inside the United States: 800.446.2617 Outside the United States: 781.575.2879

TDD/TTY for hearing impaired:

800.490.1493. Operators are available 8:00 a.m. to 5:00 p.m., Central Time, Monday-Friday. An interactive automated system is available around the clock every day.

INFORMATION CONTACTS

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

- · information regarding stock transfer requirements
- · address changes
- duplicate 1099 forms and W-9 tax certification forms
- · transcripts of shareholder accounts

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

SAFE HARBOR STATEMENT

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

The right solutions in moments that matter



