

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

FORM 10-K

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

For the fiscal year ended December 31, 2022

or

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

For the transition period from ____ to ____

Commission file number 001-34480

VERISK ANALYTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

545 Washington Boulevard
Jersey City
NJ
(Address of principal executive offices)

26-2994223
(I.R.S. Employer
Identification No.)

07310-1686
(Zip Code)

(201) 469-3000

(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Trading Symbol</u>	<u>Name of each exchange on which registered</u>
Common Stock \$.001 par value	VRSK	NASDAQ Global Select Market

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

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

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

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

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

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

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment on the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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

As of June 30, 2022, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was \$26,458,185,993 based on the closing price reported on the NASDAQ Global Select Market on such date.

As of February 24, 2023, there were 154,695,842 shares outstanding of the registrant's Common Stock, par value \$.001.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information required by Part III of this annual report on Form 10-K is incorporated by reference to our definitive Proxy Statement for our 2022 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission not later than 120 days after December 31, 2022.

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Unless the context otherwise indicates or requires, as used in this annual report on Form 10-K, references to “we,” “us,” “our” or the “Company” refer to Verisk Analytics, Inc. and its subsidiaries.

In this annual report on Form 10-K, all dollar amounts are expressed in millions, unless indicated otherwise.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Verisk Analytics, Inc. (“Verisk”) has made statements under the captions “Business,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and in other sections of this annual report on Form 10-K that are forward-looking statements. In some cases, you can identify these statements by forward-looking words such as “may,” “might,” “will,” “should,” “expects,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential,” or “continue,” the negative of these terms and other comparable terminology. These forward-looking statements, which are subject to risks, uncertainties and assumptions about us, may include projections of our future financial performance, our anticipated growth strategies, and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. There are important factors that could cause our actual results, level of activity, performance, or achievements to differ materially from the results, level of activity, performance, or achievements expressed or implied by the forward-looking statements, including those factors discussed under the caption entitled “Risk Factors.” You should specifically consider the numerous risks outlined under “Risk Factors.”

Although we believe the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, level of activity, performance, or achievements. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of any of these forward-looking statements. We are under no duty to update any of these forward-looking statements after the date of this annual report on Form 10-K to conform our prior statements to actual results or revised expectations.

PART I

Item 1. Business

Our Company

Verisk is a leading data analytics provider serving customers in the insurance and energy market until February 1, 2023 when we completed the sale of our energy business. We also divested our specialized markets and financial services businesses in March 2022 and April 2022, respectively.

Using advanced technologies to collect and analyze billions of records, we draw on unique data assets and deep domain expertise to provide innovations that may be integrated into customer workflows. We offer predictive analytics and decision support solutions to customers in rating, underwriting, claims, catastrophe, weather risk, and many other fields. In the United States ("U.S.") and around the world, we help customers protect people, property, and financial assets.

Our customers use our solutions to make better decisions about risk and opportunities with greater efficiency and discipline. We refer to these products and services as solutions due to the integration among our services and the flexibility that enables our customers to purchase components or a comprehensive package. These solutions take various forms, including proprietary data assets, expert industry insight, statistical models, tailored analytic object, and robust software platforms all designed to allow our customers to make more informed risk decisions. We believe our solutions for analyzing risk have a positive impact on our customers' revenues and help them better manage their costs. In 2022, our customers included all of the top 100 property and casualty ("P&C") insurance providers in the U.S. for the lines of P&C services we offer. We believe that our commitment to our customers and the embedded nature of our solutions serve to strengthen and extend our relationships.

We believe that Verisk is uniquely positioned because of the set of Distinctives or competitive advantages we cultivate and continue to expand, as indicated below. Our existing businesses, in addition to new product innovations, integrate the following four singular qualities into the foundation of our strategy.

Our Distinctives

- Unique Data Assets - Data is at the core of what we do. We use our proprietary data assets to develop predictive analytics and transformative models for our customers.
- Deep Domain Expertise - We have specialized and in-depth knowledge in insurance and risk management. We understand that different verticals require different approaches, and our deep domain expertise adds value to our analytics in the markets we serve.
- Steady Stream of First-to-Market Innovations - We move quickly to be the first to market with new solutions. Typically, the marketplace assumes that those who are first to market are superior to the competition and better positioned to succeed.
- Deep Integration into Customer Workflows - By embedding our solutions into customer workflows, we help our customers better manage risk and optimize their bottom line. We achieve this goal by remaining closely connected to our customers at all times and serving their distinct needs.

We offer our solutions and services primarily through annual subscriptions or long-term agreements, which are typically prepaid and represented over 81% of our revenues in 2022.

Our History

We trace our history to 1971, when Insurance Services Office, Inc. ("ISO") started operations as a not-for-profit advisory and rating organization providing services to the U.S. P&C insurance industry. ISO was formed as an association of insurance companies to gather statistical data and other information from insurers and report to regulators, as required by law. ISO's original functions also included developing programs to help insurers define and manage insurance products and providing information to help insurers determine their own independent premium rates. Insurers used and continue to use our offerings primarily in their product development, underwriting, and rating functions.

On May 23, 2008, in contemplation of our initial public offering ("IPO"), ISO formed Verisk Analytics, Inc. ("Verisk"), a Delaware corporation, to be the holding company for our business. Verisk was initially formed as a wholly owned subsidiary of ISO. On October 6, 2009, in connection with our IPO, we effected a reorganization whereby ISO became a wholly owned subsidiary of Verisk. Verisk common stock began trading on the NASDAQ Global Select Market on October 7, 2009, under the ticker symbol "VRSK."

Segments

Our operating segments have historically been Insurance, Energy and Specialized Markets, and Financial Services. On March 11, 2022 and April 8, 2022, we sold our environmental health and safety business, which represented the “specialized markets” in our Energy and Specialized Markets segment, and our Financial Services segment, respectively. We assessed the sale of our environmental health and safety business and Financial Services segment per the guidance in ASC 205-20, *Discontinued Operations*, and determined that the transactions did not qualify as a discontinued operation because they did not, quantitatively or qualitatively, represent a strategic shift that has or will have a major effect on our operations and financial results. On October 28, 2022, we also entered into an equity purchase agreement to sell Wood Mackenzie, Inc. and Verisk New UK Holdco LP (together with their respective subsidiaries, our “Energy business”). The transaction closed on February 1, 2023. The Energy business qualified as held for sale in the fourth quarter of 2022 and was classified as a discontinued operation per the guidance in ASC 205-20, *Discontinued Operations*, as we determined that this transaction represents a strategic shift that has or will have a major effect on our operations and financial results. Accordingly, all results of the Energy business have been removed from continuing operations and presented as discontinued operations in our consolidated statements of operations and assets and liabilities held for sale for all periods presented. Results of our Energy business are reported as a discontinued operation for the year ended December 31, 2022 and for all prior periods presented. See [Note 11](#). Dispositions and Discontinued Operation for further discussion.

Insurance Segment

Our Insurance segment primarily serves our P&C insurance customers and focuses on the prediction of loss, the selection and pricing of risk, and compliance with their reporting requirements in each U.S. state in which they operate. We also develop and utilize machine learned and artificially intelligent models to forecast scenarios and produce both standard and customized analytics that help our customers better manage their businesses, including detecting fraud before and after a loss event and quantifying losses. Our customers include most of the P&C insurance providers in the U.S. In recent years, we have expanded our offerings to also serve certain non-U.S. markets. Additionally, we have expanded into the markets of life insurance and annuities via our December 2019 acquisition of FAST and marketing via our acquisitions, which are known collectively as Marketing Solutions, of Jornaya in 2020, Contact State in 2021, and Infutor in 2022. FAST enables the transformation of the industry across the policy lifecycle through no-code technology, data analytics, and modeling, and Marketing Solutions focuses on differentiated data that helps insurers drive top-line growth and marketing budget savings through more personalized, timely interactions with prospects and customers.

Underwriting & rating

We are the recognized leader in the U.S. for industry-standard insurance programs that help P&C insurers define coverages and issue policies. We provide policy language, prospective loss costs, policy writing rules, and a variety of underwriting solutions for risk selection and segmentation, pricing, and workflow optimization across 30 lines of insurance. Our policy language, prospective loss cost information and policy writing rules can serve as integrated turnkey insurance programs for our customers. Insurance companies need to ensure that their policy language, rules, and rates comply with all applicable legal and regulatory requirements. They must also make sure their policies remain competitive by promptly changing coverages in response to changes in statutes, case law, or regulatory requirements. To meet our insurers' needs, we process approximately 2,300 regulatory filings and interface with state regulators in all 50 states plus the District of Columbia, Guam, Puerto Rico, and the Virgin Islands each year to ensure smooth implementation of our rules and forms. When insurers choose to develop their own alternative programs, our industry-standard insurance programs also help regulators ensure that such insurers' policies meet basic coverage requirements.

Standardized coverage language, which has been tested in litigation and tailored to reflect judicial interpretation, helps ensure consistent treatment of claimants. As a result, our industry-standard language also simplifies claim settlements and can reduce the occurrence of costly litigation because our language causes the meaning of coverage terminology to become established and known. Our policy language includes standard coverage language, endorsements, and policy writing support language that assist our customers in understanding the risks they assume and the coverages they offer. With these policy programs, insurers also benefit from economies of scale. We have more than 211 specialized lawyers and insurance experts reviewing changes in each state's insurance rules and regulations, including an average of approximately 8,200 legislative actions, 7,400 regulatory actions, and 2,000 court decisions per year, to make any required changes to our policy language and rating information.

To cover the wide variety of risks in the marketplace, we offer a broad range of policy programs. For example, in the homeowners line of insurance, we maintain policy language and rules for 6 basic coverages, 438 national endorsements, and 640 state-specific endorsements.

The P&C insurance industry is heavily regulated in the U.S.; P&C insurers are required to collect statistical data about their premiums and losses and to report that data to regulators in every state in which they operate. Our statistical agent services have enabled P&C insurers to meet those regulatory requirements for more than 50 years. We aggregate the data, and as a licensed or appointed “statistical agent” in all 50 states, Puerto Rico, and the District of Columbia, we report those statistics to insurance regulators. We are able to capture significant economies of scale given the level of penetration of this service within the U.S. P&C insurance industry.

To provide our customers and the regulators the information they require, we maintain one of the largest private databases in the world. Over the past five decades, we have developed core expertise in acquiring, processing, managing, protecting, and operating large and comprehensive databases that are the foundation of our insurance offerings. We use our proprietary technology to assemble, organize, and update vast amounts of detailed information submitted by our customers. We supplement this data with publicly available information.

In 2021 alone, P&C insurers sent us approximately 2.3 billion detailed individual records of insurance transactions, such as insurance premiums collected or losses incurred. We maintain a database of more than 32.4 billion statistical records, including approximately 8.7 billion commercial lines records and approximately 23.7 billion personal lines records. We collect unit transaction detail of each premium and loss record, which enhances the validity, reliability, and accuracy of our data sets and our actuarial analyses. Our proprietary quality process includes more than 2,900 separate checks to ensure that the data meets our high standards of quality.

We provide actuarial services to help our customers analyze and price their risks. Using our large database of premium and loss data, our actuaries are able to perform sophisticated analyses using our predictive models and analytic methods to help our P&C insurance customers with pricing, loss reserving, and marketing. We distribute a number of actuarial solutions and offer flexible services to meet our customers’ needs. In addition, our actuarial consultants provide customized services for our customers that include assisting them with the development of independent insurance programs, analysis of their own underwriting experience, development of classification systems and rating plans, and a wide variety of other business decisions. We also supply information to various customers in other markets, including reinsurance and government agencies.

We project customers' future losses and loss expenses using a broad set of data. Those projections tend to be more reliable than if our customers used their own data exclusively. We make a number of actuarial adjustments before the data is used to estimate future costs. Our customers can use our estimates of future costs in making independent decisions about the prices charged for their policies. For most P&C insurers in most lines of business, we believe that our estimates of future costs are an essential input to rating decisions. Our actuarial products and services are also used to create the analytics underlying our industry-standard insurance programs described above.

We gather information on individual properties and communities so that insurers can use our information to evaluate and price personal and commercial property insurance, as well as commercial liability insurance. Our property-specific rating and underwriting information allows our customers to understand, quantify, underwrite, mitigate, and avoid potential loss for residential and commercial properties. Our database contains data and analytics on approximately 15.7 million commercial properties in the U.S. We have a staff of approximately 500 field representatives strategically located around the U.S. who observe and report on conditions at commercial and residential properties, evaluate community fire-protection capabilities and assess the effectiveness of municipal building-code enforcement. Each year, our field staff visits more than 317,000 commercial properties to collect information on new buildings and verify building attributes.

We are a leading provider of innovative solutions for the personal underwriting markets, including homeowners and auto lines. Drawing on an array of resources from proprietary and third-party data to geospatial imagery, we build and maintain widely used industry-standard tools that assist insurers in underwriting and rating—that is, measuring and selecting risks and pricing coverage appropriately to help ensure fairness to the consumer and a reasonable return for the insurer. Our solutions apply advanced predictive analytics to our deep reservoir of data and information to gauge the degree and cost of risk quickly and precisely, and our workflow tools help insurers increase speed and cost-efficiency while delivering superior customer experiences. These premier solutions span a range of applications—from using precise home reconstruction costs to ensure policyholders have the right amount of coverage, to providing auto insurers with data to bind policies in minutes with once-and-done quoting.

Our solutions span a wide range of P&C insurance, encompassing personal and commercial lines of coverage that protect private residences, private and commercial vehicles, and businesses.

We also provide proprietary analytic measures of the ability of individual communities to mitigate losses from important perils. Nearly every property insurer in the U.S. uses our evaluations of community firefighting capabilities to help determine premiums for fire insurance throughout the country. We provide field-verified and validated data on the fire protection services for approximately 37,000 fire response jurisdictions. We also offer services to evaluate the effectiveness of community enforcement of building codes and the efforts of communities to mitigate damage from flooding. Further, we provide information on the insurance rating territories, premium taxes, crime risk, and hazards of windstorm, earthquake, wildfire, and other perils. To supplement our data on specific commercial properties and individual communities, we have assembled, from a variety of internal and third-party sources, information on hazards related to geographic locations representing every postal address in the U.S. Insurers use this information not only for policy quoting but also for analyzing risk concentration in geographical areas. We also make our data and analytics available to commercial real estate lenders to allow them to better understand risks associated with people they lend against.

We are a leader in and pioneered the field of probabilistic catastrophe modeling used by insurers, reinsurers, financial institutions, and government to manage their risk from extreme events. Our models, which form the basis of our solutions, enable companies to identify, quantify, and plan for the financial consequences of catastrophes. We have developed models for hurricanes, earthquakes, winter storms, tornadoes, hailstorms, and floods in more than 110 countries as well as pandemics worldwide. We have developed a probabilistic terrorism model capable of quantifying the risk in the U.S. from this evolving threat, which supports pricing and underwriting decisions down to the level of an individual policy, as well as models for estimating losses to crop insurance programs in the U.S., Canada, and China. Our newest models offer risk management solutions for the cyber and casualty lines of business.

We help businesses and governments better anticipate and monitor risks in Earth's natural environment. We prepare certain agencies and companies to anticipate, manage, react to, and profit from climate- and weather-related risk. We serve our customers by providing state-of-the-art research, development, and analysis delivered in reports, data streams, and software solutions. We are dedicated to the advancement of the atmospheric and remote sensing science disciplines and directly addressing problems regarding weather, climate, and air quality as well as oceanography and the planetary sciences. Through research conducted by our in-house scientific staff, and often in collaboration with world-renowned scientists at academic and other research institutions, we have developed analytical tools to help measure and observe environmental properties and translate those measurements into actionable information.

We have begun to expand our footprint of data and solutions to include both U.S. and international markets. Our international insurance markets grew through acquisitions, and today serves a large proportion of those insurers operating in both the United Kingdom ("U.K.") and Irish property and casualty markets. Additionally, our international market provides services to much of the Lloyd's and London market, whilst also serving customers in Canada, Continental Europe, Singapore, China, Australia, and New Zealand. The international enhanced commercial and residential property models and enriched data sets help insurers with triage, reconstruction value, risk selection, pricing, benchmarking, and portfolio management across multiple insured segments, with an emphasis on residential and commercial property. Insurers also use our solutions to finetune the accuracy of their rating models, to drive underwriting results through a set of analytical products that predict the relative risk and variation of major insurance perils including theft, flood, storm, fire, freeze, etc. Our international small and medium size commercial lines casualty solutions help customers digitally transform, enabling straight through processing and underwriting. In addition to property data and solutions, customers benefit from decision and benchmarking analytics using firmographic, technographic, and business intelligence, and proprietary management competency scores.

Claims

Our claims insurance solutions provide our customers analytics in fraud detection, compliance reporting, subrogation, liability assessment, litigation, and repair cost estimation, including emerging areas of interest within these categories.

We are a leading provider of fraud-detection tools for the P&C insurance industry. Our anti-fraud solutions improve our customers' profitability by predicting the likelihood that fraud may be occurring and detecting suspicious activity after it has occurred. When a claim is submitted, our system searches our all-claims database and returns information about other claims filed by the same individuals or businesses (either as claimants or insureds) that helps our customers determine if fraud may be occurring. The system searches for matches in identifying information fields, such as name, address, Social Security number, vehicle identification number, driver's license number, tax identification number, or other parties to the loss. Our system also includes advanced name and address searching to perform intelligent searches and improve the overall quality of the matches. Information from match reports speeds payment of meritorious claims while providing a defense against fraud and can lead to denial of a claim, negotiation of a reduced award, or further investigation by the insurer or law enforcement. We also have a suite of advanced fraud analytics solutions: a solution that uses predictive models to accurately score claims based on fraud indicators; an injury claims solution that uses predictive analytics to detect medical provider fraud, waste, and abuse; and a network analytics solution that helps detect patterns indicative of organized fraud. We also have a comprehensive case management system claims adjusters and investigation professionals use to manage claim investigations.

Our claims database is one of the key tools in the fight against insurance fraud. The benefits of a single all-claims database include improved efficiency in reporting data and searching for information, enhanced capabilities for detecting suspicious claims, and superior information for investigating fraudulent claims, suspicious individuals, and possible fraud rings. Our database also helps insurers fulfill their regulatory compliance reporting requirements at both the state and federal levels for delinquent child support liens and other required checks. The database contains information for more than 1.6 billion claim records and is the world's largest database of P&C claims information used for claims processing and investigations. Insurers and other participants submit more than 175,500 new claims a day on average across all U.S. P&C insurance industry categories.

We also offer solutions to help the P&C industry comply with the federal Medicare Secondary Payer ("MSP") Statute, which mandates claims data reporting, conditional payments liabilities repayment, and ongoing protection of the Medicare Trust Fund. Our solutions include highly accurate Medicare reporting customized to the way insurers, self-insured employers, and third-party administrators ("TPAs") do business. We also provide integrated conditional payment processing and a full range of Medicare Set-Aside ("MSA") services. We have services that automatically extract unstructured medical records and demand packages for easy, efficient review and analysis. In addition to full compliance support-including First Report of Injury ("FROI")/Subsequent Report of Injury ("SROI") and other Electronic Data Interchange ("EDI") reporting-claims professionals can also access robust analytic solutions for workers' compensation and liability claims and leverage litigation analytics for improved claim results.

We also provide data, analytics, and networking products for professionals involved in estimating all phases of building repair and reconstruction. We provide solutions for every phase of a building's life, including:

- quantifying the ultimate cost of repair or reconstruction of damaged or destroyed buildings,
- aiding in the settlement of insurance claims; and
- tracking the process of repair or reconstruction and facilitating communication among insurers, adjusters, contractors, and policyholders.

To help our customers estimate repair costs, we provide a solution that assists contractors and insurance adjusters in estimating repairs using a patented plan-sketching program. The program allows our customers to manually sketch floor, roof, and wall framing plans based upon their own measurements and automatically calculates material and labor quantities for all desired construction or repairs to the structure.

We also provide our customers access to price lists, which include structural repair and restoration pricing for 468 separate economic areas in North America. We revise this information monthly, and as often as weekly in the aftermath of major disasters, to reflect rapid price changes. Our structural repair and cleaning database contains approximately 21,000 unit-cost line items. For each line item, we report time and material pricing, and improve our reported pricing data by several methods, including direct market surveys and an analysis of the actual claim experiences of our customers. We estimate that more than 80% of insurance repair contractors and service providers in the U.S. and Canada with computerized estimating systems use our building and repair pricing data. This large percentage leads to accurate reporting of pricing information, which we believe is unmatched in the industry.

Our virtual claims adjusting tools help improve policyholder satisfaction and save on loss adjustment expense. These tools simplify collaboration among claims professionals, contractors, and policyholders as they work together remotely and efficiently. Real-time video collaboration, remote measuring tools, AI-powered damage assessment, and image analytics fraud warnings are just a few of the advantages we deliver through these solutions.

Customers access our claims ecosystem to enhance their business and operations. For example, they can tap into our weather API for near-real-time updates and valuable insights for responding to weather perils that can impact their policyholders and their business. Plus, they can use our data insights to analyze and benchmark their performance against peers in the industry and manage claims assignments.

We continually pursue new solutions that help our customers keep abreast of changing markets and technology. For example, we developed a digital media database that allows customers to view prior-loss images on claim matches so they can detect pre-existing damage on new claims. Our cutting-edge image forensics can detect suspicious claim-related photos and our customers can flag stolen and synthetic identities in the database to help subscribers deter that type of fraud.

Energy and Specialized Markets Segment

Up until the conclusion of the Energy Sale on February 1, 2023, we were a leading provider of data analytics across the natural resources value chain including the global energy, chemicals, metals and mining, and power and renewables sectors. We delivered analysis and advice on assets, companies, governments, and markets based on proprietary near real time data as well as historic information. This enabled us to offer a comprehensive and integrated analysis of relevant commodities to our customers. We provided research and consulting services focusing on supporting customer capital allocation decisions, asset valuation and benchmarking, commodity markets, and corporate analysis. We offered consultancy in the areas of business environment, business improvement, business strategies, commercial advisory, and transaction support.

We differentiated our solutions in the market by continuously gathering and managing proprietary information, insight, and analysis on thousands of oil and gas assets, wind turbines and solar assets, mines, refineries, and other assets, as well as detailed assessments of the market fundamentals across each value chain. These market insights helped our customers achieve operational excellence, increase profitability and optimize business performance. And our experts applied the data and worked directly with customers to address their business challenges.

Before the sale of our specialized markets on March 11, 2022, we offered a comprehensive suite of data and information services that enable improved compliance with global environmental health and safety ("EH&S") requirements related to the safe manufacturing, distribution, transportation, usage, and disposal of chemicals and products. From the supply chain or solutions life cycle, we delivered a program specific to the EH&S compliance information and management needs of our customers. Our full-solutions life cycle and cross-supply chain approach provided a single, integrated solution for managing customers' EH&S capabilities, which resulted in improved processes and reduced cost, risk, and liability.

Financial Services

Before the sale of Financials Services Segment on April 8, 2022, we maintained the largest bank account consortia to provide competitive benchmarking, decisioning algorithms, business intelligence, and customized analytic services to financial institutions, payment networks and processors, alternative lenders, regulators, and merchants enabling better strategy, marketing, and risk decisions. We delivered unique products and services to an expanding customer base that valued the comprehensiveness of our data and solutions as well as our full wallet-spend view of a consumer. Complementing this, we leveraged our partnerships with processors and credit bureaus not only to augment the richness of our data but also to provided expanded solutions across the broad span of consumer banking and retail products.

Our Growth Strategy

Over the past five years, we have grown our revenues through the successful execution of our business plan. Those results reflect strong organic revenue growth, new product development, and acquisitions. We have made, and continue to make, investments in people, data sets, analytic solutions, technology, and complementary businesses. The key components of our strategy include the following:

Increase Solution Penetration with Customers. We expect to expand the application of our solutions in customers' internal processes. Building on our deep knowledge of and embedded position in, various industries, we expect to sell more solutions to existing customers tailored to individual market segments. By increasing the breadth and relevance of our offerings, we believe that we can strengthen our relationships with customers and increase our value to their decision making in critical ways. We have opportunities to expand solution penetration to our insurance customers.

Develop New Proprietary Data Sets and Predictive Analytics. We work with our customers to understand their evolving needs. We plan to create new solutions by enriching our mix of proprietary data sets, analytic solutions, and effective decision support across the markets we serve. We constantly seek to add new data sets that can further leverage our analytic methods, technology platforms, and intellectual capital.

Leverage Our Intellectual Capital to Expand into Adjacent Markets and New Customer Sectors. Our organization is built on more than five decades of intellectual property in risk management. We believe we can continue to expand the use of our intellectual capital profitably and apply our analytic methods in new insurance-related markets where significant opportunities for long-term growth exist. We also continue to pursue growth through targeted international expansion.

Pursue Strategic Acquisitions That Complement Our Leadership Positions. We will continue to expand our data and analytics capabilities. While we expect this will occur primarily through organic growth, we have acquired and will continue to acquire assets and businesses that strengthen our value proposition to customers. We have developed an internal capability to source, evaluate, and integrate acquisitions that have created value for shareholders.

Our Customers

The customers in our Insurance segment for the lines of P&C services we offer include the top 100 P&C insurance providers in the U.S. as well as domestic InsurTech companies and insurers in international markets. A substantial majority of P&C insurance providers in the U.S. use our statistical agent services to report to regulators, and the majority of insurers and reinsurers in the U.S. use our actuarial services and industry-standard insurance programs. In addition, certain agencies of the federal government as well as county and state governmental agencies and organizations use our solutions to help satisfy government needs for risk assessment and emergency response information. For life and annuity insurers, we offer digital solutions including electronic applications and policy administration systems to enable automated/accelerated triage, underwriting, fraud detection, and modeling. Our claims database serves thousands of customers, representing approximately 90% of the P&C insurance industry by premium volume, approximately 500 self-insurers, approximately 400 third party administrators, several state fraud bureaus, and many law enforcement agencies involved in the investigation and prosecution of insurance fraud. We estimate that more than 80% of insurance repair contractors and service providers in the U.S. and Canada with computerized estimating systems use our building and repair cost estimation pricing data.

Our Competitors

We believe that no single competitor currently offers the same scope of services and market coverage we provide. The breadth of markets we serve exposes us to a broad range of competitors as described below. Businesses that we acquire may introduce us to additional competitors.

Our Insurance segment operates primarily in the U.S. P&C insurance industry, where we enjoy a leading market presence. We have a number of competitors in specific lines or services. We encounter competition from a number of sources, including insurers that develop internal technology and actuarial methods for proprietary insurance programs. Competitors also include other statistical agents, such as the National Independent Statistical Service, the Independent Statistical Service, Inc., and other advisory organizations, that provide underwriting rules, prospective loss costs, and coverage language, including the American Association of Insurance Services, Inc. and Mutual Services Organization. However, we believe that none of our competitors have the breadth or depth of data we have. Competitors for our property-specific rating and underwriting information are primarily limited to a number of regional providers of commercial property inspections and surveys, including Overland Solutions, Inc., and Regional Reporting, Inc., and emerging providers in the InsurTech space. We also compete with a variety of organizations that offer consulting services, primarily specialty technology and consulting firms. In addition, a customer may use its own internal resources rather than engage an outside firm for these services. Finally, our underwriting products compete with Lexis Nexis and Core Logic in the marketplace. Our competitors also include information technology product and services vendors; management and strategy consulting firms; and smaller specialized information technology and analytical services firms, including Pinnacle Consulting and EMB, a unit of Willis Towers Watson. Finally, in the life insurance sector, our solutions compete against vendors such as Accenture, Oracle, DXC, Majesco and iPipeline, as well as the in-house technology departments of Life Insurers. In the P&C insurance claims and catastrophe modeling markets, certain products are offered by a number of companies, including Risk Management Solutions (catastrophe modeling), CoreLogic (repair cost estimating), LexisNexis® Risk Solutions (claims investigative reports), SAS (claims fraud analytics), and Enlyte (injury claims analytics). We believe that our P&C insurance industry expertise, and our ability to offer multiple applications, services, and integrated solutions to individual customers are competitive strengths.

Development of New Solutions

We take a market-focused team approach to developing our solutions. Our operating units are responsible for developing, reviewing, and enhancing our various products and services. Our data management and production team designs and manages our processes and systems for market data procurement, proprietary data production, and quality control. Our teams support our efforts to create new information and products from available data and explore new methods of collecting data. We are focused on understanding and documenting business unit and corporate data assets and data issues, sharing and combining data assets across the enterprise, creating an enterprise data strategy, facilitating research and product development, and promoting cross-enterprise communication.

Our software development teams build the technology used in many of our solutions. As part of our product development process, we continually solicit feedback from our customers on the value of our products and services and the market's needs. We have established an extensive system of customer advisory panels that meet regularly throughout the year to help us respond effectively to the needs of our markets. In addition, we use frequent sales calls, executive visits, user group meetings, and other industry forums to gather information to align our product development efforts with the needs of the market. We also use a variety of market research techniques to enhance our understanding of our customers and the markets in which they operate.

We add to our offerings through an active acquisition program. Since 2018, we have acquired 26 businesses, which have allowed us to enter new markets, offer new solutions, and enhance the value of existing services with additional proprietary sources of data.

When we find it advantageous, we augment our proprietary data sources and systems by forming alliances with other leading information providers and technology companies and integrating their product offerings into our offerings. This approach gives our customers the opportunity to obtain the information they need from a single source and more easily integrate the information into their workflows.

Sales, Marketing, and Customer Support

We sell our solutions and services primarily through direct interaction with our customers. We employ a three-tier sales structure that includes salespeople, technical consultants, and sales support. Within our company, several areas have sales teams that specialize in specific products and services. Those specialized sales teams sell specific, highly technical solution sets to targeted markets in coordination with account management.

To provide account management to our largest customers, we divide our customers into three groups. Tier One ("Client Engagement Accounts") comprises our largest customers. Tier Two ("Strategic Accounts") represents both large and middle-market customer groups. Tier Three is composed of small and specialized companies that may represent one line of business, may be regionally focused, or are recent new entrants into the marketplace. In Tier One and Tier Two segments, we have sales teams organized by the following specialties: personal or commercial lines underwriting and pricing, claims, and catastrophe risk. In the Tier Three segment, we assign a sales generalist with overall account management responsibility. Our tiered approach has proven to be a successful sales model and approach to building customer relationships. Our senior executives regularly engage with the senior management of our customers to ensure customer satisfaction and strategic alignment and to support mutual partnership innovation opportunities.

Salespeople participate in both sales and customer service activities. They provide direct support, interacting frequently with assigned customers to ensure a satisfactory experience using our services. Salespeople primarily seek out new sales opportunities and work with the various product teams to coordinate sales activities and ensure our solutions fit the customer's needs. We believe our salespeople's product knowledge, skills to develop relationships of trust, and local presence differentiate us from our competition. Subject matter experts work with salespeople on specific opportunities for their assigned products and segments. Salespeople manage the overall sales process and subject matter experts manage the rigorous integration and functional fit discussions to ensure mutual success and satisfaction. Both salespeople and technical consultants have responsibility for identifying new sales opportunities as well as handling renewals of existing business. A team approach and a common customer relationship management system allow for effective coordination among the groups.

Sources of Our Data

The data we use to perform our analytics and power our solutions is sourced through seven different kinds of data arrangements. First, we gather data from our customers within agreements that also permit our customers to use the solutions created from their data. Those agreements remain in effect unless the data contributor chooses to opt out. It is very rare that contributors elect not to continue providing us data. Second, we have agreements with data contributors in which we specify the particular uses of their data and provide their required levels of privacy, protection of data, and where necessary, de-identification of data. The agreements represent no cost to us, generally feature a specified period of time for the data contributions, and require renewal. Third, we "mine" data found inside the transactions supported by our solutions; as an example, we use the claims settlement data generated inside our repair cost estimating solution to improve the cost factors used in our models. Again, those arrangements represent no cost to us, and we obtain the consent of our customers to make use of their data in this way. Fourth, we source data generally at no cost from public sources, including federal, state, and local governments. Fifth, we gather data about the physical characteristics of commercial properties through the direct observation of our field staff members, who also perform property surveys at the request of, and facilitated by, property insurers. Sixth, we collect data, or license or purchase from third parties, on geographic and spatially referenced information relating to residential and commercial structures by using the latest remote sensing and machine learning technologies. Lastly, we purchase data from data aggregators under contracts that reflect prevailing market pricing for the data elements purchased, including county tax assessor records, descriptions of hazards such as flood plains, and professional licenses. We are the owners of the derivative solutions we create using the data we collect.

Information Technology

Technology

Our information technology systems and the more recent adoption of cloud computing are fundamental to our success. They are used for the storage, processing, access, and delivery of the data that forms the foundation of our business and the development and delivery of the solutions we provide to our customers. We generally own, or have secured ongoing rights to use for the purposes of our business, all the customer-facing applications that are material to our operations. We support and implement a mix of technologies and focus on implementing the most efficient technology for any given business requirement or task.

Data Centers

We have two primary data centers in Somerset, New Jersey, and Lehi, Utah, creating redundancy and back up capabilities. In addition, we have data centers located in other states dedicated to certain business units.

Disaster Recovery

We are committed to a framework for business continuity management and carry out annual reviews of the state of preparedness of each business unit. We also have documented disaster recovery plans in place for each of our major data centers and each of our solutions. The data center in Somerset, New Jersey is the recovery site for the Lehi, Utah, data center and vice versa. Business continuity planning is in place for all of our critical business processes to provide for the prompt and effective continuation of critical services in the event of a business disruption. Our business continuity program adheres to ISO 22301:2019, which is an international standard for business continuity. All business impact analysis and business continuity plans are reviewed and updated, at a minimum, annually or when significant business changes occur.

Security

We have adopted a wide range of measures to secure our IT infrastructure and data. Security measures generally cover the following key areas: security policies and governance committees, physical security, logical security of the perimeter, network security such as firewalls, logical access to applications and operating systems, deployment of endpoint anti-malware software, email security, and appropriate procedures relating to removable media such as laptops. Laptops are encrypted, and media leaving our premises and sent to third-party storage facilities are also encrypted. Our commitment to security has earned ISO 27001:2013 Certification for our core data centers, which is an international standard for best practices associated with our Information Security Management System.

Intellectual Property

We own a significant number of intellectual property rights, including copyrights, trademarks, trade secrets, and patents. Specifically, our policy language, insurance manuals, software, and databases are protected by both registered and common law copyrights; and the licensing of those materials to our customers for their use represents a large portion of our revenue. We also own in excess of 700 trademarks in the U.S. and foreign countries, including the names of our products and services and our logos and tag lines, many of which are registered. We believe many of our trademarks, trade names, service marks, and logos to be of material importance to our business, as they assist our customers in identifying our products and services and the quality that stands behind them. We consider our intellectual property to be proprietary, and we rely on a combination of statutory (for example, copyright, trademark, trade secret, and patent) and contractual safeguards in a comprehensive intellectual property enforcement program to protect it wherever it is used.

We also own several patents and have several pending patent applications in the U.S. that complement our products. We believe the protection of our proprietary technology is important to our success, and we will continue to seek to protect those intellectual property assets for which we have expended substantial research and development capital and that are material to our business.

To maintain control of our intellectual property, we enter into contractual agreements with our customers, granting each customer permission to use our products and services, including our software and databases. This helps maintain the integrity of our proprietary intellectual property and to protect the embedded information and technology contained in our solutions. As a general practice, employees, contractors, and other parties with access to our proprietary information sign agreements that prohibit the unauthorized use or disclosure of our proprietary rights, information, and technology.

Human Capital

Our global workforce is united by our mission to serve, add value, and innovate for our customers. We continue to invest in our people worldwide by encouraging all employees to reach their full potential through our focus on learning, providing competitive compensation and benefits, and our culture anchored on innovation, collaboration, and inclusion.

As a knowledge-based business, we carefully integrate the skills and talents of approximately 7,000 employees worldwide as of December 31, 2022. Most of our highly credentialed team holds advanced degrees and professional certifications specializing in actuarial science, chemistry and physics, commercial banking and finance, commodity analytics, data science and artificial intelligence, economics, engineering, GIS mapping, meteorology, natural resources, predictive analytics, supply chain, and other fields.

Approximately 66% of our employees are based in the United States, 13% in the United Kingdom, 6% in India, with the remainder serving in 20 other countries across the globe.

Very few of our employees are represented by unions or subject to collective bargaining agreements, only a small number of employees in Germany who are represented by a works council. We consider our relationship with our employees to be good and have not experienced interruptions of operations due to labor disagreements.

We support and work to inspire our people with a collaborative and engaging culture, and career development and learning opportunities at all levels, competitive compensation and benefits, an ongoing focus on well-being, and responsive leadership. Starting in 2021, we have introduced a common global wellbeing day across the enterprise to recognize the importance of the total wellbeing of our workforce. In addition, in 2022, we have introduced Juneteenth, as a U.S. holiday to recognize this significant milestone in U.S. history.

We have a culture of continuous learning and improvement. In 2022, we introduced a continuous approach to performance management, supported by a new user-friendly platform and guidance. Each quarter, employees and managers were provided with customized training and were prompted to review and discuss goals, progress, and ways to grow and develop. We also continue to curate self-paced learning resources and create real-time opportunities for employees to take charge of their development and learn from each other. All employees have access to our world-class virtual learning platform, which features thousands of courses taught by industry experts, ranging from public speaking, to balancing work and personal life, to data science fundamentals. Course enrollments are up 26% at nearly 49,808 for the full year.

Our leadership development programs are tailored to leaders ranging from first-time managers to senior executives. In 2022, we focused our programming on essential leadership skills and invited people managers globally to a two-part Leadership Accelerator series. During the virtual sessions and applied practice that followed, 75% of all people managers participated to learn how to increase trust and purpose, and how to coach and give difficult feedback in support of employee growth. Separately, we piloted new managers program with the goal to provide training within a manager's first three months in their role.

We offer competitive salaries, short and long-term incentives and the opportunity for advancement. In addition, our program includes paid time off ("PTO"), flextime and telecommuting options, and a 401(k) program with a 100% company cash match (up to 6%). We also offer health insurance plans, no-cost life insurance equivalent to annual salary (with the option to purchase more), a discounted stock purchase program, a variety of physical, mental, and financial well-being offerings and resources, and more. Terms vary by business unit and country.

Employees can also take advantage of our employee networks, grassroots groups that help support diversity-related programs and events and promote an inclusive community. As of 2022, there were eight networks: the Verisk Women's Network, the Verisk Pride Network, the Verisk Veterans and Military Service Members Network, the Verisk REACH Network (dedicated to empowering Black employees), the Verisk Parents Network, the Verisk Unidos Network (promoting awareness of Hispanic and Latinx culture), the Verisk Asian Network, and the Verisk Accessibility Network.

The enterprise sponsored over 50 special events in 2022 through our various employee network groups focused on helping our employees find ways to continue conversations that center around equality and inclusion and the employee experience. Included in these events were webcasts, panel discussions, book clubs, fundraisers and activities centered around celebratory months. We also held a Day of Understanding with open discussions on topics such as Roe v. Wade, Hate Crimes, Immigration, Accessibility, and LGBTQ+ experiences.

To support our goal to have a workforce that reflects the diversity of the communities we operate in, our Board of Directors adopted our revised Statement on Racial Equity and Diversity in 2022. Its purpose is to confront and overcome barriers to individual achievement based on race, ethnicity, gender, sexual orientation, identity, and beliefs.

We continually strive to encourage collaboration throughout the organization, involve and empower all of our employees, and develop a diverse workforce. Surveys conducted by outside organizations and our annual employee engagement survey measure our progress against these critical metrics. Starting in 2022, we evaluated our senior leaders against an enterprise goal to attract and retain diverse talent across the globe. The performance goal is linked to leaders' annual compensation and leaders' performance will be assessed by the senior operating committee.

The health and safety of our people working around the globe is a top priority, and our facilities worldwide follow rigorous, internally and externally audited, occupational health and safety policies. We also recognize that protecting the health, safety and wellbeing of our employees is crucial to our ability to continue to address the impact of the global COVID-19 pandemic.

The majority of our people worked remotely in 2021 but moved to a hybrid work policy in 2022 with at least 2 days in the office. We saw increased collaboration and engagement as a result of this move.

Our employee engagement score for 2022 is at 77%. Verisk continues to be recognized for our outstanding workplace culture by Great Place to Work® in the U.S., the United Kingdom, India, Spain, and was recognized for the first time in Poland. We are also earning recognition from UK's Best Workplaces in Tach and Malaga's Best Workplaces. The Great Place to Work Institute is a global authority on high-trust, high-performance workplaces. To create an outstanding employee experience, leaders understand and act on their results and insights, and continuously communicate with employees through town halls and local engagement events.

Regulation

Because our business involves the distribution of certain personal, public, and nonpublic data to businesses and governmental entities that make eligibility, service, and marketing decisions based on such data, certain of our solutions and services are subject to regulation under federal, state, and local laws in the U.S. and, to a lesser extent, in foreign countries. Examples of such regulation include the Fair Credit Reporting Act, which regulates the use of consumer credit report information; the Gramm-Leach-Bliley Act, which regulates the use of nonpublic personal financial information held by financial institutions and applies indirectly to companies that provide services to financial institutions; the Drivers Privacy Protection Act, which prohibits the public disclosure, use, or resale by any state's department of motor vehicles of personal information about an individual that was obtained by the department in connection with a motor vehicle record, except for a "permissible purpose"; and various other federal, state, and local laws and regulations.

Those laws generally restrict the use and disclosure of personal information and provide consumers certain rights to know the manner in which their personal information is being used, to challenge the accuracy of such information, and/or to prevent the use and disclosure of such information. In certain instances, the laws also impose requirements for safeguarding personal information through the issuance of data security standards or guidelines. Certain state laws impose similar privacy obligations as well as obligations to provide notification of security breaches in certain circumstances.

We are also licensed as a rating, rate service, advisory, or statistical organization under state insurance codes in all 50 states, Puerto Rico, Guam, the U.S. Virgin Islands, and the District of Columbia. As such an advisory organization, we provide statistical, actuarial, policy language development, and related products and services to P&C insurers, including advisory prospective loss costs, other prospective cost information, manual rules, and policy language. We also serve as an officially designated statistical agent of state insurance regulators to collect policy writing and loss statistics of individual insurers and compile that information into reports used by the regulators.

Many of our products, services, and operations as well as insurers' use of our services are subject to state rather than federal regulation by virtue of the McCarran-Ferguson Act. As a result, many of our operations and products are subject to review and/or approval by state regulators. Further, our operations involving licensed advisory organization activities are subject to periodic examinations conducted by state regulators; and our operations and products are subject to state antitrust and trade practice statutes within or outside state insurance codes, which are typically enforced by state attorneys general and/or insurance regulators.

Available Information

We maintain an Investor Relations website on the Internet at investor.verisk.com. We make available free of charge on or through this website, our annual, quarterly, and current reports and any amendments to those reports as soon as reasonably practicable following the time they are electronically filed with or furnished to the U.S. Securities and Exchange Commission ("SEC"). For access to the filings, click the "SEC Filings" link on the "Financials" tab on our Investor Relations homepage. The contents of our website are not incorporated into this filing. Verisk trades on the NASDAQ Global Market in the Nasdaq Global Select Market segment under the ticker symbol "VRSK." Our stock was first publicly traded on October 7, 2009.

The public may read any materials filed by Verisk with the SEC on the SEC's Internet site (www.sec.gov), which contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

Item 1A. Risk Factors

You should carefully consider the following risks and all of the other information set forth in this annual report on Form 10-K before deciding to invest in any of our securities. If any of the following risks actually occurs, our business, financial condition or results of operations would likely suffer. In such case, the trading price of our securities, including our common stock, could decline due to any of these risks, and you may lose all or part of your investment. In addition to the effects of the COVID-19 pandemic and resulting global disruptions on our business and operations discussed in Item 7 of Part II, "Management's Discussion Analysis of Financial Condition and Results of Operations," and in the risk factors below, additional or unforeseen effects from the COVID-19 pandemic and the global economic climate may give rise to or amplify many of the risks discussed below.

Risks Related to Our Business

We could lose our access to data from external sources, which could prevent us from providing our solutions.

We depend upon data from external sources, including data received from customers and various government and public record services, for information used in our databases. In general, we do not own the information in these databases, and the participating organizations could discontinue contributing information to the databases. Our data sources could withdraw or increase the price for their data for a variety of reasons, and we could also become subject to legislative, judicial, or contractual restrictions on the use of such data, in particular if such data is not collected by the third parties in a way that allows us to legally use and/or process the data. In addition, some of our customers have been, and in the future may continue to be, stockholders of our company. If our customers' percentage of ownership of our common stock decreases, or they cease to be stockholders of our company, there can be no assurance that our customers will continue to provide data to the same extent or on the same terms. If a substantial number of data sources, or certain key sources, were to withdraw or be unable to provide their data, or if we were to lose access to data due to government regulation or if the collection of data became uneconomical, our ability to provide solutions to our customers could be impacted, which could materially adversely affect our business, reputation, financial condition, operating results, and cash flows.

Agreements with our data suppliers are short-term agreements. Some suppliers are also competitors, which may make us vulnerable to unpredictable price increases and may cause some suppliers not to renew certain agreements. Our competitors could also enter into exclusive contracts with our data sources. If our competitors enter into such exclusive contracts, we may be precluded from receiving certain data from these suppliers or restricted in our use of such data, which would give our competitors an advantage. Such a termination or exclusive contracts could have a material adverse effect on our business, financial position, and operating results if we were unable to arrange for substitute data sources.

We derive a substantial portion of our revenues from U.S. P&C primary insurers. If there is a downturn in the U.S. insurance industry or that industry does not continue to accept our solutions, our revenues will decline.

Revenues derived from solutions we provide to U.S. P&C primary insurers account for a substantial portion of our total revenues. During the year ended December 31, 2022, approximately 69% of our revenue was derived from solutions provided to U.S. P&C primary insurers. Also, our invoices for certain of our solutions are linked in part to premiums in the U.S. P&C insurance market, which may rise or fall in any given year due to loss experience and capital capacity and other factors in the insurance industry that are beyond our control. In addition, our revenues will decline if the insurance industry does not continue to accept our solutions.

Factors that might affect the acceptance of these solutions by P&C primary insurers include the following:

- changes in the business analytics industry,
- changes in technology,
- our inability to obtain or use state fee schedule or claims data in our insurance solutions,
- saturation of market demand,
- loss of key customers,
- industry consolidation, and
- failure to execute our customer-focused selling approach.

A downturn in the insurance industry, pricing pressure or lower acceptance of our solutions by the insurance industry could result in a decline in revenues from that industry and have a material adverse effect on our financial condition, results of operations and cash flows.

Acquisitions, other strategic relationships and dispositions of our business, and related integration and separation risks, could result in operating difficulties and other harmful consequences, and we may not be successful in achieving the anticipated benefits of such transactions.

Our long-term business strategy includes growth through acquisitions and other strategic relationships. Future acquisitions may not be completed on acceptable terms and acquired assets, data or businesses may not be successfully integrated into our operations, and we may ultimately divest unsuccessful acquisitions or investments. Moreover, from time to time we may also undertake dispositions of certain businesses or assets. Any acquisitions, investments and dispositions will be accompanied by the risks commonly encountered in such transactions. Such risks include, among other things:

- failing to implement or remediate controls, procedures and policies appropriate for a larger public company at acquired companies that prior to the acquisition lacked such controls, procedures and policies,
- paying more than fair market value for an acquired company or assets, or receiving less than fair market value for disposed businesses or assets,
- failing to integrate or separate the operations and personnel of the acquired or disposed businesses in an efficient, timely manner,
- assuming potential liabilities of an acquired company,
- managing the potential disruption to our ongoing business,
- distracting management focus from our core businesses,
- failing to retain management at the acquired company,
- difficulty in acquiring suitable businesses, including challenges in predicting the value an acquisition will ultimately contribute to our business,
- possibility of overpaying for acquisitions, particularly those with significant intangible assets that derive value using novel tools and/or are involved in niche markets,
- impairing relationships with employees, customers, and strategic partners,
- incurring expenses associated with the amortization of intangible assets particularly for intellectual property and other intangible assets,
- incurring expenses associated with an impairment of all or a portion of goodwill and other intangible assets due to changes in market conditions, weak economies in certain competitive markets, or the failure of certain acquisitions to realize expected benefits, and
- diluting the share value and voting power of existing stockholders.

The anticipated benefits of many of our acquisitions may not materialize. Future acquisitions or dispositions could result in the incurrence of debt, contingent liabilities or amortization expenses, or write-offs of goodwill and other intangible assets, any of which could harm our financial condition.

We typically fund our acquisitions through our debt facilities. Although we have capacity under committed facilities, those may not be sufficient. Therefore, future acquisitions may require us to obtain additional financing through debt or equity, which may not be available on favorable terms or at all and could result in dilution. In addition, to the extent we cannot identify or consummate, on terms acceptable to us, acquisitions that are complementary or otherwise attractive to our business, we may experience difficulty in achieving future growth.

There may be consolidation in our end customer market, which could reduce the use of our services.

Mergers or consolidations among our customers could reduce the number of our customers and potential customers. This could adversely affect our revenues even if these events do not reduce the aggregate number of customers or the activities of the consolidated entities. If our customers merge with or are acquired by other entities that are not our customers, or that use fewer of our services, they may discontinue or reduce their use of our services. The adverse effects of consolidation will be greater in sectors that we are particularly dependent upon, for example, in the P&C insurance sector. Any of these developments could materially adversely affect our business, financial condition, operating results, and cash flows.

If we are unable to develop successful new solutions or if we experience defects, failures and delays associated with the introduction of new solutions, our business could suffer serious harm.

Our growth and success depend upon our ability to develop and sell new solutions. If we are unable to develop new solutions, or if we are not successful in introducing and/or obtaining regulatory approval or acceptance for new solutions, or products we develop face sufficient pricing pressure to make them unattractive to pursue, we may not be able to grow our business, or growth may occur more slowly than we anticipate. In addition, significant undetected errors or delays in new solutions may affect market acceptance of our solutions and could harm our business, financial condition or results of operations. In the past, we have experienced delays while developing and introducing new solutions, primarily due to difficulties in developing models, acquiring data and adapting to particular operating environments. Errors or defects in our solutions that are significant, or are perceived to be significant, could result in rejection of our solutions, damage to our reputation, loss of revenues, diversion of development resources, an increase in product liability claims, and increases in service and support costs and warranty claims.

We typically face a long selling cycle to secure new contracts that require significant resource commitments, which result in a long lead time before we receive revenues from new relationships.

We typically face a long selling cycle to secure a new contract and there is generally a long preparation period in order to commence providing the services. We typically incur significant business development expenses during the selling cycle and we may not succeed in winning a new customer's business, in which case we receive no revenues and may receive no reimbursement for such expenses. Even if we succeed in developing a relationship with a potential new customer, we may not be successful in obtaining contractual commitments after the selling cycle or in maintaining contractual commitments after the implementation cycle, which may have a material adverse effect on our business, results of operations and financial condition.

To the extent the availability of free or relatively inexpensive information increases, the demand for some of our solutions may decrease.

Public sources of free or relatively inexpensive information have become increasingly available recently, particularly through the Internet, and this trend is expected to continue. Governmental agencies in particular have increased the amount of information to which they provide free public access. Public sources of free or relatively inexpensive information may reduce the demand for our solutions. To the extent that customers choose not to obtain solutions from us and instead rely on information obtained at little or no cost from these public sources, our business and results of operations may be adversely affected.

Our senior leadership team is critical to our continued success and the loss of such personnel could harm our business.

Our future success substantially depends on the continued service and performance of the members of our senior leadership team. These personnel possess business and technical capabilities that are difficult to replace.

However, as a general practice we do not enter into employee contracts with the members of our senior management operating team, except for certain limited situations. If we lose key members of our senior management operating team, we may not be able to effectively manage our current operations or meet ongoing and future business challenges, and this may have a material adverse effect on our business, results of operations and financial condition.

We may fail to attract and retain enough qualified employees to support our operations, which could have an adverse effect on our ability to expand our business and service our customers.

Our business relies on large numbers of skilled employees and our success depends on our ability to attract, train and retain a sufficient number of qualified employees. If our attrition rate increases, our operating efficiency and productivity may decrease. We compete for employees not only with other companies in our industry, but also with companies in other industries, such as software services, engineering services and financial services companies, and there is a limited pool of employees who have the skills and training needed to do our work.

If our business continues to grow, the number of people we will need to hire will increase. We will also need to increase our hiring if we are not able to maintain our attrition rate through our current recruiting and retention policies. Increased competition for employees could have an adverse effect on our ability to expand our business and service our customers, as well as cause us to incur greater personnel expenses and training costs.

General economic, political and market forces and dislocations beyond our control could reduce demand for our solutions and harm our business.

The demand for our solutions may be impacted by domestic and international factors that are beyond our control, including macroeconomic, political and market conditions, the energy transition driven by climate change and decarbonization, the availability of short-term and long-term funding and capital, the level and volatility of interest rates, currency exchange rates, and inflation. Any one or more of these factors may contribute to reduced activity and prices in the securities markets generally and could result in a reduction in demand for our solutions, which could have an adverse effect on our results of operations and financial condition. A significant additional decline in the value of assets for which risk is transferred in market transactions could have an adverse impact on the demand for our solutions.

We may incur substantial additional indebtedness in connection with future acquisitions.

In order to finance acquisitions, which are an important part of our long-term growth strategy, we may incur substantial additional indebtedness and such increased leverage could adversely affect our business. In particular, the increased leverage could increase our vulnerability to sustained, adverse macroeconomic weakness, limit our ability to obtain further financing and limit our ability to pursue other operational and strategic opportunities. Further, the Federal Reserve has increased its benchmark interest rate multiple times in 2022 in a bid to reduce rising inflation rates in the United States, and it is expected that additional rate hikes may be adopted in the future. These interest rate increases have resulted in higher short-term and long-term borrowing costs. The increased leverage, potential lack of access to financing and increased expenses could have a material adverse effect on our financial condition, results of operations and cash flows.

Risks Related to Our Intellectual Property and Cybersecurity

Fraudulent or unpermitted data access and other cyber-security or privacy breaches may negatively impact our business and harm our reputation.

Security breaches in our facilities, computer networks, and databases may cause harm to our business and reputation and result in a loss of customers. Many of our solutions involve the storage and transmission of proprietary information and sensitive or confidential data. As with other global companies, our systems are regularly subject to cyber-attacks, cyber-threats, attempts at fraudulent access, physical break-ins, computer viruses, attacks by hackers and similar disruptive problems. As cyber-threats continue to evolve, we are required to expend significant additional resources to continue to modify and enhance our protective measures and to investigate and remediate any information security vulnerabilities and incidents. Despite efforts to ensure the integrity of our systems and implement controls, processes, policies and other protective measures, we may not be able to anticipate or detect all security breaches, nor may we be able to implement guaranteed preventive measures against such security breaches. Cyber-threats are rapidly evolving and we may not be able to anticipate, prevent or detect all such attacks and could be held liable for any security breach or loss.

Third-party contractors, including cloud-based service providers, also may experience security breaches involving the storage and transmission of proprietary information. If users gain improper access to our databases, they may be able to steal, publish, delete or modify confidential third-party information that is stored or transmitted on our networks. Our business relies on the secure processing, transmission, storage and retrieval of confidential, proprietary and other information in our computer and data management systems and networks, and in the computer and data management systems and networks of third parties. In addition, to access our network, products and services, our customers and other third parties may use personal mobile devices or computing devices that are outside of our network environment and are subject to their own cybersecurity risks.

In addition, customers', employees' or other's misuse of and/or gaining fraudulent or unpermitted access to or failure to properly secure our information or services could cause harm to our business and reputation and result in loss of customers. Any such misappropriation and/or misuse of or failure to properly secure our information could result in us, among other things, being in breach of certain data protection and related legislation.

A security or privacy breach may affect us in the following ways:

- deterring customers from using our solutions;
- deterring data suppliers from supplying data to us;
- harming our reputation;
- exposing us to liability;
- increasing operating expenses to correct problems caused by the breach;
- affecting our ability to meet customers' expectations; and/or
- causing inquiry from governmental authorities.

Incidents in which consumer data has been fraudulently or improperly acquired or viewed, or any other security or privacy breaches, have in the past occurred, and may in the future occur and could go undetected. The number of potentially affected consumers identified by any future incidents is inherently uncertain. Any such incident could materially adversely affect our business, reputation, financial condition, operating results and cash flows. In addition, media or other reports of perceived security vulnerabilities to our systems or those of our third-party suppliers, even if no breach has been attempted or occurred, could also adversely impact our reputation and materially impact our business.

We could face claims for intellectual property infringement, which if successful could restrict us from using and providing our technologies and solutions to our customers.

There has been substantial litigation and other proceedings, particularly in the U.S., regarding patent and other intellectual property rights in the information technology industry. There is a risk that we are infringing, or may in the future infringe, the intellectual property rights of third parties. We have, from time-to-time, been subject to litigation alleging intellectual property infringement. We monitor third-party patents and patent applications that may be relevant to our technologies and solutions and we carry out freedom to operate analysis where we deem appropriate. However, such monitoring and analysis has not been, and is unlikely in the future to be, comprehensive, and it may not be possible to detect all potentially relevant patents and patent applications. Since the patent application process can take several years to complete, there may be currently pending applications, unknown to us, that may later result in issued patents that cover our products and technologies. As a result, we may infringe existing and future third-party patents of which we are not aware. As we expand our operations there is a higher risk that such activity could infringe the intellectual property rights of third parties.

Third-party intellectual property infringement claims and any resultant litigation against us or our technology partners or providers, could subject us to liability for damages, restrict us from using and providing our technologies and solutions or operating our business generally, or require changes to be made to our technologies and solutions. Even if we prevail, litigation is time consuming and expensive to defend and would result in the diversion of management's time and attention.

If a successful claim of infringement is brought against us and we fail to develop non-infringing technologies and solutions or to obtain licenses on a timely and cost-effective basis, this could materially adversely affect our business, reputation, financial condition, operating results, and cash flows.

We may lose key business assets, through the loss of data center capacity or the interruption of telecommunications links, the internet, or power sources, which could significantly impede our ability to do business.

Our operations depend on our ability, as well as that of third-party service providers to whom we have outsourced several critical functions, to protect data centers, whether in cloud or dedicated environments, and related technology against damage from hardware failure, fire, flood, power loss, telecommunications failure, impacts of terrorism, breaches in security (such as the actions of computer hackers), natural disasters, or other disasters. Certain of our facilities are located in areas that could be impacted by coastal flooding, earthquakes or other disasters. The online services we provide are dependent on links to telecommunications providers. In addition, we generate a significant amount of our revenues through telesales centers and websites that we utilize in the acquisition of new customers, fulfillment of solutions and services and responding to customer inquiries. We may not have sufficient redundant operations to cover a loss or failure in all of these areas in a timely manner. Certain of our customer contracts provide that our online servers may not be unavailable for specified periods of time. Any damage to our or our third-party service provider's data centers, failure of our telecommunications links or inability to access these telesales centers or websites could cause interruptions in operations that materially adversely affect our ability to meet customers' requirements, resulting in decreased revenue, operating income and earnings per share.

Risks Related to Legal, Regulatory and Compliance Matters

We will continue to rely upon proprietary technology rights, and if we are unable to protect them, our business could be harmed.

Our success depends, in part, upon our intellectual property rights. To date, we have relied primarily on a combination of copyright, patent, trade secret, and trademark laws and nondisclosure and other contractual restrictions on copying and distribution to protect our proprietary technology. This protection of our proprietary technology is limited, and our proprietary technology could be used by others without our consent. In addition, patents may not be issued with respect to our pending or future patent applications, and our patents may not be upheld as valid or may not prevent the development of competitive products. Businesses we acquire also often involve intellectual property portfolios, which increase the challenges we face in protecting our strategic advantage. Any disclosure, loss, invalidity of, or failure to protect our intellectual property could negatively impact our competitive position, and ultimately, our business. Our protection of our intellectual property rights in the U.S. or abroad may not be adequate and others, including our competitors, may use our proprietary technology without our consent. Furthermore, litigation may be necessary to enforce our intellectual property rights, to protect our trade secrets, or to determine the validity and scope of the proprietary rights of others. Such litigation could result in substantial costs and diversion of resources and could harm our business, financial condition, results of operations, and cash flows.

Regulatory developments could negatively impact our business.

Because personal, public and non-public information is stored in some of our databases, we are vulnerable to government regulation and adverse publicity concerning the use of our data. We provide many types of data and services that already are subject to regulation under the Fair Credit Reporting Act, Gramm-Leach-Bliley Act, Driver's Privacy Protection Act, the European Union's General Data Protection Regulation, the Dodd Frank Wall Street Reform and Consumer Protection Act and to a lesser extent, various other federal, state, and local laws and regulations. These laws and regulations are designed to protect the privacy of the public and to prevent the misuse of personal information in the marketplace. However, many consumer advocates, privacy advocates, and government regulators believe that the existing laws and regulations do not adequately protect privacy. They have become increasingly concerned with the use of personal information, particularly social security numbers, department of motor vehicle data and dates of birth. As a result, they are lobbying for further restrictions on the dissemination or commercial use of personal information to the public and private sectors. Similar initiatives are under way in other countries in which we do business or from which we source data. We have implemented various measures to comply with the data privacy and protection principles of the European Union's General Data Protection Regulation, however, there can be no assurances that such methods will be deemed fully compliant. If we are unable to comply with the data privacy and protection principles adopted pursuant to the General Data Protection Regulation, it will impede our ability to conduct business between the U.S. and the E.U. which could have a material adverse effect on our business, financial position, results of operations or cash flows.

The following legal and regulatory developments also could have a material adverse effect on our business, financial position, results of operations or cash flows:

- amendment, enactment, or interpretation of laws and regulations which restrict the access and use of personal information and reduce the supply of data available to customers;
- changes in cultural and consumer attitudes to favor further restrictions on information collection and sharing, which may lead to regulations that prevent full utilization of our solutions;
- failure of our solutions to comply with current and future laws and regulations; and
- failure of our solutions to adapt to changes in the regulatory environment in an efficient, cost-effective manner.

Our financial position may be impacted by audit examinations or changes in tax laws or tax rulings.

Our existing corporate structure and tax positions have been implemented in a manner in which we believe is compliant with current prevailing tax laws. However, changes in existing tax laws or rulings, including Federal, State and International, could have a significant impact on our effective tax rate, cash tax positions and deferred tax assets and liabilities. Tax audit examinations with an adverse outcome could have a negative effect in the jurisdictions in which we operate. Furthermore, the Organization for Economic Co-operation and Development (OECD) released its Base Erosion and Profit Shifting (BEPS) action plans which may also lead to future tax reform that could affect our results. In addition, our tax positions are impacted by fluctuations in our earnings and financial results in the various countries in which we do business.

We are subject to antitrust, consumer protection, intellectual property and other litigation, as well as governmental investigations, and may in the future become further subject to such litigation and investigations; an adverse outcome in such litigation or investigations could have a material adverse effect on our financial condition, revenues and profitability.

We participate in businesses (particularly insurance-related businesses and services) that are subject to substantial litigation, including antitrust, consumer protection and intellectual property litigation. In addition, our insurance specialists are in the business of providing advice on standard contract terms, which if challenged could expose us to substantial reputational harm and possible liability. We are subject to the provisions of a 1995 settlement agreement in an antitrust lawsuit brought by various state Attorneys General and private plaintiffs, which imposes certain constraints with respect to insurer involvement in our governance and business.

Our failure to successfully defend or settle any litigation or resolve any governmental investigation could result in liability that, to the extent not covered by our insurance, could have a material adverse effect on our financial condition, revenues and profitability. Given the nature of our business, we may be subject to litigation or investigation in the future. Even if the direct financial impact of such litigation or investigations is not material, settlements or judgments arising out of such litigation or investigations could include further restrictions on our ability to conduct business, including potentially the elimination of entire lines of business, which could increase our cost of doing business and limit our prospects for future growth.

Risks Related to International Operations

We are subject to competition in many of the markets in which we operate and we may not be able to compete effectively.

Some markets in which we operate or which we believe may provide growth opportunities for us are highly competitive, and are expected to remain highly competitive. We compete on the basis of quality, customer service, product and service selection, and pricing. Our competitive position in various market segments depends upon the relative strength of competitors in the segment and the resources devoted to competing in that segment. Due to their size, certain competitors may be able to allocate greater resources to a particular market segment than we can. As a result, these competitors may be in a better position to anticipate and respond to changing customer preferences, emerging technologies and market trends. In addition, new competitors and alliances may emerge to take market share away, and as we enter into new lines of business, due to acquisition or otherwise, we face competition from new players with different competitive dynamics. We may be unable to maintain our competitive position in our market segments, especially against larger competitors. We may also invest further to upgrade our systems in order to compete. If we fail to successfully compete, our business, financial position and results of operations may be adversely affected.

Our operations are subject to additional risks inherent in international operations.

Conducting extensive international operations subjects us to risks that are inherent in international operations, including challenges posed by different pricing environments and different forms of competition; lack of familiarity and burdens of complying with foreign laws, legal standards, regulatory requirements, tariffs and other barriers; unexpected changes in regulatory requirements, taxes, trade laws, tariffs, export quotas, custom duties, or other trade restrictions; differing technology standards; difficulties in collecting accounts receivable; difficulties in managing and staffing international operations; varying expectations as to employee standards; potentially adverse tax consequences, including possible restrictions on the repatriation of earnings; and reduced or varied protection for intellectual property rights in some countries. In addition, our international operations subject us to obligations associated with anti-corruption laws and regulations, such as the U.K. Bribery Act 2010, the U.S. Foreign Corrupt Practices Act and regulations established by the U.S. Office of Foreign Assets Control. Government agencies and authorities have a broad range of civil and criminal penalties they may seek to impose against companies for violations of export controls, anti-corruption laws or regulations, and other laws, rules, sanctions, embargoes, and regulations.

Moreover, international operations could be interrupted and negatively affected by economic changes, geopolitical regional conflicts, terrorist activity, political unrest, civil strife, acts of war, and other economic or political uncertainties. All of these risks could result in increased costs or decreased revenues, either of which could have a material adverse effect on our financial condition, results of operations and cash flows.

We are subject to the increased risk of exchange rate fluctuations.

As a result of our operations outside of the U.S., we face greater exposure to movements in currency exchange rates, which may cause our revenue and operating results to differ materially from expectations. Our operating results could be negatively affected depending on the amount of revenue and expense denominated in foreign currencies. As exchange rates vary, revenue, cost of revenue, operating expenses, and other operating results, when remeasured in U.S. dollars, may differ materially from expectations. Although we may apply certain strategies to mitigate foreign currency risk, these strategies may not eliminate our exposure to foreign exchange rate fluctuations and would involve costs and risks of their own, such as ongoing management time and expertise, external costs to implement the strategies and potential accounting implications.

Risks Related to Our Common Stock

If there are substantial sales of our common stock, our stock price could decline.

The market price of our common stock could decline as a result of sales of a large number of shares of our common stock in the market, or the perception that these sales could occur. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem attractive. As of December 31, 2022, our ten largest shareholders owned 40.3% of our common stock, including 2.5% of our common stock owned by our Employee Stock Ownership Plan or ESOP. Such stockholders are able to sell their common stock in the public market from time to time without registration, and subject to limitations on the timing, amount and method of those sales imposed by securities laws. If any of these stockholders were to sell a large number of their common stock, the market price of our common stock could decline significantly. In addition, the perception in the public markets that sales by them might occur could also adversely affect the market price of our common stock.

Pursuant to our equity incentive plans, options to purchase approximately 4,037,798 shares of common stock were outstanding as of February 24, 2023. We filed a registration statement under the Securities Act, which covers the shares available for issuance under our equity incentive plans (including for such outstanding options) as well as shares held for resale by our existing stockholders that were previously issued under our equity incentive plans. Such further issuance and resale of our common stock could cause the price of our common stock to decline.

Also, in the future, we may issue our securities in connection with investments and acquisitions. The amount of our common stock issued in connection with an investment or acquisition could constitute a material portion of our then outstanding common stock.

Our capital structure, level of indebtedness and the terms of anti-takeover provisions under Delaware law and in our amended and restated certificate of incorporation and bylaws could diminish the value of our common stock and could make a merger, tender offer or proxy contest difficult or could impede an attempt to replace or remove our directors.

We are a Delaware corporation and the anti-takeover provisions of the Delaware General Corporation Law may discourage, delay or prevent a change in control by prohibiting us from engaging in a business combination with an interested stockholder for a period of three years after the person becomes an interested stockholder, even if a change of control would be beneficial to our existing stockholders. In addition, our certificate of incorporation and bylaws may discourage, delay or prevent a change in our management or control over us that stockholders may consider favorable or make it more difficult for stockholders to replace directors even if stockholders consider it beneficial to do so. Our certificate of incorporation and bylaws:

- authorize the issuance of “blank check” preferred stock that could be issued by our Board of Directors to increase the number of outstanding shares to thwart a takeover attempt,
- prohibit cumulative voting in the election of directors, which would otherwise allow holders of less than a majority of the stock to elect some directors,
- require that vacancies on the Board of Directors, including newly created directorships, be filled only by a majority vote of directors then in office,
- limit who may call special meetings of stockholders,
- prohibit stockholder action by written consent, requiring all stockholder actions to be taken at a meeting of the stockholders, and
- establish advance notice requirements for nominating candidates for election to the Board of Directors or for proposing matters that can be acted upon by stockholders at stockholder meetings.

In addition, Section 203 of the Delaware General Corporation Law may inhibit potential acquisition bids for us. As a public company, we are subject to Section 203, which regulates corporate acquisitions and limits the ability of a holder of 15% or more of our stock from acquiring the rest of our stock. Under Delaware law, a corporation may opt out of the anti-takeover provisions, but we do not intend to do so.

These provisions may prevent a stockholder from receiving the benefit from any premium over the market price of our common stock offered by a bidder in a potential takeover. Even in the absence of an attempt to effect a change in management or a takeover attempt, these provisions may adversely affect the prevailing market price of our common stock if they are viewed as discouraging takeover attempts in the future.

Item 1B. Unresolved Staff Comments

Not Applicable.

Item 2. Properties

Our headquarters are in Jersey City, New Jersey. As of December 31, 2022, our principal offices consisted of the following properties:

Location	Square Feet	Lease Expiration Date
Jersey City, New Jersey	352,765	December 31, 2033
Lehi, Utah	200,000	January 31, 2024
Boston, Massachusetts	115,271	November 30, 2030
London, United Kingdom	50,677	November 29, 2030
Houston, Texas	45,867	April 30, 2034

We also lease offices in 21 states in the U.S., and offices outside the U.S. to support our international operations in Australia, Bahrain, Brazil, Canada, China, Costa Rica, Czech Republic, Denmark, France, Germany, India, Indonesia, Ireland, Israel, Italy, Japan, Kazakhstan, Malaysia, Mexico, Nepal, Netherlands, Poland, Singapore, South Korea, Spain, the United Arab Emirates, and the U.K.

We believe that our properties are in good operating condition and adequately serve our current business operations. We also anticipate that suitable additional or alternative space, including those under lease options, will be available at commercially reasonable terms for future expansion.

Item 3. Legal Proceedings

See [Note 21](#), Commitments and Contingencies, to the consolidated financial statements included in Item 8 Part II of this 10-K for information regarding certain legal proceedings in which we are involved.

Item 4. Mine Safety Disclosures

Not Applicable.

PART II

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

Market Information

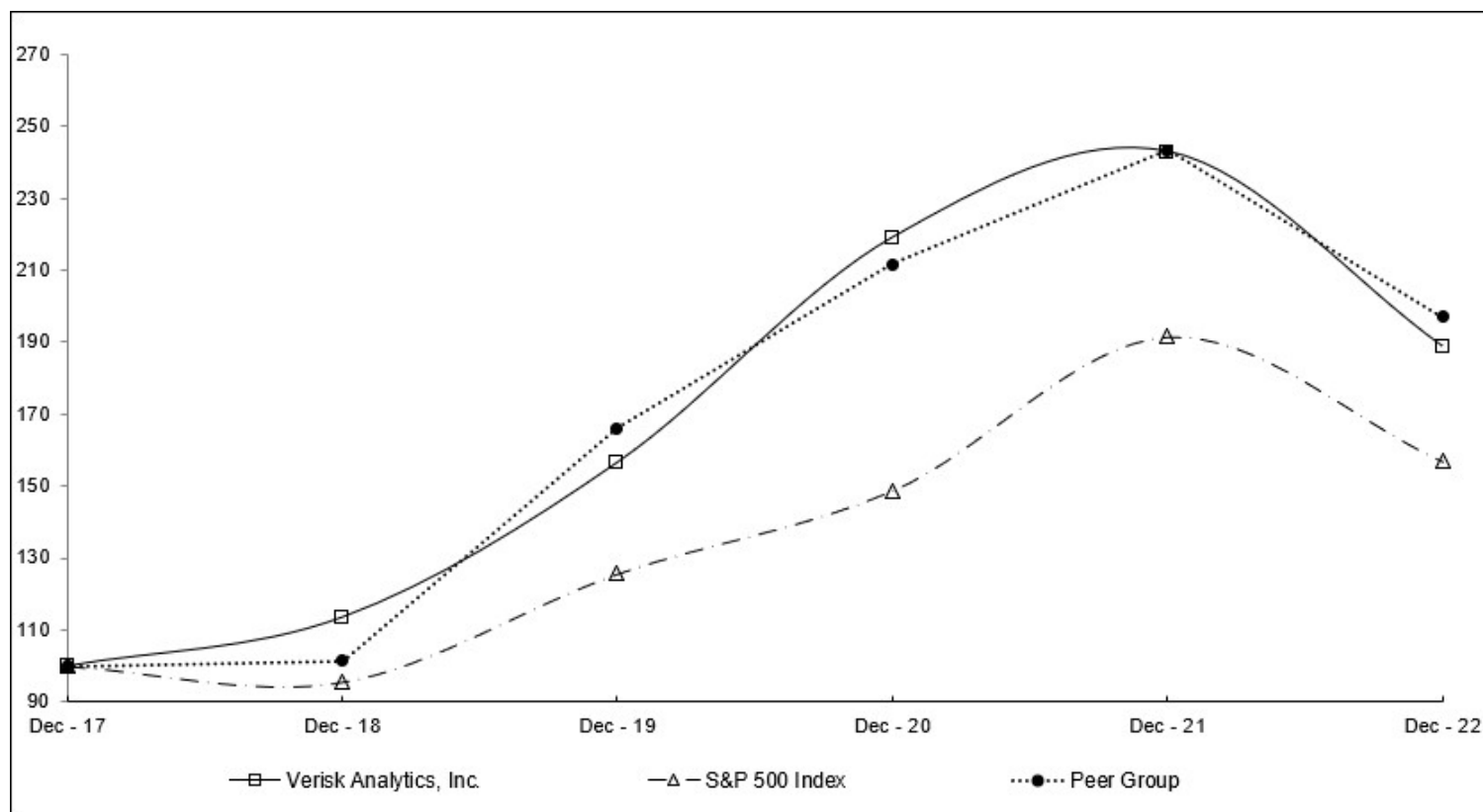
Verisk trades under the ticker symbol "VRSK" on the NASDAQ Global Select Market. As of February 24, 2023, there were approximately 76 stockholders of record. We believe the number of beneficial owners is substantially greater than the number of record holders because a large portion of common stock is held in "street name" by brokers.

On February 16, 2022, April 27, 2022, July 27, 2022, and October 26, 2022, our Board approved a cash dividend of \$0.31 per share of common stock issued and outstanding to the holders of record as of March 15, 2022, June 15, 2022, September 15, 2022, and December 15, 2022, respectively. Cash dividends of \$195.2 million and \$188.2 million were paid during the years ended December 31, 2022 and 2021 and recorded as a reduction to retained earnings, respectively. We have a publicly announced share repurchase plan and repurchased a total of 73,354,544 shares since our IPO through December 31, 2022. As of December 31, 2022, we had 389,301,902 shares of treasury stock.

Performance Graph

The graph below compares the cumulative total stockholder return on \$100 invested in our common stock, with the cumulative total return on \$100 invested in the S&P 500 index and an aggregate of peer issuers in our industry. The peer issuers used for this graph are Black Knight, Inc., CoreLogic Inc. (as of June 3, 2021, CoreLogic was no longer a publicly-traded company), CoStar Group Inc., Equifax Inc., Fair Isaac Corp., Gartner, Inc., Global Payments, Inc., IHS Markit (as of February 26, 2022, IHS Markit was no longer a publicly-traded company), Intercontinental Exchange, Inc., Jack Henry & Associates Inc., Moody's Corporation, MSCI Inc., S&P Global, and TransUnion. The graph assumes that the value of investment in our common stock and each index was \$100 at December 31, 2017 and that all cash dividends were reinvested.

COMPARISON OF CUMULATIVE TOTAL RETURN
Assumes \$100 Invested on December 31, 2017
Assumes Dividend Reinvested
Fiscal Year Ended December 31, 2022



Recent Sales of Unregistered Securities

We had no unregistered sales of equity securities during 2022.

Issuer Purchases of Equity Securities

Under the Repurchase Program, we may repurchase stock in the market or as otherwise determined by us. These authorizations have no expiration dates and may be suspended or terminated at any time. As of December 31, 2022, we had \$441.3 million available to repurchase shares, inclusive of the \$1,000 million authorization approved by the board on February 16, 2022 and \$500 million authorization approved by the board on November 8, 2022. Our share repurchases for the quarter-ended December 31, 2022 are set forth below:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (in millions)
October 1, 2022 through October 31, 2022	469,126(1)	\$ 170.53(1)	469,126	\$ 307.5
November 1, 2022 through November 30, 2022	353,069	\$ 180.04	353,069	\$ 763.9
December 1, 2022 through December 31, 2022	1,561,472(1,2)	\$ 182.56(1,2)	1,561,472	\$ 441.3
	<u>2,383,667(1,2)</u>	<u>\$ 179.82(1,2)</u>	<u>2,383,667</u>	

(1) In September 2022, we entered into an ASR agreement to repurchase shares of our common stock for an aggregate purchase price of \$100.0 million with HSBC Bank USA, N.A. The ASR agreement is accounted for as a treasury stock transaction and a forward stock purchase agreement indexed to our common stock. Upon the payment of the aggregate purchase price of \$100.0 million on October 3, 2022, we received 469,126 shares of our common stock at a price of \$170.53 per share. Upon final settlement in December 2022, we received an additional 108,508 shares as determined by the daily volume weighted average share price of our common stock during the term of the ASR agreement, bringing the total shares received under this ASR agreement to 577,634 and a final average price paid of \$173.12 per share.

(2) In December 2022, we entered into an ASR agreement to repurchase shares of our common stock for an aggregate purchase price of \$250.0 million with Bank of America USA, NA. The ASR agreement is accounted for as a treasury stock transaction and a forward stock purchase agreement indexed to our common stock. Upon the payment of the aggregate purchase price of \$250.0 million on December 14, 2022, we received 1,168,224 shares of our common stock at a price of \$182.01 per share, representing an initial delivery of approximately 85 percent of the aggregate purchase price. Upon the final settlement of this ASR agreement in February of 2023, we received additional shares of 247,487 as determined by the daily volume weighted average share price of our common stock of \$176.68 during the term of this ASR agreement.

Item 6. [Reserved]

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

The following discussion should be read in conjunction with our historical financial statements and the related notes included elsewhere in this annual report on Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those discussed in or implied by any of the forward-looking statements as a result of various factors, including but not limited to those listed under “Risk Factors” and “Special Note Regarding Forward-Looking Statements.” New risks and uncertainties come up from time to time, and it is impossible to predict these events or how they may affect us. We have no obligation to update any forward-looking statements after the date hereof, except as required by applicable federal securities law. This discussion includes a comparison of our results of operations, liquidity and capital resources, financing and financing capacity and cash flow for the years ended December 31, 2022 and 2021.

We are a leading data analytics provider serving customers in the insurance markets. Using advanced technologies to collect and analyze billions of records, we draw on unique data assets and deep domain expertise to provide innovations that may be integrated into customer workflows. We offer predictive analytics and decision support solutions to customers in rating, underwriting, claims, catastrophe and weather risk, global risk analytics, and many other fields. In the U.S., and around the world, we help customers protect people, property, and financial assets. Refer to [Item 1](#). Business for further discussion.

Our customers use our solutions to make better decisions about risk and opportunities with greater efficiency and discipline. We refer to these products and services as “solutions” due to the integration among our services and the flexibility that enables our customers to purchase components or the comprehensive package. These solutions take various forms, including data, statistical models, or tailored analytics, all designed to allow our customers to make more logical decisions. We believe our solutions for analyzing risk positively impact our customers’ revenues and help them better manage their costs.

Recent Developments

On October 28, 2022, we entered into an equity purchase agreement to sell our Energy business to Planet Jersey Buyer Ltd, an entity that was formed on behalf of, and is controlled by, The Veritas Capital Fund VIII, L.P. and its affiliated funds and entities (“Veritas Capital”), for a purchase price of \$3,100.0 million (subject to customary purchase price adjustments for, among other things, the cash, working capital and indebtedness of the Energy business as of the closing) and up to \$200 million of additional contingent cash consideration based on Veritas Capital’s future return on its investment paid through a Class C Partnership interest. This transaction closed on February 1, 2023. The Energy business qualified as held for sale in the fourth quarter of 2022 and was classified as a discontinued operation per the guidance in ASC 205-20, *Discontinued Operations*, as we determined, qualitatively and quantitatively, that this transaction represents a strategic shift that has or will have a major effect on our operations and financial results. Accordingly, all results of the Energy business have been removed from continuing operations and presented as discontinued operations in our consolidated statements of operations and as held for sale assets and liabilities on our balance sheet for all periods presented.

On February 1, 2023, we entered into an agreement to acquire Maveria for a net cash purchase price of \$29.3 million, of which \$4.2 million represents indemnity escrows. Maveria is a Sweden-based InsurTech firm with a strong regional presence and established customer base for its personal injury claims management platform. Maveria will support our expansion in continental Europe and its continued growth as a technology and analytics partner to the global insurance industry.

On January 17, 2023 and February 1, 2023, we made repayments of \$20 million and \$970 million, respectively, under the Syndicated Credit Facility. As a result of this activity, we now have the ability to draw up to \$995.6 million from our Syndicated Credit Facility.

Subsequent to December 31, 2022, the outstanding borrowings under the Bilateral Term Loan Facility of \$125.0 million and the Bilateral Revolving Credit Facility of \$275.0 million were repaid.

Executive Summary

Key Performance Metrics

Revenue growth. We use year-over-year revenue growth as a key performance metric. We assess revenue growth based on our ability to generate increased revenue through increased sales to existing customers, sales to new customers, sales of new or expanded solutions to existing and new customers, and strategic acquisitions of new businesses.

We believe our business’s ability to grow recurring revenue and generate positive cash flow is the key indicator of the successful execution of our business strategy. We use year-over-year revenue and EBITDA growth as metrics to measure our performance. EBITDA and EBITDA margin are non-GAAP financial measures. EBITDA is defined as net income before interest expense, provision for income taxes, and depreciation and amortization of fixed and intangible assets. We calculate EBITDA margin as EBITDA divided by revenues. The respective nearest applicable GAAP financial measures are net income and net income margin. Although EBITDA is a non-GAAP financial measure, EBITDA is frequently used by securities analysts, lenders, and others in their evaluation of companies; EBITDA has limitations as an analytical tool, and should not be considered in isolation, or as a substitute for an analysis of our operating income, net income, or cash flow from operating activities reported under GAAP. Management uses EBITDA and EBITDA margin in conjunction with traditional GAAP operating performance measures as part of its overall assessment company performance. We believe these measures are useful and meaningful because they help us allocate resources, make business decisions, allow for greater transparency regarding our operating performance, and facilitate period-to-period comparisons. Some of these limitations involved in the use of EBITDA are:

- EBITDA does not reflect our cash expenditures, or future requirements for capital expenditures or contractual commitments.
- EBITDA does not reflect changes in, or cash requirements for, our working capital needs.
- Although depreciation and amortization are non-cash charges, the assets being depreciated and amortized often will have to be replaced in the future and EBITDA does not reflect any cash requirements for such replacements.
- Other companies in our industry may calculate EBITDA differently than we do, limiting its usefulness as a comparative measure.

EBITDA growth. We use EBITDA growth as a measure of our ability to balance the size of revenue growth with cost management and investing for future growth. EBITDA growth allows for greater transparency regarding our operating performance and facilitate period-to-period comparison.

EBITDA margin. We use EBITDA margin as a performance measure to assess segment performance and scalability of our business. We assess EBITDA margin based on our ability to increase revenues while controlling expense growth.

Revenues

Our Insurance segment provides underwriting and ratings, and claims insurance data for the U.S. P&C insurance industry. This segment's revenues represented approximately 98% and 90% of our revenues for the years ended December 31, 2022 and 2021, respectively. Our customers in this segment include most of the P&C insurance providers in the U.S. Our former Energy and Specialized Markets segment no longer includes the Energy business as it was classified as a discontinued operation in the fourth quarter of 2022. The Energy and Specialized Markets segment consists of our environmental health and safety business, which was sold on March 11, 2022. Our former Energy and Specialized Markets segment's revenues represented approximately 1% and 5% of our revenues for the years ended December 31, 2022 and 2021. Our former Financial Services segment provided competitive benchmarking, decisioning algorithms, business intelligence, and customized analytic services to financial institutions, payment networks and processors, alternative lenders, regulators and merchants. Our former Financial Services segment's revenues represented approximately 1% and 5% of our revenues for the years ended December 31, 2022 and 2021, respectively.

We earn revenues through agreements for hosted subscriptions, advisory/consulting services, and for transactional solutions, recurring and non-recurring. Subscriptions for our solutions are generally paid in advance of rendering services either quarterly or in full upon commencement of the subscription period, which is usually for one year and automatically renewed each year. As a result, the timing of our cash flows generally precedes our recognition of revenues and income and our cash flow from operations tends to be higher in the first quarter as we receive subscription payments. Examples of these arrangements include subscriptions that allow our customers to access our standardized coverage language, our claims fraud database, or our actuarial services throughout the subscription period. In general, we experience minimal revenue seasonality within the business. Approximately 81% of the revenues in our Insurance segment for the years ended December 31, 2022 and 2021 were derived from hosted subscriptions through agreements (generally one to five years) for our solutions.

We also provide advisory/consulting services, which help our customers get more value out of our analytics and their subscriptions. In addition, certain of our solutions are paid for by our customers on a transactional basis, recurring and non-recurring. For example, we have solutions that allow our customers to access property-specific rating and underwriting information to price a policy on a commercial building, or compare a P&C insurance or a workers' compensation claim with information in our databases, or use our repair cost estimation solutions on a case-by-case basis. For the years ended December 31, 2022 and 2021, approximately 19% of our consolidated revenues were derived from providing transactional and advisory/consulting solutions.

Principal Operating Costs and Expenses

Personnel expenses are a major component of both our cost of revenues and selling, general and administrative expenses. Personnel expenses, which represented approximately 59.2% and 56.3% of our total operating expenses (excluding gains/losses related to dispositions) for each of the years ended December 31, 2022 and 2021, respectively, include salaries, benefits, incentive compensation, equity compensation costs, sales commissions, employment taxes, recruiting costs, and outsourced temporary agency costs.

We assign personnel expenses between two categories, cost of revenues and selling, general and administrative costs, based on the actual costs associated with each employee. We categorize employees who maintain our solutions as cost of revenues, and all other personnel, including executive managers, salespeople, marketing, business development, finance, legal, human resources, and administrative services, as selling, general and administrative expenses. A significant portion of our other operating costs, such as facilities and communications, are either captured within cost of revenues or selling, general and administrative expense based on the nature of the work being performed.

While we expect to grow our headcount over time to take advantage of our market opportunities, we believe that the economies of scale in our operating model will allow us to grow our personnel expenses at a lower rate than revenues. Historically, our EBITDA margin has improved because we have been able to increase revenues without a proportionate corresponding increase in expenses. However, part of our corporate strategy is to invest in new solutions and new businesses, which may offset margin expansion.

Cost of Revenues. Our cost of revenues consists primarily of personnel expenses. Cost of revenues also includes the expenses associated with the acquisition and verification of data, the maintenance of our existing solutions, and the development and enhancement of our next-generation solutions. Our cost of revenues excludes depreciation and amortization.

Selling, General and Administrative Expense. Our selling, general and administrative expense also consists primarily of personnel costs. A portion of the other operating costs such as facilities, insurance, and communications are allocated to selling, general and administrative costs based on the nature of the work being performed by the employee. Our selling, general and administrative expenses excludes depreciation and amortization.

Trends Affecting Our Business

A significant change in P&C insurers' profitability could affect the demand for our solutions. For insurers, the keys to profitability include increasing investment income, premium growth and disciplined and accurate underwriting of risks. Growth in P&C insurers' direct written premiums is cyclical, with total industry premium growth receding from a peak of 14.8% in 2002 to a trough of negative 3.1% in 2009 and subsequently recovering to 5.1% in 2019. In 2020, industry premium growth declined to 2.3% due to the COVID-19 pandemic. Direct premium growth accelerated to 9.5% in 2021 indicating a recovery from the COVID-19 pandemic. Based on the most recent results available, direct written premiums continued to grow in 2022. As the pandemic related issues continue winding down, new economic concerns such as inflation and rising interest rates have risen to the fore. Despite increasing interest rates in 2022, the annualized yield on investments (not attributable to cash transfers from outside the P/C industry) is 2.5% as of nine-months 2022, down from the 2.6% yield for year-end 2021. Both recent results are lower than the historical 15-year average of 3.4%, showing that yields have yet to follow the trend in interest rates.

From 2020 to 2022, insurers were also challenged by heightened catastrophic losses associated with a record number of events that ISO's Property Claims Service had classified as catastrophes. The catastrophes of 2020 included hurricane Laura and the Midwest derecho, as well as multiple wildfires in the Western states, while the most notable events of 2021 included the winter storm in February that left much of Texas without power and Hurricane Ida in August. Calendar year 2022 was marked by Hurricane Ian in September, the deadliest hurricane to strike Florida since 1935. All three of these hurricanes - Laura, Ida, and Ian - are among the strongest hurricanes to ever make landfall in the United States. In Florida specifically, the high overall claim risk, as evidenced by Ian, combined with the litigious environment poses an even greater risk to insurers who have faced two consecutive years with significant net underwriting losses. In California, the Department of Insurance enacted regulations for wildfire mitigation discounts in rating plans and wildfire risk models in response to an insurance affordability crisis in wildfire prone areas. We continue to provide the necessary coverages and data and analytics to meet the changing needs of communities, regulators and insurers as illustrated by these events.

In response to rising inflation, carriers are working to reset pricing to fix loss ratios and improve profitability. This has slowed their marketing spend for customer acquisition. Until premium pricing adjustments take effect and profitability improves, carriers are refraining from spending to drive new policy volume, creating short term impacts on demand and volume for our Marketing Solutions offerings and auto underwriting solutions.

Trends in catastrophe and non-catastrophe losses (such as from weather, climate, casualty, terrorism, pandemics, and tsunamis) can have an effect on our customers' profitability, and therefore on their appetite for buying analytics to help them manage their risks. Any increase or decrease in frequency or severity of these events over time could lead to an increased or decreased demand for our catastrophe modeling, catastrophe loss information, and repair cost solutions. Likewise, any structural changes in the reinsurance and related brokerage industry from alternative capital or newer technologies could affect demand for our products. We also have a portion of our revenue related to the number of claims processed due to losses, which can be impacted by seasonal storm activity. The need by our customers to fight insurance fraud - both in claims and at policy inception - could lead to increased demand for our underwriting and claims solutions.

In the life insurance market, carriers are looking to modernize and digitize their core platforms, as well as offer streamlined underwriting decision-making process to expand the number of policies, which can be offered more rapidly, and without cumbersome medical tests. Our no-code modular technology stack and advanced analytics (such as using electronic health records to model mortality and detecting of tobacco use through voice analysis) enable the digital transformation of our customers' core infrastructure and automate their decision-making processes across the policy lifecycle.

Description of Acquisitions

We acquired thirteen businesses since January 1, 2020. These acquisitions affect the comparability of our consolidated results of operations between periods. See a description of our 2022 acquisitions below and [Note 10](#). Acquisitions to our consolidated financial statements included in this annual report on Form 10-K for further discussions.

On March 1, 2022, we acquired 100 percent of the stock of Opta Information Intelligence Corp. ("Opta") for a net cash purchase price of \$217.5 million excluding working capital adjustments, of which \$0.8 million represents indemnity escrows. Opta, a leading provider of property intelligence and innovative technology solutions in Canada, has become a part of the underwriting & rating category within our Insurance segment. We believe this acquisition further expands our footprint in the Canadian market and supports Verisk in reshaping risk management with valuable business intelligence.

On February 11, 2022, we acquired 100 percent of the membership interest of Infutor Data Solutions ("Infutor") for a net cash purchase price of \$220.7 million excluding working capital adjustments, of which \$1.5 million represents a working capital escrow, plus a contingent earn-out payment of up to \$25.0 million subject to the achievement of certain revenue and other performance targets. Infutor, a leading provider of identity resolution and consumer intelligence data, has become part of the underwriting & rating category within our Insurance segment. We believe this acquisition further enhances Verisk's marketing solutions offerings to companies across several industries, including the insurance industry.

Description of Dispositions and Discontinued Operations

See a description of our 2022 dispositions and businesses held for sale below and [Note 11](#). Dispositions and Discontinued Operations to our consolidated financial statements included in this annual report on Form 10-K for further discussions.

As described above, we completed the sale of our Energy business on February 1, 2023. The Energy business qualified as held for sale in the fourth quarter of 2022 and was classified as a discontinued operation. Accordingly, all results of the Energy business have been removed from continuing operations and presented as discontinued operations in our consolidated statements of operations and as held for sale on the balance sheet for all periods presented.

On April 8, 2022, the sale of Verisk Financial Services, our Financial Services segment, to TransUnion, a global information and insights company, was completed for net cash proceeds of \$498.3 million. An impairment loss of \$73.7 million and a loss on the sale of \$15.6 million were included in "Other operating (income) loss" within our accompanying consolidated statements of operations for the year ended 2022, respectively. We had a \$134.0 million impairment to the long-lived assets for our Financial Services reporting unit including \$88.2 million to intangible assets and \$45.8 million to fixed assets for the year ended 2021. We assessed the sale of our Financial Services segment per the guidance in ASC 205-20, *Discontinued Operations*, and determined that this transaction did not qualify as a discontinued operation as its total revenues and assets did not meet the thresholds exemplified in the guidance, quantitatively or qualitatively, to represent a strategic shift that has or will have a major effect on our operations and financial results. Verisk Financial Services generated revenue of \$37.6 million in 2022.

On March 11, 2022, the sale of our environmental health and safety business ("3E Company Environmental, Ecological and Engineering") within the Energy and Specialized Markets segment, was completed for proceeds of \$575.0 million, net of cash and excluding contingent consideration. In the first quarter of 2022, we recognized a gain of \$450.8 million. The major classes of assets and liabilities disposed of, reflected in our consolidated balance sheets as of March 11, 2022. We assessed the sale of our environmental health and safety business per the guidance in ASC 205-20, *Discontinued Operations*, and determined that this transaction did not qualify as a discontinued operation as its total revenues and assets did not meet the thresholds exemplified in the guidance, quantitatively or qualitatively, to represent a strategic shift that has or will have a major effect on our operations and financial results.

Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

Consolidated Results of Continuing Operations

Revenues

Revenues were \$2,497.0 million for the year ended December 31, 2022 compared to \$2,462.5 million for the year ended December 31, 2021, an increase of \$34.5 million or 1.4%. Our recent acquisitions (Data Driven Safety, LLC, Infutor Data Solutions, LLC, and Opta Information Intelligence Corp. within the underwriting & rating category of the Insurance segment, ACTINEO GmbH, Automated Insurance Solutions Ltd. and Pruvan Inc., within the claims category of the Insurance segment) and dispositions (the Specialized Markets segment and the Financial Services segment) reduced net revenues by \$93.8 million. The remaining growth in consolidated revenues of \$128.3 million or 5.8% is related to increased revenues within our Insurance segment. Refer to the Results of Operations by Segment within this section for more information regarding our revenues.

	2022	2021	Percentage change	Percentage change excluding recent acquisitions, businesses held for sale and disposition
	(in millions)			
Insurance	\$ 2,437.0	\$ 2,206.9	10.4%	5.8%
Energy and Specialized Markets	22.4	112.8	(80.1)%	—%
Financial Services	37.6	142.8	(73.7)%	—%
Total revenues	<u>\$ 2,497.0</u>	<u>\$ 2,462.5</u>	1.4%	5.8%

Cost of Revenues

Cost of revenues was \$824.6 million for the year ended December 31, 2022 compared to \$853.7 million for the year ended December 31, 2021, a decrease of \$29.1 million or 3.4%. Our recent acquisitions and dispositions accounted for a net decrease of \$54.9 million in cost of revenues, which was primarily related to salaries and employee benefits. The remaining cost of revenues of \$25.8 million or 3.6% was primarily due to increases in salaries and employee benefits of \$15.0 million, information technology expenses of \$13.6 million and travel expenses of \$3.5 million. These increases were partially offset by decreases in data costs of \$4.7 million, professional consulting fees of \$0.9 million and other operating cost of \$0.7 million.

Selling, General and Administrative Expenses

Selling, general and administrative expenses ("SGA") were \$381.5 million for the year ended December 31, 2022 compared to \$313.2 million for the year ended December 31, 2021, an increase of \$68.3 million or 21.8%. Our recent acquisitions and dispositions accounted for an increase of \$13.7 million in SGA primarily related to salaries and employee benefits. Our acquisition-related costs (earn-outs) accounted for a decrease of \$3.6 million (See [Note 10](#). Acquisitions to our consolidated financial statements included in this annual report on Form 10-K). The remaining SGA increase of \$58.2 million or 21.3% was primarily due to increases in professional consulting costs of \$49.2 million, travel expenses of \$4.6 million, salaries and employee benefits of \$4.2 million and information technology expenses of \$0.4 million. The increase in professional consulting costs is primarily due to the release of the previously established Xactware Solutions Patent Litigation's ("EVT Litigation Reserve") reserve once the final payment was made in the fourth quarter of 2021 (the original accrual for this matter was recorded as part of SGA). These increases were partially offset by decreases of other operating costs of \$0.2 million.

Depreciation and Amortization of Fixed Assets

Depreciation and amortization of fixed assets was \$164.2 million for the year ended December 31, 2022 compared to \$170.3 million for the year ended December 31, 2021, a decrease of \$6.1 million or 3.6%. The decrease was primarily driven by recent dispositions of \$20.5 million, partially offset by \$13.1 million attributed to assets placed into service to support data capacity expansion and revenue growth and \$1.3 million related to recent acquisitions.

Amortization of Intangible Assets

Amortization of intangible assets was \$74.4 million for the year ended December 31, 2022 compared to \$79.9 million for the year ended December 31, 2021, a decrease of \$5.5 million or 6.9%. The decrease was primarily driven by recent dispositions of \$20.1 million, and intangible assets that were fully amortized of \$8.6 million, partially offset by additional amortization of intangible assets incurred in connection with our recent acquisitions of \$23.2 million.

Other Operating (Income)Loss

Other operating income was a gain of \$354.2 million for the year ended December 31, 2022 compared to a loss of \$134.0 million for the year ended December 31, 2021. This increase of \$488.2 million was primarily related to the net gain from our dispositions within our former Energy and Specialized Markets and Verisk Financial Services segments.

Investment (Loss)Income and Others, Net

Investment (loss)income and others, net was a loss of \$5.3 million for the year ended December 31, 2022 compared to a gain of \$2.1 million for the year ended December 31, 2021. The decrease was primarily due to impact of foreign currencies.

Interest Expense

Interest expense was \$138.8 million for the year ended December 31, 2022 compared to \$127.0 million for the year ended December 31, 2021, an increase of \$11.8 million or 9.3%. The increase in interest expense was primarily due to increased borrowings and higher interest rates on our Syndicated Credit Facility, and the addition of a Bilateral Term Loan Credit Facility during the first quarter of 2022, partially offset by the maturity of our 4.125% senior notes.

Provision for Income Taxes

The provision for income taxes was \$220.3 million for the year ended December 31, 2022 compared to \$179.4 million for the year ended December 31, 2021, an increase of \$40.9 million or 22.8%. The effective tax rate was 17.5% for the year ended December 31, 2022 compared to 22.8% for the year ended December 31, 2021. The decrease in the effective tax rate in 2022 compared to 2021 was primarily due to a tax rate benefit in connection with the sale of our environmental health and safety business for which a benefit was recognized for the difference between book and tax basis of our investment. The 2022 rate was also lower than 2021 due to a \$30.3 million release of a United Kingdom valuation allowance related to interest expense utilization and a reduced Global Intangible Low Taxed Income ("GILTI") inclusion in the current period versus the prior period, partially offset by reduced stock option exercises resulting in lower tax benefits from equity compensation in the current period versus the prior period.

Net Income Margin

The net income margin for our consolidated results was 41.7% for the year ended December 31, 2022 compared to 24.7% for each of the year ended December 31, 2021. The increase in net income margin was primarily related to the net gain from the sale of our environmental health and safety business and the Financial Services segment in addition to an impairment of our Financial Services segment in 2021.

EBITDA Margin [1]

The EBITDA margin for our consolidated results was 65.7% for the year ended December 31, 2022 compared to 47.3% for the year ended December 31, 2021. The increase in EBITDA margin was primarily related to the net gain from our dispositions within our former Energy and Specialized Markets and Verisk Financial Services segments. The increase in EBITDA margin was primarily driven by the net gain from the sale of our environmental health and safety business and the Financial Services segment, which positively impacted our margin by 14.2%.

[1] Note: Consolidated EBITDA margin, a non-GAAP measure, is calculated as a percentage of consolidated revenue. A reconciliation from net income to EBITDA is in the table below:

	Year Ended December 31,	
	2022	2021
Net Income	\$ 954.3	\$ 666.3
Less: (Loss) income from discontinued operations, net of tax (benefit) expense of \$(131.5) and \$29.7, respectively	(87.8)	59.2
Income from continuing operations	1,042.1	607.1
Depreciation and amortization of fixed assets	164.2	170.3
Amortization of intangible assets	74.4	79.9
Interest expense	138.8	127.0
Provision for income taxes	220.3	179.4
EBITDA	\$ 1,639.8	\$ 1,163.7

Revenue	\$	2,497.0	\$	2,462.5
EBITDA Margin		65.7%		47.3%

Results of Continuing Operations by Segment

Our Energy and Specialized Market segment was comprised of two businesses, our Energy business and Specialized Market business. On March 11, 2022, we completed the sale of 3E Company Environmental, Ecological and Engineering, which made up the Specialized Markets within this segment. This transaction did not qualify as a discontinued operation. The Energy business qualified as held for sale in the fourth quarter of 2022 and was classified as a discontinued operation. Accordingly, all results of the Energy business have been removed from continuing operations and presented as discontinued operations in our consolidated statements of operations for all periods presented. On February 1, 2023, we completed the sale of our Energy business.

On April 8, 2022, we completed the sale of Verisk Financial Services, our Financial Services segment, to TransUnion. This transaction did not qualify as a discontinued operation.

As a result of these sale transactions, we have excluded the Energy and Specialized Markets and Financial Services segments from our management's discussion and analysis of the results of operations by segment. See a description of our 2022 dispositions and businesses held for sale below and [Note 11](#). Dispositions and Discontinued Operations to our consolidated financial statements included in this annual report on Form 10-K for further discussions.

Insurance

Revenues

Revenues were \$2,437.0 million for the year ended December 31, 2022 compared to \$2,206.9 million for the year ended December 31, 2021, an increase of \$230.1 million or 10.4%. Our underwriting & rating revenues increased \$179.4 million or 11.5%. Our claims revenues increased \$50.7 million or 7.8%.

	2022	2021	Percentage change	Percentage change excluding recent acquisitions, businesses held for sale and disposition
	(in millions)			
Underwriting & rating	\$ 1,734.5	\$ 1,555.1	11.5%	5.9%
Claims	702.5	651.8	7.8%	5.6%
Total Insurance	<u>\$ 2,437.0</u>	<u>\$ 2,206.9</u>	10.4%	5.8%

Our recent acquisitions (Data Driven Safety, LLC, Infutor Data Solutions, LLC, and Opta Information Intelligence Corp. within the underwriting & rating category of the Insurance segment, ACTINEO GmbH, Automated Insurance Solutions Ltd. and Pruva Inc., within the claims category of the Insurance segment) contributed net revenues of \$101.8 million, while the remaining Insurance revenues increased \$128.3 million or 5.8%. Our underwriting & rating revenues increased \$91.8 million or 5.9% primarily due to an annual increase in prices derived from continued enhancements to the content of the solutions within our industry-standard insurance programs as well as selling expanded solutions to existing customers within commercial and personal lines. In addition, catastrophe modeling services contributed to the growth. Our claims revenues increased \$36.5 million or 5.6%, primarily due to growth in our repair cost estimating solutions revenue and claims analytics revenue related to annual price as well as volume increases.

Cost of Revenues

Cost of revenues for our Insurance segment was \$781.9 million for the year ended December 31, 2022 compared to \$704.4 million for the year ended December 31, 2021, an increase of \$77.5 million or 11.0%. Our recent acquisitions and dispositions represented a net increase of \$51.7 million in cost of revenues, which was primarily related to salaries and employee benefits. The remaining increase in cost of revenues of \$25.8 million or 3.6% was primarily due to increases in salaries and employee benefits of \$15.0 million, information technology expenses of \$13.6 million and travel expenses of \$3.5 million. These increases were partially offset by decreases in data costs of \$4.7 million, professional consulting fees of \$0.9 million and other operating cost of \$0.7 million.

Selling, General and Administrative Expenses

SGA expenses for our Insurance segment were \$347.4 million for the year ended December 31, 2022 compared to \$239.1 million for the year ended December 31, 2021, an increase of \$108.3 million or 45.3%. Our recent acquisitions and dispositions accounted for an increase of \$53.7 million primarily related to salaries and employee benefits. Our acquisition-related costs (earn-outs) accounted for a decrease of \$3.6 million. The remaining increase in SGA of \$58.2 million or 21.3% was primarily due to increases in professional consulting costs of \$49.2 million, travel expenses of \$4.6 million, salaries and employee benefits of \$4.2 million and information technology expenses of \$0.4 million. The increase in professional consulting costs is primarily due to the release of the previously established EVT Litigation Reserve once the final payment was made in the fourth quarter of 2021 (the original accrual for this matter was recorded as part of SGA). These increases were partially offset by decreases of other operating costs of \$0.2 million.

Investment (Loss) Income and Others, Net

Investment (loss) income and others, net was a loss of \$4.7 million for the year ended December 31, 2022 compared to a gain of \$1.8 million for the year ended December 31, 2021. The decrease was primarily due to impact of foreign currencies.

EBITDA

EBITDA for our Insurance segment was \$1,303.0 million for the year ended December 31, 2022 compared to \$1,265.2 million for the year ended December 31, 2021. The EBITDA margin for our Insurance segment was 53.5% for the year ended December 31, 2022 compared to 57.3% for the year ended December 31, 2021. The decrease in EBITDA was primarily due to the release of the previously established EVT Litigation Reserve during the fourth quarter of 2021.

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Consolidated Results of Continuing Operations

Revenues

Revenues were \$2,462.5 million for the year ended December 31, 2021 compared to \$2,269.4 million for the year ended December 31, 2020, an increase of \$193.1 million or 8.5%. Our recent acquisitions (Franco Signor, Jornaya, Whitespace, Ignite Software Systems, Data Driven Safety within the underwriting & rating category of the Insurance segment, and ACTINEO within the claims category of the Insurance segment) and dispositions (the aerial imagery sourcing group and the compliance background screening business within the claims category of the Insurance segment and the data warehouse business within the Financial Services segment) increased net revenues by \$50.9 million. The remaining growth in consolidated revenues of \$142.2 million or 6.3% is primarily related to increased revenues within our Insurance segment. Refer to the Results of Operations by Segment within this section for more information regarding our revenues.

	2021	2020	Percentage change	Percentage change excluding recent acquisitions, businesses held for sale and disposition
	(in millions)			
Insurance	\$ 2,206.9	\$ 2,008.7	9.9%	7.3%
Energy and Specialized Markets	112.8	104.0	8.5%	8.5%
Financial Services	142.8	156.7	(8.9)%	(8.1)%
Total revenues	<u>\$ 2,462.5</u>	<u>\$ 2,269.4</u>	<u>8.5%</u>	<u>6.3%</u>

Cost of Revenue

Cost of revenues was \$853.7 million for the year ended December 31, 2021 compared to \$791.7 million for the year ended December 31, 2020, an increase of \$62.0 million or 7.8%. Our recent acquisitions and dispositions accounted for a net increase of \$12.3 million in cost of revenues, which was primarily related to salaries and employee benefits. The remaining cost of revenues of \$49.7 million or 6.3% was primarily due to increases in salaries and employee benefits of \$26.7 million, information technology expenses of \$17.6 million, professional consulting fees of \$2.4 million, data cost of \$0.7 million and other operating cost of \$3.6 million. These increases were partially offset by a decrease in travel expense of \$1.3 million.

Selling, General and Administrative Expenses

Selling, general and administrative expenses ("SGA") were \$313.2 million for the year ended December 31, 2021 compared to \$308.2 million for the year ended December 31, 2020, an increase of \$5.0 million or 1.6%. Our recent acquisitions and dispositions accounted for an increase of \$14.6 million in SGA primarily related to salaries and employee benefits. Our acquisition-related costs (earn-outs) accounted for a decrease of \$2.0 million (See [Note 10](#), Acquisitions to our consolidated financial statements included in this annual report on Form 10-K). The remaining SGA decrease of \$7.6 million or 2.5% was primarily due to decreases in professional consulting costs of \$37.9 million, travel expenses of \$1.4 million and other operating cost of \$0.2 million. The decrease in professional consulting costs is primarily due to the release of the previously established Xactware Solutions Patent Litigation's ("EVT Litigation Reserve") reserve once the final payment was made in the fourth quarter of 2021 (the original accrual for this matter was recorded as part of SGA). These decreases were partially offset by increases of salaries and employee benefits of \$28.2 million and information technology expenses of \$3.8 million.

Depreciation and Amortization of Fixed Assets

Depreciation and amortization of fixed assets was \$170.3 million for the year ended December 31, 2021 compared to \$159.2 million for the year ended December 31, 2020, an increase of \$11.0 million or 6.9%. The increase was primarily attributed to \$11.8 million assets placed into service to support data capacity expansion and revenue growth and \$0.4 million related to recent acquisitions, partially offset by recent dispositions of \$1.2 million.

Amortization of Intangible Assets

Amortization of intangible assets was \$79.9 million for the year ended December 31, 2021 compared to \$73.4 million for the year ended December 31, 2020, an increase of \$6.5 million or 9.0%. This increase was primarily driven by the additional amortization of intangible assets incurred in connection with our recent acquisitions of \$11.2 million, partially offset by intangible assets that were fully amortized of \$4.5 million and our recent dispositions of \$0.2 million.

Other Operating Income(Loss)

Other operating income was a loss of \$134.0 million for the year ended December 31, 2021 compared to a gain of \$19.4 million for the year ended December 31, 2020. This decrease of \$153.6 million was primarily related to the long-lived impairment loss associated with our Financial Services segment recorded in the current period and gains associated with the dispositions of our compliance background screening business and data warehouse business that were recorded in 2020.

Investment (Loss)Income and Others, Net

Investment (loss) income and others, net was a gain of \$2.1 million for the year ended December 31, 2021 compared to a gain of \$0.4 million for the year ended December 31, 2020. The increase was primarily due to impact of foreign currencies.

Interest Expense

Interest expense was \$127.0 million for the year ended December 31, 2021 compared to \$138.3 million for the year ended December 31, 2020, a decrease of \$11.3 million or 8.2%. We repaid our 5.800% senior notes in May 2021, which contributed to a lower interest expense.

Provision for Income Taxes

The provision for income taxes was \$179.4 million for the year ended December 31, 2021 compared to \$164.6 million for the year ended December 31, 2020, an increase of \$14.8 million or 9.0%. The effective tax rate was 22.8% for the year ended December 31, 2021 compared to 20.1% for the year ended December 31, 2020. The increase in the effective tax rate in 2021 compared to 2020 was primarily due to the deferred tax impact of the tax rate increase in the United Kingdom that was enacted and recorded in 2021 and the impact of higher tax benefits from equity compensation in the prior period versus the current period.

Net Income Margin

The net income margin for our consolidated results was 24.7% for the year ended December 31, 2021 compared to 28.8% for each of the year ended December 31, 2020. The decrease in net income margin was primarily related to the long-lived asset impairment loss associated with our Financial Services segment.

EBITDA Margin [1]

The EBITDA margin for our consolidated results was 47.3% for the year ended December 31, 2021 compared to 52.4% for the year ended December 31, 2020. The decrease in EBITDA margin was primarily related to the long-lived asset impairment loss associated with our Financial Services segment, partially offset by the release of the previously established EVT Litigation Reserve once the final payment was made in December 2021.

[1] Note: Consolidated EBITDA margin, a non-GAAP measure, is calculated as a percentage of consolidated revenue. A reconciliation from net income to EBITDA is in the table below:

	Year Ended December 31,	
	2021	2020
Net Income	\$ 666.3	\$ 712.7
Less: Income from discontinued operations, net of tax expense of \$29.7 and \$20.1, respectively	59.2	58.9
Income from continuing operations	607.1	653.8
Depreciation and amortization of fixed assets	170.3	159.2
Amortization of intangible assets	79.9	73.4
Interest expense	127.0	138.3
Provision for income taxes	179.4	164.6
EBITDA	\$ 1,163.7	\$ 1,189.3
Revenue	\$ 2,462.5	\$ 2,269.4
EBITDA Margin	47.3%	52.4%

Results of Continuing Operations by Segment

As previously described in our “Results of Continuing Operations by Segment for year ended December 31, 2022 compared to year ended December 31, 2021, we have excluded Energy and Specialized Markets segment and Financial Services segment from the results of operations by segment due to the sale of these two segments. See a description of our 2022 dispositions and businesses held for sale below and [Note 11](#). Dispositions and Discontinued Operations to our consolidated financial statements included in this annual report on Form 10-K for further discussions.

Insurance

Revenues

Revenues were \$2,206.9 million for the year ended December 31, 2021 compared to \$2,008.7 million for the year ended December 31, 2020, an increase of \$198.2 million or 9.9%. Our underwriting & rating revenues increased \$142.1 million or 10.1%. Our claims revenues increased \$56.1 million or 9.4%.

	2021	2020	Percentage change	Percentage change excluding recent acquisitions, businesses held for sale and disposition
	(in millions)			
Underwriting & rating	\$ 1,555.1	\$ 1,413.0	10.1%	7.2%
Claims	651.8	595.7	9.4%	7.5%
Total Insurance	<u>\$ 2,206.9</u>	<u>\$ 2,008.7</u>	<u>9.9%</u>	<u>7.3%</u>

Our recent acquisitions (Franco Signor, Jornaya, Whitespace, Ignite Software Systems, and Data Driven Safety within the underwriting & rating category and ACTINEO within the claims category) and dispositions (the aerial imagery sourcing group and the compliance background screening business within the claims category) contributed net revenues of \$52.2 million, while the remaining Insurance revenues increased \$146.0 million or 7.3%. Our underwriting & rating revenues increased \$101.7 million or 7.2% primarily due to an annual increase in prices derived from continued enhancements to the content of the solutions within our industry-standard insurance programs as well as selling expanded solutions to existing customers within commercial and personal lines. In addition, catastrophe modeling services contributed to the growth. Our claims revenues increased \$44.3 million or 7.5%, primarily due to growth in our repair cost estimating solutions revenue and claims analytics revenue related to annual price as well as volume increases.

Cost of Revenues

Cost of revenues for our Insurance segment was \$704.4 million for the year ended December 31, 2021 compared to \$644.4 million for the year ended December 31, 2020, an increase of \$60.0 million or 9.3%. Our recent acquisitions and dispositions represented a net increase of \$13.0 million in cost of revenues, which was primarily related to salaries and employee benefits. The remaining increase in cost of revenues of \$47.0 million or 7.4% was primarily due to increases in salaries and employee benefits of \$25.4 million, information technology expenses of \$16.5 million, professional consulting fees of \$2.9 million, data cost of \$2.0 million and other operating cost of \$0.8 million. These increases were partially offset by a decrease in travel expense of \$0.6 million.

Selling, General and Administrative Expenses

SG&A expenses for our Insurance segment were \$239.1 million for the year ended December 31, 2021 compared to \$248.1 million for the year ended December 31, 2020, a decrease of \$9.0 million or 3.6%. Our recent acquisitions and dispositions accounted for an increase of \$15.1 million primarily related to salaries and employee benefits. Our acquisition-related costs (earn-outs) accounted for a decrease of \$2.0 million. The remaining decrease in SGA of \$22.1 million or 9.1% was primarily due to decreases in professional consulting costs of \$42.2 million, travel expenses of \$1.2 million and other operating cost of \$0.7 million. The decrease in professional consulting fees was primarily due to the release of the previously established EVT Litigation Reserve once the final payment was made in the fourth quarter of 2021 (the original accrual for this matter was recorded as part of SGA). These decreases were partially offset by increases of salaries and employee benefits of \$19.5 million and information technology expenses of \$2.6 million.

Investment (Loss) Income and Others, Net

Investment (loss) income and others, net was a gain of \$1.8 million for the year ended December 31, 2021 compared to a gain of \$0.3 million for the year ended December 31, 2020. The gain was primarily due to impact of foreign currencies.

EBITDA

EBITDA for our Insurance segment was \$1,265.2 million for the year ended December 31, 2021 compared to \$1,132.4 million for the year ended December 31, 2020. The EBITDA margin for our Insurance segment was 57.3% for the year ended December 31, 2021 compared to 56.4% for the year ended December 31, 2020. The increase in EBITDA was primarily due to the release of the previously established EVT Litigation Reserve once the final

payment was made in the fourth quarter of 2021, a reduction in travel expenses as a result of COVID-19, and cost discipline.

Quarterly Results of Operations

The following table set forth our quarterly unaudited consolidated statement of operations data for each of the eight quarters in the period ended December 31, 2022. In management's opinion, the quarterly data has been prepared on the same basis as the audited consolidated financial statements and includes all adjustments necessary to state fairly the information for the periods presented. Our Energy business is classified as discontinued operations.

	March 31,	June 30,	September 30,	December 31,
	2022			
	(in millions, except for per share data)			
Statement of operations data:				
Revenues	\$ 643.6	\$ 612.9	\$ 610.1	\$ 630.4
Cost of revenue	228.7	195.5	195.2	205.2
Operating income	622.8	247.6	253.6	282.5
Income from continuing operations	487.0	173.5	165.8	215.8
Net Income attributable to Verisk	505.7	197.6	189.4	61.2
Basic earnings per share:				
Income from continuing operations	\$ 3.03	\$ 1.10	\$ 1.06	\$ 1.38
Net income attributable to Verisk	\$ 3.15	\$ 1.25	\$ 1.21	\$ 0.39
Diluted earnings per share:				
Income from continuing operations	\$ 3.01	\$ 1.09	\$ 1.05	\$ 1.37
Net income attributable to Verisk	\$ 3.13	\$ 1.24	\$ 1.20	\$ 0.39

	March 31,	June 30,	September 30,	December 31,
	2021			
	(in millions, except for per share data)			
Statement of operations data:				
Revenues	\$ 597.2	\$ 613.1	\$ 621.9	\$ 630.3
Cost of revenue	212.5	212.6	212.4	216.2
Operating income	227.2	246.9	266.2	171.1
Income from continuing operations	147.0	159.2	182.6	118.3
Net income attributable to Verisk	168.6	153.9	201.8	141.9
Basic earnings per share:				
Income from continuing operations	\$ 0.90	\$ 0.98	\$ 1.13	\$ 0.73
Net income attributable to Verisk	\$ 1.04	\$ 0.95	\$ 1.25	\$ 0.88
Diluted earnings per share:				
Income from continuing operations	\$ 0.89	\$ 0.98	\$ 1.12	\$ 0.73
Net income attributable to Verisk	\$ 1.03	\$ 0.94	\$ 1.24	\$ 0.87

Liquidity and Capital Resources

As of December 31, 2022 and 2021, we had cash and cash equivalents and available-for-sale securities of \$296.7 million and \$285.3 million, respectively, inclusive of cash included within assets held for sale. Subscriptions for our solutions are billed and generally paid in advance of rendering services either quarterly or in full upon commencement of the subscription period, which is usually for one year. Subscriptions are automatically renewed at the beginning of each calendar year. We have historically generated significant cash flows from operations. As a result of this factor, as well as the availability of funds under our Syndicated Credit Facility (as defined below) and the Bilateral Revolving Credit Facility (as defined below), we believe we will have sufficient cash to meet our working capital, human capital and capital expenditure needs, and to fuel our future growth plans.

We have historically managed the business with a working capital deficit due to the fact that, as described above, we offer our solutions and services primarily through annual subscriptions or long-term contracts, which are generally prepaid quarterly or annually in advance of the services being rendered. When cash is received for prepayment of invoices, we record an asset (cash and cash equivalents) on our balance sheet with the offset recorded as a current liability (deferred revenues). This current liability is deferred revenue that does not require a direct cash outflow since our customers have prepaid and are obligated to purchase the services. In most businesses, growth in revenue typically leads to an increase in the accounts receivable balance causing a use of cash as a company grows. Unlike these businesses, our cash position is favorably affected by revenue growth, which results in a source of cash due to our customers prepaying for most of our services.

Our capital expenditures as a percentage of revenues for the years ended December 31, 2022 and 2021, were 8.1% and 8.5%, respectively. Expenditures related to developing and enhancing our solutions are predominately related to internal-use software and are capitalized in accordance with ASC 350-40, “*Accounting for Costs of Computer Software Developed or Obtained for Internal Use*.” We also capitalize amounts in accordance with ASC 985-20, “*Software to be Sold, Leased or Otherwise Marketed*.”

We have historically used a portion of our cash for repurchases of our common stock from our stockholders. For the years ended December 31, 2022, 2021, and 2020, we repurchased \$1,662.5 million, \$475.0 million and \$348.8 million, respectively, of our common stock. For the years ended December 31, 2022, 2021, and 2020, we also paid dividends of \$195.2 million, \$188.2 million, and \$175.8 million, respectively.

Financing and Financing Capacity

We had total debt, excluding finance lease obligations, unamortized discounts and premium, and debt issuance costs of \$3,740.0 million and \$3,310.0 million at December 31, 2022 and 2021, respectively. The debt at December 31, 2022 primarily consists of senior notes issued in 2020, 2019 and 2015 and borrowings outstanding under our committed senior unsecured syndicated revolving credit facility (“Syndicated Credit Facility”), described below, our bilateral revolving credit facility (“Bilateral Revolving Credit Facility”) and our bilateral term loan credit facility (“Bilateral Term Loan Credit Facility”). Together, the Syndicated Credit Facility, the Bilateral Revolving Credit Facility, the Bilateral Term Loan Credit Facility are referred to as our “Credit Facilities”. Interest on the senior notes is payable semi-annually each year. The unamortized discount and debt issuance costs were recorded as “Long-term debt” in the accompanying consolidated balance sheets, and will be amortized to “Interest expense” in the accompanying consolidated statements of operations within this Form 10-K over the life of the respective senior note. The indenture governing the senior notes restricts our ability to, among other things, create certain liens, enter into sale/leaseback transactions and consolidate with, sell, lease, convey, or otherwise transfer all or substantially all of our assets, or merge with or into, any other person or entity. As of December 31, 2022, we had senior notes with an aggregate principal amount of \$2,350.0 million outstanding, and we were in compliance with our financial and non-financial debt covenants.

We have a \$1,000.0 million Syndicated Credit Facility with Bank of America N.A., HSBC Bank USA, N.A., JP Morgan Chase Bank, N.A., Wells Fargo Bank, National Association, Citibank, N.A., Credit Suisse AG, Cayman Islands Branch, Morgan Stanley Bank, N.A., First Commercial Bank, Ltd., Los Angeles Branch, TD Bank, N.A., and the Northern Trust Company. The financial covenants thereunder require that, at the end of any fiscal quarter, we have a consolidated funded debt leverage ratio of less than 3.5 to 1.0. At our election, the maximum consolidated funded debt leverage ratio could be permitted to increase one time each to 4.0 to 1.0 and 4.25 to 1.0. The Syndicated Credit Facility may be used for general corporate purposes, including working capital needs and capital expenditures, acquisitions, dividends and the share repurchase program (the “Repurchase Program”). As of December 31, 2022, we were in compliance with all financial and other debt covenants under the Syndicated Credit Facility. As of December 31, 2022 and 2021, the available capacity under the Syndicated Credit Facility was \$5.6 million and \$384.9 million, net of the letters of credit of \$4.4 million and \$5.1 million, respectively. Subsequent to December 31, 2022 we have made repayments of \$990.0 million under the Syndicated Credit Facility. As a result of this activity, we now have the ability to draw up to \$995.6 million from our Syndicated Credit Facility.

On March 11, 2022, we entered into a \$125.0 million Bilateral Term Loan Credit Facility with Bank of America, N.A with an agreed maturity date of September 12, 2022. On September 9, 2022, we amended the Bilateral Term Loan Credit Facility to provide a one-year extension with an agreed maturity date of September 9, 2023. Subsequent to December 31, 2022, we repaid the full \$125.0 million outstanding principal amount under our Bilateral Term Loan Credit Facility agreement.

On September 9, 2022 we also added a 364-day \$275.0 million Bilateral Revolving Credit Facility to be available starting October 3, 2022. The Bilateral Revolving Credit Facility carry an interest rate of 135 basis points plus the one-month BSBY margin at the time. The Bilateral Revolving Credit Facility may be used for general corporate purposes, including working capital needs and capital expenditures, acquisitions, dividend payments, and the Repurchase Program. In December 2022, we borrowed \$275.0 million on the Bilateral Revolving Credit Facility, of which \$250.0 million was utilized for share repurchases in the fourth quarter of 2022. Subsequent to December 31, 2022, we repaid the full \$275.0 million outstanding principal amount under our Bilateral Revolving Credit Facility.

Cash Flow

The following table summarizes our cash flow data for the years ended December 31:

	2022	2021	2020
	(in millions)		
Net cash provided by operating activities	\$ 1,059.0	\$ 1,155.7	\$ 1,068.2
Net cash provided by (used in) investing activities	\$ 301.4	\$ (592.0)	\$ (595.8)
Net cash used in financing activities	\$ (1,330.2)	\$ (498.9)	\$ (445.2)

Operating Activities

Net cash provided by operating activities was \$1,059.0 million for the year ended December 31, 2022 compared to \$1,155.7 million for the year ended December 31, 2021, a decrease of \$96.7 million, or 8.4%. The decrease is primarily related to the sale of our environmental health and safety business ("3E") and Financial Services segment, as well as an increase in tax payments of \$310.8 million primarily due to the gain on the sale of 3E, partially offset by an impairment related to the Financial Services segment and the Energy business of \$243.4 million and the prior year settlement of our EVT litigation reserve of \$75.0 million.

Net cash provided by operating activities was \$1,155.7 million for the year ended December 31, 2021 compared to \$1,068.2 million for the year ended December 31, 2020, an increase of \$87.5 million, or 8.2%. The increase was primarily due to an increase in operating profit, exclusive of the non-cash impairment of long-lived assets, and customer collections, partially offset by the settlement of our EVT litigation reserve of \$75.0 million.

Investing Activities

Net cash provided by investing activities of \$301.4 million for the year ended December 31, 2022 was primarily related to the \$1,073.3 million in proceeds from the sale of 3E and our Financial Services segment, partially offset by acquisitions and purchase of non-controlling interest, including escrow funding associated with these acquisitions, of \$451.2 million, capital expenditures of \$274.7 million and investments in nonpublic companies of \$46.0 million.

Net cash used in investing activities of \$592.0 million for the year ended December 31, 2021 was primarily related to acquisitions, including escrow funding associated with these acquisitions, of \$299.0 million, capital expenditures of \$268.4 million, and investments in nonpublic companies of \$23.6 million.

Net cash used in investing activities of \$595.8 million for the year ended December 31, 2020 was primarily related to acquisitions, including escrow funding associated with these acquisitions, of \$285.1 million, investing in nonpublic companies of \$94.8 million, and capital expenditures of \$246.8 million, partially offset by the sale of our background screening business within our Insurance segment of \$23.1 million.

Financing Activities

Net cash used in financing activities of \$1,330.2 million for the year ended December 31, 2022 was primarily related to repurchases of common stock of \$1,662.5 million, repayment of our \$350.0 million 4.125% senior notes on September 12, 2022, and dividend payments of \$195.2 million, partially offset by proceeds under our Bilateral Term Loan Credit Facility of \$125.0 million, proceeds from our Bilateral Revolving Credit Facility of \$275.0 million, proceeds, net of repayments of debt under our Syndicated Credit Facility of \$380.0 million and proceeds from stock options exercised of \$132.5 million.

Net cash used in financing activities of \$498.9 million for the year ended December 31, 2021 was primarily related to repurchases of common stock of \$475.0 million, repayment of our \$450.0 million 5.800% senior notes on May 3, 2021, and dividend payments of \$188.2 million, partially offset by proceeds, net of repayments, from our Syndicated Credit Facility of \$560.0 million and proceeds from stock options exercised of \$84.3 million.

Net cash used in financing activities of \$445.2 million for the year ended December 31, 2020 was primarily related to proceeds, net of repayments of debt from our Syndicated Credit Facility of \$445.0 million, repurchases of common stock of \$348.8 million, and dividend payments of \$175.8 million, partially offset by proceeds from the issuance of long-term debt and net of original discount, of \$494.8 million, and proceeds from stock options exercised of \$88.0 million.

Contractual Obligations

The following table summarizes our contractual obligations at December 31, 2022 and the future periods in which such obligations are expected to be settled in cash:

	Payments Due by Period				
	Total	Less than 1 year	2-3 years (in millions)	4-5 years	More than 5 years
Contractual obligations					
Long-term debt, current portion of long-term debt and interest	\$ 4,915.1	\$ 1,492.5	\$ 1,076.8	\$ 124.3	\$ 2,221.5
Operating leases	263.4	34.6	57.0	52.8	119.0
Pension and postretirement plans (1)	12.8	1.6	3.0	2.5	5.7
Finance lease obligations	4.3	3.1	1.1	0.1	—
Total (2)	<u>\$ 5,195.6</u>	<u>\$ 1,531.8</u>	<u>\$ 1,137.9</u>	<u>\$ 179.7</u>	<u>\$ 2,346.2</u>

- (1) Our funding policy is to contribute at least equal to the minimum legal funding requirement.
- (2) Unrecognized tax benefits of approximately \$3.2 million have been recorded as liabilities in accordance with *Accounting for Uncertainty in Income Taxes — an interpretation of ASC 740*, which have been omitted from the table above, and we are uncertain as to if or when such amounts may be settled, with the exception of those amounts subject to a statute of limitation. Related to the unrecognized tax benefits, we also have recorded a liability for potential penalties and interest of \$0.4 million.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements.

Critical Accounting Policies and Estimates

Our management's discussion and analysis of financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements require management to make estimates and judgments that affect reported amounts of assets and liabilities and related disclosures of contingent assets and liabilities at the dates of the financial statements and revenue and expenses during the reporting periods. These estimates are based on historical experience and on other assumptions that are believed to be reasonable under the circumstances. On an ongoing basis, management evaluates its estimates, including those related to revenue recognition, goodwill and intangible assets, pension and other postretirement benefits, stock-based compensation, and income taxes. Actual results may differ from these assumptions or conditions.

Revenue Recognition

We recognize revenue based on the transfer of promised goods or services to customers for the amount that reflects the consideration to which we expect to be entitled in exchange for those goods or services. Revenue is recognized in a five-step model: 1) identify the contract with a customer; 2) identify the performance obligations in the contract; 3) determine the transaction price; 4) allocate the transaction price to the performance obligations in the contract; and 5) recognize revenue when or as we satisfy a performance obligation. Revenues for hosted subscription services are recognized ratably over the subscription term. Revenues from certain discrete project based advisory/consulting services are recognized over time by measuring the progress toward complete satisfaction of the performance obligation, based on the input method of consulting hours worked; this aligns with the results achieved and value transferred to the customer. Revenues from transactional solutions are recognized as the solutions are delivered or services performed at point in time.

We invoice our customers in annual, quarterly, or monthly installments. Amounts billed and collected in advance are recorded as deferred revenues on the balance sheet and are recognized as the services are performed and revenue recognition criteria are met.

Stock-Based Compensation

Stock-based compensation cost, including stock options, restricted stock, and performance share units ("PSUs"), is measured at the grant date, based on the fair value of the awards granted, and is recognized as expense over the requisite service period. The fair value of stock options is measured using a Black-Scholes option-pricing model, which requires the use of several estimates, including expected term, expected risk-free interest rate, expected volatility, and expected dividend yield. The fair value of the restricted stock is determined using the closing price of our common stock on the grant date. The fair value of PSUs is determined on the grant date using the Monte Carlo Simulation model.

Option grants and restricted stock awards are generally expensed ratably over the four-year vesting period. PSUs are generally expensed ratably over the three-year vesting period. We follow the substantive vesting period approach for awards granted after January 1, 2005, which requires that stock-based compensation expense be recognized over the period from the date of grant to the date when the award is no longer contingent on the employee providing additional service.

We estimate expected forfeitures of equity awards at the date of grant and recognize compensation expense only for those awards expected to vest. The forfeiture assumption is ultimately adjusted to the actual forfeiture rate.

Goodwill and Intangibles

Goodwill represents the excess of acquisition costs over the fair value of tangible net assets and identifiable intangible assets of the businesses acquired. Goodwill and intangible assets deemed to have indefinite lives are not amortized. Intangible assets determined to have definite lives are amortized over their useful lives. Goodwill and intangible assets with indefinite lives are subject to impairment testing annually as of June 30, or whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable, using the guidance and criteria described in the accounting standard for *Goodwill and Other Intangible Assets*. This testing compares carrying values to fair values and, when appropriate, the carrying value of these assets is reduced to fair value.

As of December 31, 2022, we had goodwill from continuing operations of \$1,676.0 million, which represents 24.1% of our total assets. During 2022, we performed an impairment test as of June 30, 2022 and confirmed that no impairment charge was necessary as the fair value of each reporting unit exceeded its carrying value. Subsequent to performing our annual impairment test, we continued to monitor these reporting units for events that would trigger an interim impairment test; other than the impairment of the Energy business that was triggered once the entity was classified as held for sale, we did not identify any other triggering events. There are many assumptions and estimates used that directly impact the results of impairment testing, including an estimate of future expected revenues, EBITDA, EBITDA margins and cash flows, useful lives and discount rates, and an estimate of value using multiples derived from the stock prices of publicly traded guideline companies applied to such expected cash flows and market approaches in order to estimate fair value. We have the ability to influence the outcome and ultimate results based on the assumptions and estimates we choose for determining the fair value of our reporting units. To mitigate undue influence, we set criteria and benchmarks that are reviewed and approved by various levels of management and reviewed by other independent parties. The determination of whether or not goodwill or indefinite-lived acquired intangible assets have become impaired involves a significant level of judgment in the assumptions and estimates underlying the approach used to determine the value of our reporting units. Changes in our strategy or market conditions could significantly impact these judgments and require an impairment to be recorded to intangible assets and goodwill.

In connection with the held for sale classification of the Energy business, we recognized an impairment of \$303.7 million, partially offset by a deferred tax benefit of \$75.9 million on the remeasurement of the disposal group held for sale, which has been included in discontinued operations in our consolidated statement of operations for the year ended December 31, 2022. Upon classification of the Energy business as held for sale, its cumulative foreign currency translation adjustment within shareholders' equity was included with its carrying value, which primarily resulted in the impairment.

Due to the deterioration in the performance of our former Financial Services reporting unit and the finalization of the sale price, we reassessed the recoverability of these long-lived assets during the first quarter of 2022, resulting in a \$73.7 million impairment. In the fourth quarter of 2021, we recognized a \$134.0 million impairment to the long-lived assets for our Financial Services reporting unit including \$88.2 million to intangible assets and \$45.8 million to fixed assets. These impairments are included within "Other operating income, net" in our consolidated statements of operations.

We allocate the fair value of the purchase consideration to the tangible assets acquired, liabilities assumed and intangible assets acquired based on their estimated fair values. The excess of the fair value of the purchase consideration over the fair values of these identifiable assets and liabilities is recorded as goodwill. Such valuations require management to make significant estimates and assumptions, especially with respect to intangible assets. The estimates used in valuing the intangible assets are determined with the assistance of third-party specialists, a discounted cash flow analysis and estimates made by management. Management's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates. During the measurement period, which is not to exceed one year from the acquisition date, we may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings.

Pension and Postretirement

Certain assumptions are used in the determination of our annual net period benefit (credit) cost and the disclosure of the funded status of these plans. The principal assumptions concern the discount rate used to measure the projected benefit obligation and the expected return on plan assets. We revise these assumptions based on an annual evaluation of long-term trends and market conditions that may have an impact on the cost of providing retirement benefits.

In determining the discount rate, we utilize quoted rates from long-term bond indices, and changes in long-term bond rates over the past year, cash flow models and other data sources we consider reasonable based upon the life expectancy and mortality rate of eligible employees. As part of our evaluation, we calculate the approximate average yields on securities that were selected to match our separate projected cash flows for both the pension and postretirement plans. Our separate benefit plan cash flows are input into actuarial models that include data for corporate bonds rated AA or better at the measurement date. The

outputs from the actuarial models are assessed against the prior year's discount rate and quoted rates for long-term bond indices. For our pension plans at December 31, 2022, we determined this rate to be 5.49%, an increase of 2.74% from the 2.75% rate used at December 31, 2021. Our postretirement rate was 5.25% at December 31, 2022 an increase of 3.00% from the 2.25% rate used at December 31, 2021.

The expected return on plan assets is determined by taking into consideration our analysis of our actual historical investment returns to a broader long-term forecast adjusted based on our target investment allocation, and the current economic environment. Our pension asset investment guidelines target an investment portfolio allocation of 55% debt securities and 45% equity securities. As of December 31, 2022, the pension plan assets were allocated 52.9% debt securities, 41.4% equity securities, 5.0% real estate and 0.7% other. The VEBA Plan target allocation is 100% debt securities. We have used our target investment allocation to derive the expected return as we believe this allocation will be retained on an ongoing basis that will be commensurate with the projected cash flows of the plan. The expected return for each investment category within our target investment allocation is developed using average historical rates of return for each targeted investment category, considering the projected cash flow of the qualified pension plan and postretirement plan. The difference between this expected return and the actual return on plan assets is generally deferred and recognized over subsequent periods through future net periodic benefit (credits) costs. We believe these considerations provide the basis for reasonable assumptions with respect to the expected long-term rate of return on plan assets.

When actual plan experience differs from the assumptions used, actuarial gains or losses arise. We amortize, as a component of annual pension expense, total outstanding actuarial gains or losses over the estimated average expected remaining lifetime of plan participants to the extent that the gain/loss exceeds 10% of the greater of the beginning-of-year projected benefit obligation or the market-related value of plan assets. For our pension and postretirement plans, the total actuarial losses as of December 31, 2022 that have not been recognized in annual expense are \$147.8 million and \$3.2 million, respectively, and we expect to recognize a net periodic pension and postretirement expenses of \$5.3 million and \$0.1 million, respectively, in 2023 related to the amortization of actuarial losses.

A one percent change in discount rate and future rate of return on plan assets would have the following effects:

	Pension				Postretirement			
	1% Decrease		1% Increase		1% Decrease		1% Increase	
	Benefit (Credit) Cost	Projected Benefit Obligation	Benefit (Credit) Cost	Projected Benefit Obligation	Benefit (Credit) Cost	Projected Benefit Obligation	Benefit (Credit) Cost	Projected Benefit Obligation
Discount Rate	\$ (0.8)	\$ 28.2	\$ 0.6	\$ (24.4)	\$ -	\$ 0.3	\$ -	\$ (0.3)
Expected Rate of Return on Assets	\$ 4.4	\$ -	\$ (4.4)	\$ -	\$ 0.1	\$ -	\$ (0.1)	\$ -

Income Taxes

In projecting future taxable income, we develop assumptions including the amount of future state, federal and foreign pretax operating income, the reversal of temporary differences, and the implementation of feasible and prudent tax planning strategies. These assumptions require significant judgment about the forecasts of future taxable income and are consistent with the plans and estimates we use to manage the underlying businesses. The calculation of our tax liabilities also involves dealing with uncertainties in the application and evolution of complex tax laws and regulations in other jurisdictions.

We account for uncertain tax positions in accordance with *Accounting for Uncertainty in Income Taxes — an interpretation of ASC 740*, which addresses the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under this interpretation, we may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained upon examination by the taxing authorities, based on the technical merits of the position.

We recognize and adjust our liabilities when our judgment changes as a result of the evaluation of new information not previously available. Due to the complexity of some of these uncertainties, the ultimate resolution may result in a payment that is materially different from our current estimate of the tax liabilities. These differences will be reflected as increases or decreases to income tax expense in the period in which they are determined.

We estimate unrecognized tax positions of \$0.9 million that may be recognized by December 31, 2023, due to expiration of statutes of limitations and resolution of audits with taxing authorities, net of additional uncertain tax positions.

As of December 31, 2022, we have gross federal, state, and foreign income tax net operating loss carryforwards of \$85.3 million, which will expire at various dates from 2023 through 2042. Such net operating loss carryforwards expire as follows:

Years Ending	(In millions)
2023 - 2030	\$ 20.8
2031 - 2035	11.7
2036 - 2042	52.8
Total	<u>\$ 85.3</u>

The net deferred income tax liability of \$114.0 million consists primarily of timing differences involving amortization.

Recent Accounting Pronouncements

For a discussion of recent accounting pronouncements, refer to [Note 2\(s\)](#) to the audited consolidated financial statements included elsewhere in this annual report on Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Risk

We are exposed to market risk from fluctuations in interest rates. As of December 31, 2022, we had borrowings outstanding under our Credit Facilities of \$1,390.0 million. The borrowings under the Syndicated Credit Facility bear interest at variable rates based on LIBOR plus 1.0% to 1.625% depending on the public debt rating defined in the credit agreement. The current margin is 1.25% for \$990.0 million under the Syndicated Credit Facility as a result of the current public debt rating. A change in interest rates on variable rate debt impacts our pre-tax income and cash flows but does not impact the fair value of the instruments. Subsequent to December 31, 2022, we have made repayments of \$1,390.0 million on our Credit Facilities. As a result of this activity, we now have the ability to draw up to \$1,395.6 million from our Credit Facilities.

On September 9, 2022, we amended the \$125.0 million Bilateral Term Loan Facility and established the \$275.0 million Bilateral Revolving Credit Facility with maturity dates of September 9, 2023 and October 2, 2023, respectively. The Bilateral Credit Facilities carry an interest rate of 135 basis points plus the one-month BSBY and may be used for general corporate purposes, including working capital needs and capital expenditures, acquisitions, dividend payments and the Repurchase Program.

The Bilateral Credit Facilities are now subject to the replacement of LIBOR. Interest on the Bilateral Credit Facilities is based on BSBY and we have the choice of the Secured Overnight Financing Rate ("SOFR") or the BSBY as part of the Bilateral Credit Facilities agreement. As our only current contract that is subject to the LIBOR rate is the existing Syndicated Credit Facility, the impact will be dependent on what the outstanding borrowing amount is on the Syndicated Credit Facility and the relevant interest rate that will be contractually applicable. Should we amend or extend our Syndicated Credit Facility to reflect SOFR or BSBY, based on recent borrowings and applicable SOFR, we do not anticipate such an amendment to have a material impact on the business.

Based on our overall interest rate exposure as of December 31, 2022, a one percent change in interest rate would result in a change in annual pre-tax interest expense of approximately \$13.9 million based on our current borrowing levels outstanding on December 31, 2022.

Foreign Currency Risk

Our foreign-based businesses and results of operations are exposed to movements in the U.S. dollar to British pounds and other foreign currency exchange rates. A portion of our revenue is denominated in British pounds and other foreign currencies. If the U.S. dollar strengthens against British pounds and other foreign currencies, our revenues reported in U.S. dollars would decline. With regard to operating expense, our primary exposure to foreign currency exchange risk relates to operating expense incurred in British pounds and other foreign currencies. If British pounds and other foreign currencies strengthen, costs reported in U.S. dollars will increase. Movements in the U.S. dollar to British pounds and other foreign currency exchange rates did not have a material effect on our revenue for the year ended December 31, 2022. A hypothetical ten percent change in average exchange rates versus the U.S. dollar would not have resulted in a material change to our earnings.

Item 8. Consolidated Financial Statements and Supplementary Data

The information required by this Item is set forth on pages 53 through 99 of this annual report on Form 10-K.

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We are required to maintain disclosure controls and procedures (as that term is defined in Rules 13a-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”) that are designed to ensure that information required to be disclosed in our reports under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures. Any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives at the reasonable assurance level.

Our management, with the participation of the Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) as of the end of the period covered by this annual report on Form 10-K for our Company and subsidiaries other than our recent acquisitions in 2022 (See [Note 10](#), of our consolidated financial statements included in this annual report on Form 10-K). Management excluded from its assessment the internal control over financial reporting of these acquisitions and collectively represents less than 1.5% of total assets (excluding goodwill and intangible assets which were integrated into our systems and control environment) and less than 3.5% of revenues as of and for the year ended December 31, 2022. Based upon the foregoing assessments, our Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2022, our disclosure controls and procedures were effective at the reasonable assurance level.

Management’s Report on Internal Control over Financial Reporting

The information required by this Item is set forth on page 49 of this annual report on Form 10-K.

Attestation Report of the Registered Public Accounting Firm

The information required by this Item is set forth on page 50 of this annual report on Form 10-K.

Changes in Internal Control over Financial Reporting

We are in the process of integrating our recent acquisitions in 2022 into our overall internal control over financial reporting process. Other than this ongoing integration, there have been no changes in our internal control over financial reporting identified in connection with the evaluation of such internal control that occurred during the fourth quarter of 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements for external purposes in accordance with U.S. generally accepted accounting principles. Because of its inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that internal control may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework set forth in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

Based on this assessment, management concluded that our internal control over financial reporting was effective at December 31, 2022.

Management excluded from its assessment the internal control over financial reporting for our acquisitions in 2022 (See [Note 10](#) of our consolidated financial statements included in this annual report on Form 10-K). The excluded financial statements of these acquisitions constitute approximately 1.5% of total assets (excluding goodwill and intangible assets which were integrated into our systems and control environment) and 3.5% of revenues collectively included within our consolidated financial statements as of and for the year ended December 31, 2022. Due to the timing of the acquisitions, management did not assess the effectiveness of internal control over financial reporting for these acquisitions.

Deloitte & Touche LLP, the independent registered public accounting firm that audited the consolidated financial statements included in this annual report on Form 10-K has also audited the effectiveness of our internal control over financial reporting as of December 31, 2022, as stated in their report which is included herein.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Verisk Analytics, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Verisk Analytics, Inc. and subsidiaries (the “Company”) as of December 31, 2022, 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, 2022, 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, 2022, of the Company and our report dated February 28, 2023, expressed an unqualified opinion on those consolidated financial statements.

As described in *Management’s Report on Internal Controls over Financial Reporting*, management excluded from its assessment the internal control over financial reporting at Infutor Data Solutions LLC, which was acquired on February 11, 2022, Opta Information Intelligence Corp on March 1, 2022, Automated Insurance Solutions on March 1, 2022, and Pruvin, Inc on May 18, 2022 (collectively the “2022 Acquisitions”). The financial statements of the 2022 Acquisitions constitute less than 1.5% of total assets (excluding goodwill and intangible assets which were integrated into the Company’s systems and control environment) and 3.5% of revenues collectively of the consolidated financial statement amounts as of and for the year ended December 31, 2022. Accordingly, our audit did not include the internal control over financial reporting of the 2022 Acquisitions.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Management’s Report on Internal Controls 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
Morristown, New Jersey
February 28, 2023

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required to be furnished by this Item 10 is incorporated herein by reference to our Notice of Annual Meeting of Stockholders and Proxy Statement to be filed within 120 days of December 31, 2022 (the “Proxy Statement”).

Our Board of Directors has adopted a Code of Business Conduct and Ethics applicable to all officers, directors and employees, which is available on our website (investor.verisk.com) under "Corporate Governance". We intend to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding any amendment to, or waiver from, a provision of our Code of Business Conduct and Ethics by posting such information on the website address and location specified above.

Item 11. Executive Compensation

The information required to be furnished by this Item 11 is incorporated herein by reference to our Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required to be furnished by this Item 12 is incorporated herein by reference to our Proxy Statement.

Item 13. Certain Relationships and Related Transactions and Director Independence

The information required to be furnished by this Item 13 is incorporated herein by reference to our Proxy Statement.

Item 14. Principal Accounting Fees and Services

The information required to be furnished by this Item 14 is incorporated herein by reference to our Proxy Statement.

PART IV

Item 15. Exhibits and Financial Statement Schedule

- (a) The following documents are filed as part of this report.
- (1) Financial Statements. See Index to Financial Statements and Schedules in Part II, Item 8 on this Form 10-K.
 - (2) Financial Statement Schedule. See Schedule II. Valuation and Qualifying Accounts and Reserves.
 - (3) Exhibits. See Index to Exhibits in this annual report on Form 10-K.

Item 16. Form 10-K Summary

None.

Item 8. Consolidated Financial Statements and Supplementary Data

Index to Consolidated Financial Statements and Schedule

Verisk Analytics, Inc. Consolidated Financial Statements as of December 31, 2022 and 2021 and for the Years Ended December 31, 2022, 2021, and 2020.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Verisk Analytics, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Verisk Analytics, Inc. and subsidiaries (the "Company") as of December 31, 2022 and 2021, the related consolidated statements of operations, comprehensive income, stockholders' equity, and cash flows, for each of the three years in the period ended December 31, 2022, and the related notes and the schedule listed in the Index at Item 15 (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, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, 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, 2022, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 28, 2023, 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.

Goodwill - Energy and Specialized Markets Reportable Segment - Refer to Notes 2 and 12 to the financial statements

Critical Audit Matter Description

The Company's evaluation of goodwill for impairment involves the comparison of the fair value of each reporting unit to its carrying value. The Company determines the fair value of its reporting units using the discounted cash flow model and the market approach. The determination of fair value using the discounted cash flow model requires management to make significant estimates and assumptions related to forecasts of future revenues, EBITDA margins, and the discount rate. The determination of fair value using the market approach requires management to make significant estimates and assumptions related to the selection of revenue and EBITDA multiples. Changes in these assumptions could have a significant impact on either the fair value, the amount of any goodwill impairment charge, or both. The goodwill balance was \$3,812.3 million as of December 31, 2022 of which \$2,136.3 million was classified as held for sale attributable to the Energy and Specialized Markets reportable segment.

Given the significant judgments made by management to estimate the fair value of the Energy and Specialized Markets reportable segment, including management's judgments in selecting significant assumptions to forecast future revenues, EBITDA margins, and the discount rate, as well as the selection of revenue and EBITDA multiples, performing audit procedures to evaluate the reasonableness of management's estimates and assumptions for the Energy and Specialized Markets reportable segment required a high degree of auditor judgment and an increased extent of effort, including the need to involve our fair value specialists.

How the Critical Audit Matter was addressed in the Audit

Our audit procedures related to forecasts of future revenue and EBITDA margins, selection of the discount rate used within the income approach and selection of the revenue and EBITDA multiples used in the market approach for the Energy and Specialized Markets reportable segment included the following, among others:

- We tested the effectiveness of controls over management's goodwill impairment evaluation, including those over the determination of the fair value of the Energy and Specialized Markets reportable segment such as controls related to management's selection of the discount rate, forecasts of future revenue and revenue and EBITDA multiples.
- We evaluated management's ability to accurately forecast future revenues and EBITDA margins by comparing actual results to management's historical forecasts.
- We evaluated the reasonableness of management's revenue and EBITDA margin forecasts by comparing the forecasts to:
 - Historical revenues and EBITDA margins.
 - Internal communications to management and the Board of Directors.
 - Forecasted information included in Company press releases, as well as in analyst and industry reports for the Company and certain peer companies.
- With the assistance of our fair value specialists, we evaluated the reasonableness of the (1) valuation methodologies (2) revenue and EBITDA multiples and (3) the discount rate by:
 - Evaluating the market approach, including evaluating the reasonableness of the selected guideline public companies and the resulting multiples calculations, as well as benchmarking the selected multiples against these guideline public companies.
 - Assessing the acceptability of the weighting applied to value indications from different valuation techniques.
 - Assessing the acceptability of the implied company-specific risk premium. With respect to the market value of equity, we tested the calculations used in developing the respective market value of equity.
 - Testing the source information underlying the determination of the discount rate, the selection of the revenue and EBITDA multiples and the mathematical accuracy of the calculations.
 - Developing a range of independent estimates and comparing those to the discount rate selected by management.

/s/ Deloitte & Touche LLP
Morristown, New Jersey
February 28, 2023

We have served as the Company's auditor since 2001.

VERISK ANALYTICS, INC.
CONSOLIDATED BALANCE SHEETS
As of December 31, 2022 and 2021

	2022	2021
	(in millions, except par value and	number of shares)
ASSETS:		
Current assets:		
Cash and cash equivalents	\$ 112.5	\$ 111.9
Accounts receivable, net	290.1	299.9
Prepaid expenses	83.7	87.8
Income taxes receivable	44.2	41.4
Other current assets	32.0	31.4
Current assets held-for-sale	362.6	335.0
Total current assets	925.1	907.4
Noncurrent assets:		
Fixed assets, net	541.5	531.4
Operating lease right-of-use assets, net	182.0	224.0
Intangible assets, net	504.8	482.3
Goodwill	1,676.0	2,047.6
Deferred income tax assets	31.7	1.8
Other noncurrent assets	371.4	409.4
Noncurrent assets held for sale	2,728.6	3,204.2
Total assets	\$ 6,961.1	\$ 7,808.1
LIABILITIES AND STOCKHOLDERS' EQUITY:		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 292.8	\$ 262.1
Short-term debt and current portion of long-term debt	1,392.9	971.3
Deferred revenues	321.7	347.8
Operating lease liabilities	29.5	31.7
Income taxes payable	-	3.0
Current liabilities held-for-sale	282.3	232.1
Total current liabilities	2,319.2	1,848.0
Noncurrent liabilities:		
Long-term debt	2,343.2	2,342.8
Deferred income tax liabilities	145.6	290.3
Operating lease liabilities	189.9	231.3
Other noncurrent liabilities	17.9	43.3
Noncurrent liabilities held-for-sale	177.6	209.9
Total liabilities	5,193.4	4,965.6
Commitments and contingencies (Note 21)		
Stockholders' equity:		
Common stock, \$.001 par value; 2,000,000,000 shares authorized; 544,003,038 shares issued; 154,701,136 and 161,651,639 shares outstanding, respectively	0.1	0.1
Additional paid-in capital	2,720.8	2,608.7
Treasury stock, at cost, 389,301,902 and 382,351,399 shares, respectively	(6,239.5)	(4,638.1)
Retained earnings	5,999.1	5,240.4
Accumulated other comprehensive losses	(731.2)	(394.6)
Total Verisk stockholders' equity	1,749.3	2,816.5
Noncontrolling interests	18.4	26.0
Total stockholders' equity	1,767.7	2,842.5
Total liabilities and stockholders' equity	\$ 6,961.1	\$ 7,808.1

The accompanying notes are an integral part of these consolidated financial statements.

VERISK ANALYTICS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
For The Years Ended December 31, 2022, 2021, and 2020

	2022	2021	2020
	(in millions, except per share amounts and	per share amounts and	number of shares)
Revenues	\$ 2,497.0	\$ 2,462.5	\$ 2,269.4
Operating expenses:			
Cost of revenues (exclusive of items shown separately below)	824.6	853.7	791.7
Selling, general and administrative	381.5	313.2	308.2
Depreciation and amortization of fixed assets	164.2	170.3	159.2
Amortization of intangible assets	74.4	79.9	73.4
Other operating (income) loss	(354.2)	134.0	(19.4)
Total operating expenses	1,090.5	1,551.1	1,313.1
Operating income	1,406.5	911.4	956.3
Other income (expense):			
Investment (loss) income and others, net	(5.3)	2.1	0.4
Interest expense	(138.8)	(127.0)	(138.3)
Total other expense, net	(144.1)	(124.9)	(137.9)
Income from continuing operations before income taxes	1,262.4	786.5	818.4
Provision for income taxes	(220.3)	(179.4)	(164.6)
Income from continuing operations	1,042.1	607.1	653.8
(Loss) income from discontinued operations, net of tax benefit (expense) of \$131.5, \$(29.7) and \$(20.1), respectively (Note 11)	(87.8)	59.2	58.9
Net Income	954.3	666.3	712.7
Less: Net income attributable to noncontrolling interests	(0.4)	(0.1)	-
Net income attributable to Verisk	\$ 953.9	\$ 666.2	\$ 712.7
Basic net income per share attributable to Verisk:			
Income from continuing operations	\$ 6.60	\$ 3.75	\$ 4.02
Income from discontinued operations	(0.56)	0.37	0.36
Basic net income per share attributable to Verisk:	\$ 6.04	\$ 4.12	\$ 4.38
Diluted net income per share attributable to Verisk:			
Income from continuing operations	\$ 6.55	\$ 3.72	\$ 3.95
Income from discontinued operations	(0.55)	0.36	0.36
Diluted net income per share attributable to Verisk:	\$ 6.00	\$ 4.08	\$ 4.31
Weighted average shares outstanding:			
Basic	157,905,718	161,841,441	162,610,586
Diluted	158,928,942	163,338,909	165,320,709

The accompanying notes are an integral part of these consolidated financial statements.

VERISK ANALYTICS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
For The Years Ended December 31, 2022, 2021, and 2020

	<u>2022</u>	<u>2021</u>	<u>2020</u>
		(in millions)	
Net income	\$ 954.3	\$ 666.3	\$ 712.7
Other comprehensive (loss) income, net of tax:			
Foreign currency translation adjustment	(300.3)	(46.3)	107.9
Pension and postretirement liability adjustment	(37.7)	26.9	3.3
Total other comprehensive (loss) income	(338.0)	(19.4)	111.2
Comprehensive income	616.3	646.9	823.9
Less: Comprehensive loss attributable to noncontrolling interests	1.1	0.4	-
Comprehensive income attributable to Verisk	<u>\$ 617.4</u>	<u>\$ 647.3</u>	<u>\$ 823.9</u>

The accompanying notes are an integral part of these consolidated financial statements.

VERISK ANALYTICS, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
For The Years Ended December 31, 2022, 2021, and 2020

	Common Stock Issued	Par Value	Additional Paid-in Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Losses	Total Verisk Stockholders' Equity	Noncontrolling Interests	Total Stockholders' Equity
	(in millions, except for share data)								
Balance as of January 1, 2020	544,003,038	\$ 0.1	\$ 2,369.1	\$ (3,849.9)	\$ 4,228.4	\$ (486.9)	\$ 2,260.8	\$ —	\$ 2,260.8
Adjustment to opening retained earnings related to Topic 326	-	-	-	-	(2.4)	-	(2.4)	-	(2.4)
Net income	-	-	-	-	712.7	-	712.7	-	712.7
Common stock dividend (1)	-	-	-	-	(176.5)	-	(176.5)	-	(176.5)
Other comprehensive income	-	-	-	-	-	111.2	111.2	-	111.2
Treasury stock acquired (2,155,084 shares)	-	-	-	(348.8)	-	-	(348.8)	-	(348.8)
Stock options exercised (1,623,740 shares transferred from treasury stock)	-	-	74.9	17.3	-	-	92.2	-	92.2
Restricted stock ("RSA") lapsed (142,362 shares transferred from treasury stock)	-	-	(1.5)	1.5	-	-	-	-	-
Stock-based compensation	-	-	47.6	-	-	-	47.6	-	47.6
Net share settlement from RSA (27,890 shares withheld for tax settlement)	-	-	(4.1)	-	-	-	(4.1)	-	(4.1)
Other stock issuances (44,944 shares transferred from treasury stock)	-	-	4.9	0.6	-	-	5.5	-	5.5
Balance as of December 31, 2020	544,003,038	0.1	2,490.9	(4,179.3)	4,762.2	(375.7)	2,698.2	-	2,698.2
Net income	-	-	-	-	666.2	-	666.2	0.1	666.3
Other comprehensive income	-	-	-	-	-	(18.9)	(18.9)	(0.5)	(19.4)
Investment in noncontrolling interests	-	-	-	-	-	-	-	26.4	26.4
Common stock dividend (1)	-	-	-	-	(188.0)	-	(188.0)	-	(188.0)
Treasury stock acquired (2,545,191 shares)	-	-	-	(475.0)	-	-	(475.0)	-	(475.0)
Stock options exercised (1,146,368 shares transferred from treasury stock)	-	-	70.4	13.6	-	-	84.0	-	84.0
PSUs lapsed (50,898 shares issued from treasury stock)	-	-	(0.6)	0.6	-	-	-	-	-
RSAs lapsed (135,664 shares transferred from treasury stock)	-	-	(1.5)	1.5	-	-	-	-	-
Stock-based compensation	-	-	55.7	-	-	-	55.7	-	55.7
Net share settlement from PSUs and RSAs (60,101 shares withheld for tax settlement)	-	-	(11.8)	-	-	-	(11.8)	-	(11.8)
Other stock issuances (45,374 shares transferred from treasury stock)	-	-	5.6	0.5	-	-	6.1	-	6.1
Balance as of December 31, 2021	544,003,038	0.1	2,608.7	(4,638.1)	5,240.4	(394.6)	2,816.5	26.0	2,842.5
Net income	-	-	-	-	953.9	-	953.9	0.4	954.3
Other comprehensive income	-	-	-	-	-	(335.5)	(335.5)	(1.4)	(336.9)
Investment in noncontrolling interests	-	-	(0.5)	-	-	(1.1)	(1.6)	(6.6)	(8.2)
Common stock dividend (1)	-	-	-	-	(195.2)	-	(195.2)	-	(195.2)
Treasury stock acquired (8,600,963 shares)	-	-	-	(1,662.5)	-	-	(1,662.5)	-	(1,662.5)
Treasury stock share repurchased not yet settled	-	-	(37.5)	37.5	-	-	-	-	-
Stock options exercised (1,435,076 shares transferred from treasury stock)	-	-	111.9	20.6	-	-	132.5	-	132.5
PSUs lapsed (49,803 shares issued from treasury stock)	-	-	(0.6)	0.6	-	-	-	-	-
RSAs lapsed (122,340 shares transferred from treasury stock)	-	-	(1.7)	1.7	-	-	-	-	-
Stock-based compensation expense	-	-	56.5	-	-	-	56.5	-	56.5
Net share settlement from PSUs and RSAs (99,977 shares withheld for tax settlement)	-	-	(20.7)	-	-	-	(20.7)	-	(20.7)
Other stock issuances (43,241 shares transferred from treasury stock)	-	-	4.7	0.7	-	-	5.4	-	5.4
Balance as of December 31, 2022	544,003,038	\$ 0.1	\$ 2,720.8	\$ (6,239.5)	\$ 5,999.1	\$ (731.2)	\$ 1,749.3	\$ 18.4	\$ 1,767.7

(1) Refer to [Note 16](#). Stockholders' Equity for discussion related to quarterly cash dividends declared per share

The accompanying notes are an integral part of these consolidated financial statements.

VERISK ANALYTICS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
For The Years Ended December 31, 2022, 2021, and 2020

	<u>2022</u>	<u>2021</u>	<u>2020</u>
	(In millions)		
Cash flows from operating activities:			
Net income	\$ 954.3	\$ 666.3	\$ 712.7
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization of fixed assets	197.1	206.9	192.2
Amortization of intangible assets	142.9	176.7	165.9
Amortization of debt issuance costs and original issue discount, net of original issue premium	1.1	1.4	1.8
Provision for doubtful accounts	7.0	17.7	13.1
Gain on sale of assets, net	(393.9)	—	(19.4)
Stock-based compensation expense	56.5	55.7	47.6
Impairment of long lived assets	377.4	134.0	—
Deferred income taxes	(261.0)	49.8	31.1
Loss on disposal of fixed assets, net	1.1	0.4	0.6
Changes in assets and liabilities, net of effects from acquisitions:			
Accounts receivable	(57.7)	(29.7)	1.8
Prepaid expenses and other assets	(8.4)	(33.6)	(66.5)
Operating lease right-of-use assets, net	46.6	41.3	43.1
Income taxes	25.6	(5.7)	(0.5)
Acquisition-related liabilities	—	—	(77.0)
Accounts payable and accrued liabilities	(21.2)	(80.8)	24.3
Deferred revenues	64.5	32.4	21.2
Operating lease liabilities	(43.9)	(41.3)	(29.6)
Other liabilities	(29.0)	(35.8)	5.8
Net cash provided by operating activities	<u>1,059.0</u>	<u>1,155.7</u>	<u>1,068.2</u>
Cash flows from investing activities:			
Acquisitions and purchases of controlling interests, net of cash acquired of \$17.4, \$9.3, and \$11.1, respectively	(448.9)	(289.8)	(275.8)
Proceeds from sale of businesses	1,073.3	—	23.1
Investments in nonpublic companies	(46.0)	(23.6)	(94.8)
Escrow funding associated with acquisitions	(2.3)	(9.2)	(9.3)
Capital expenditures	(274.7)	(268.4)	(246.8)
Payment of contingent liability related to acquisitions	—	(1.2)	—
Other investing activities, net	—	0.2	7.8
Net cash provided by (used in) investing activities	<u>301.4</u>	<u>(592.0)</u>	<u>(595.8)</u>

The accompanying notes are an integral part of these consolidated financial statements.

VERISK ANALYTICS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)
For The Years Ended December 31, 2022, 2021, and 2020

	2022	2021 (in millions)	2020
Cash flows from financing activities:			
Proceeds from (repayment of) short-term debt, net	380.0	560.0	(445.0)
Repayments of current portion of long-term debt	(350.0)	(450.0)	-
Proceeds from issuance of long-term debt, inclusive of original issue premium and net of original issue discount	-	-	494.8
Proceeds from issuance of short-term debt with original maturities less than three month	400.0	-	-
Proceeds from issuance of short-term debt with original maturities greater than three months	-	-	20.0
Repayment of short-term debt with original maturities greater than three months	-	-	(20.0)
Payment of debt issuance costs	-	-	(5.7)
Repurchases of common stock	(1,662.5)	(475.0)	(348.8)
Net share settlement of taxes from restricted stock and performance share awards	(20.7)	(11.8)	(4.1)
Payment of contingent liability related to acquisitions	-	-	(34.2)
Proceeds from stock options exercised	132.5	84.3	88.0
Dividends paid	(195.2)	(188.2)	(175.8)
Other financing activities, net	(14.3)	(18.2)	(14.4)
Net cash (used in) provided by financing activities	(1,330.2)	(498.9)	(445.2)
Effect of exchange rate changes	(17.8)	(3.3)	7.0
Increase in cash and cash equivalents	12.4	61.5	34.2
Cash and cash equivalents, beginning of period	280.3	218.8	184.6
Cash and cash equivalents, end of period	\$ 292.7	\$ 280.3	\$ 218.8
Supplemental disclosures:			
Income taxes paid	\$ 324.5	\$ 175.0	\$ 156.5
Interest paid	\$ 134.3	\$ 129.0	\$ 134.3
Noncash investing and financing activities:			
Deferred tax liability established on date of acquisitions	\$ 14.0	\$ 21.0	\$ 13.0
Finance lease additions, net of disposals	\$ 5.2	\$ 7.0	\$ 30.9
Operating lease additions, net of terminations	\$ 21.7	\$ 22.4	\$ 87.8
Fixed assets included in accounts payable and accrued liabilities	\$ 0.2	\$ 5.3	\$ 0.8
Noncash contribution of assets for a nonpublic company	\$ -	\$ -	\$ 65.9

The accompanying notes are an integral part of these consolidated financial statements.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in millions, except for share and per share data, unless otherwise stated)

1. Organization:

Verisk Analytics, Inc. is a data analytics provider serving customers in the insurance markets. Using various technologies to collect and analyze billions of records, we draw on numerous data assets and domain expertise to provide first-to-market innovations that are integrated into customer workflows. We offer predictive analytics and decision support solutions to customers in rating, underwriting, claims, catastrophe and weather risk, global risk analytics, and many other fields. Around the world, we help customers protect people, property, and financial assets. We trade under the ticker symbol “VRSK” on the Nasdaq Global Select Market.

2. Basis of Presentation and Summary of Significant Accounting Policies:

Our accompanying consolidated financial statements have been prepared on the basis of accounting principles generally accepted in the United States of America (“U.S. GAAP”). The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. Significant estimates include acquisition purchase price allocations, the fair value of goodwill, the realization of deferred tax assets and liabilities, acquisition-related liabilities, fair value of stock-based compensation for equity awards granted, and assets and liabilities for pension and postretirement benefits. Actual results may ultimately differ from those estimates. Certain reclassifications, including combining acquisition-related liabilities into the “Accounts payable and accrued liabilities” line in 2021 (they used to be shown as a separate line item) and moving Atmospheric and Environmental Research (“AER”), an immaterial component, from the Energy and Specialized Markets segment to the underwriting and rating category within the Insurance segment, have been made within our consolidated balance sheets, consolidated statements of operations, consolidated statements of cash flows, and in our notes to conform to our respective 2021 presentation.

On October 28, 2022, we entered into an equity purchase agreement to sell our Energy business. We determined that the sale of our Energy business met the “held for sale” criteria and the “discontinued operations” criteria in accordance with Financial Accounting Standard Boards (“FASB”) Accounting Standards Codification (“ASC”) 205-20, *Discontinued Operations* (“ASC 205-20”) in the fourth quarter of 2022 due to its relative size and strategic rationale. The consolidated balance sheets and consolidated statements of operations, and the notes to the consolidated financial statements were recasted for all periods presented to reflect the discontinuation of the Energy business, in accordance with ASC 205-20. The discussion in the notes to these consolidated financial statements, unless otherwise noted, relate solely to our continuing operations.

Significant accounting policies include the following:

(a) *Intercompany Accounts and Transactions*

The consolidated financial statements include all of our accounts. All intercompany accounts and transactions have been eliminated.

(b) *Revenue Recognition*

The following describes our primary types of revenues and the applicable revenue recognition policies. We recognize revenues through recurring and non-recurring long-term agreements (generally one to five years) for hosted subscriptions, advisory/consulting services, and for transactional solutions. Our revenues are primarily derived from the sale of services where revenue is recognized when control of the promised services is transferred to customers in an amount that reflects the consideration that we expect to be entitled to in exchange for those services. Fees for services provided by us are non-refundable. Revenue is recognized net of applicable sales tax withholdings.

Hosted Subscriptions

We offer two forms of hosted subscriptions. The first and most prevalent form of hosted subscription is where customers access content only through our online portal (the “Hosted Subscription”). We grant a license to our customer to enter our online portal. The license is a contractual mechanism that allows our customer to access our online portal for a defined period of time. As the license alone does not provide utility to our customer, our customer has no contractual right to take possession of our online portal at any time, and our customer cannot engage another party to host our online portal and related content, it is not considered a functional license under Topic 606. Our promise to our customer is to provide continuous access to our online portal and to update the content throughout the subscription period. Hosted Subscription is a single performance obligation that represents a series of distinct services (daily access to our online portal and related content) that are substantially the same and that have the same pattern of transfer to our customer. We recognize revenue for Hosted Subscriptions ratably over the subscription period on a straight-line basis as services are performed and continuous access to information in our online portal is provided over the entire term of the agreements.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The second form of hosted subscription is where customers have access to our online portals combined with software content that is delivered via disk drive/download to our customer (“Hosted Subscription with Disk Drive/Download”) and is offered only on a limited basis. For this form of hosted subscription, we also grant our customer a license to enter our online portal as well as access the software content as needed and act as the same contractual mechanism as described for Hosted Subscriptions. The Hosted Subscription with Disk Drive/Download works in such a manner that our customer gains significant benefit, functionality, and overall utility only when the online portal and the software content are used together. The disk drive/download contains the models while the online portal contains the latest data and research which is updated throughout the subscription period. The models within the disk drive/download depend on the data and research contained within our online portal. The data and research within our online portal is only useful when our customer can utilize it within the models (e.g., queries, projections, etc.) so that they may use the most current information and alerts to forecast potential future losses. The software content is only sold together with our online portal to provide a highly interdependent and interrelated promise and therefore represents a single performance obligation. As our customer has no contractual right to take possession of our online portal at any time, and our customer cannot engage another party to host our online portal and related software content, it is not considered a functional license under Topic 606. Our promise to our customer is to deliver the disk drive/download, to provide continuous access to our online portal, and to update the software content throughout the subscription period. We recognize revenue for Hosted Subscriptions with Disk Drive/Download ratably over the subscription period on a straight-line basis as services are performed and continuous access to information is provided over the entire term of the agreements.

Subscriptions are generally paid in advance of rendering services either quarterly or annually upon commencement of the subscription period, which is usually for one year and in most instances automatically renewed each year.

Advisory/Consulting Services

We provide certain discrete project based advisory/consulting services, which are recognized over time by measuring the progress toward complete satisfaction of the performance obligation, based on the input method of consulting hours worked; this aligns with the results achieved and value transferred to our customer. The hours consumed are most reflective of the measure of progress towards satisfying the performance obligation, as the resources hours worked directly tie to the progress of the services to be provided. In general, they are billed over the course of the project.

Transactional Solutions

Certain solutions are also paid for by customers on a transactional basis. We recognize these revenues as the solutions are delivered or services performed at a point in time. In general, our customers are billed monthly at the end of each month.

(c) Deferred Revenues

We invoice our customers in annual, quarterly, monthly, or milestone installments. Amounts billed and/or collected in advance of services being provided are recorded as “Deferred revenues” and “Other noncurrent liabilities” in our accompanying consolidated balance sheets and are recognized as the services are performed, control is transferred to customers, and the applicable revenue recognition criteria is met.

(d) Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are generally recorded at the invoiced amount. Unbilled receivables are short-term in nature and expected to be billed within one year. The allowance for doubtful accounts or expected credit losses is estimated based on an analysis of the aging of the accounts receivable, historical write-offs, customer payment patterns, individual customer credit worthiness, current economic trends, reasonable and supportable forecasts of future economic conditions, and/or establishment of specific reserves for customers in adverse financial condition. We assess the adequacy of the allowance for doubtful accounts on a quarterly basis.

(e) Deferred Commissions

We recognize an asset for the incremental costs of obtaining a contract with a customer if we expect the benefit of those costs to be longer than one year. We have determined that certain sales incentive programs meet the requirements to be capitalized. The incremental costs of obtaining a contract with a customer, which primarily consist of sales commissions, are deferred and amortized over a useful life of five years that is consistent with the transfer to our customer the services to which the asset relates. We classify deferred commissions as current or noncurrent based on the timing of expense recognition. The current and noncurrent portions of deferred commissions are included in “Prepaid expenses” and “Other noncurrent assets”, respectively, in our consolidated balance sheets as of December 31, 2022. Amortization expense related to deferred commissions is computed on a straight-line basis over its estimated useful lives and included in “Selling, general and administrative” within our accompanying consolidated statements of operations.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(f) *Fixed Assets and Finite-lived Intangible Assets*

Fixed assets and finite-lived intangibles are stated at cost less accumulated depreciation and amortization, which are computed on a straight-line basis over their estimated useful lives. Leasehold improvements are amortized over the shorter of the useful life of the asset or the lease term.

Our internal software development costs primarily relate to internal-use software. Such costs are capitalized in the application development stage in accordance with ASC 350-40, *Internal-use Software* ("ASC 350-40"). We also capitalize software development costs upon the establishment of technological feasibility for a product in accordance with ASC 985-20, *Software to be Sold, Leased, or Marketed* ("ASC 985-20"). Software development costs are amortized on a straight-line basis.

In accordance with ASC 360, *Property, Plant & Equipment*, whenever events or changes in circumstances indicate that the carrying amount of long-lived assets and finite-lived intangible assets may not be recoverable, we review our long-lived assets and finite-lived intangible assets for impairment by first comparing the carrying value of our assets to the sum of the undiscounted cash flows expected to result from the use and eventual disposition of our assets. If the carrying value exceeds the sum of our assets' undiscounted cash flows, we estimate and recognize an impairment loss by taking the difference between the carrying value and fair value of our assets. In the first quarter of 2022, we reassessed the recoverability of long-lived assets for our Financial Services reporting unit and recorded a \$73.7 million impairment. For the year ended 2021, we had a \$134.0 million impairment to the long-lived assets for our Financial Services reporting unit including \$88.2 million to intangible assets and \$45.8 million to fixed assets. Please refer to [Note 9](#), Fixed Assets and [Note 12](#), Goodwill and Intangible Assets for more information.

(g) *Leases*

We have operating and finance leases for corporate offices, data centers, and certain equipment that are accounted for under ASC 842, *Leases*. The lease term for our corporate headquarters ends in 2033 and includes the options to extend for one 10-year renewal period and two 5-year renewal periods.

We determine if an arrangement is a lease at inception. We consider any contract where there is an identified asset and that it has the right to control the use of such asset in determining whether the contract contains a lease. A ROU asset represents our right to use an underlying asset for the lease term and the lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and lease liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As our operating leases do not provide an implicit rate, we use an incremental borrowing rate based on the information available on the adoption date in determining the present value of lease payments. The incremental borrowing rate was calculated by using our credit rating on our publicly-traded U.S. unsecured bonds and estimating an appropriate credit rating for similar secured debt instruments. Our calculated credit rating on secured debt instruments determined the yield curve used. We calculated an implied spread and applied the spreads to the risk-free interest rates based on the yield of the U.S. Treasury zero coupon securities with a maturity equal to the remaining lease term in determining the borrowing rates for all operating leases. Our operating lease ROU assets include any lease payments made prior to the rent commencement date and exclude lease incentives. Lease expense for lease payments are recognized on a straight-line basis over the lease term. Operating lease transactions are included in "Operating lease right-of-use assets, net", and "Operating lease liabilities", current and noncurrent, within our accompanying consolidated balance sheets. Finance leases are included in property and equipment under "Fixed assets, net", "Short-term debt and current portion of long-term debt", and "Long-term debt" within our accompanying consolidated balance sheets.

(h) *Fair Value of Financial and Non-financial Instruments*

We follow the provisions of ASC 820-10, *Fair Value Measurements* ("ASC 820-10"), which defines fair value, establishes a framework for measuring fair value under U.S. GAAP and expands fair value measurement disclosures. We follow the provisions of ASC 820-10 for our financial assets and liabilities recognized or disclosed at fair value on a recurring basis. We follow the provisions of ASC 820-10 for our non-financial assets and liabilities recognized or disclosed at fair value.

(i) *Foreign Currency*

We have determined local currencies are the functional currencies of our foreign operations. The assets and liabilities of foreign subsidiaries are translated at the period-end rate of exchange and statement of operations items are translated at the average rates prevailing during the year. The resulting translation adjustment is recorded as a component of "Accumulated other comprehensive losses" in our accompanying consolidated statements of changes in stockholders' equity.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(j) *Stock-Based Compensation*

We follow ASC 718, *Stock Compensation* (“ASC 718”). Under ASC 718, stock-based compensation cost is measured at the grant date, based on the fair value of the awards granted, and is recognized as expense over the requisite service period.

Our nonqualified stock options have an exercise price equal to the closing price of our common stock on the grant date, with a ten-year contractual term. The expected term for our stock options granted for a majority of the awards granted was estimated based on studies of historical experience and projected exercise behavior. However, for certain awards granted, for which no historical exercise pattern exists, the expected term was estimated using the simplified method. The risk-free interest rate is based on the yield of U.S. Treasury zero coupon securities with a maturity equal to the expected term of the equity award. The volatility factor is calculated using our historical daily closing prices over the most recent period that is commensurate with the expected term of the stock option awards. The expected dividend yield was based on our expected annual dividend rate on the date of grant.

The fair value of our restricted stock is determined using the closing price of our common stock on the grant date. Our restricted stock is not assignable or transferable until it becomes vested. Restricted stock generally has a service vesting period of four years and we recognize the expense ratably over this service vesting period.

Performance share units (“PSU”) vest at the end of a three-year performance period, subject to the recipient’s continued service. Each PSU represents the right to receive one share of our common stock and the ultimate realization is based on our achievement of certain market performance criteria. We determined the grant date fair value of PSUs with the assistance of a third-party valuation specialist and based on estimates provided by us. The valuation of our PSUs employed the Monte Carlo simulation model, which includes certain key assumptions that were applied to us and our peer group. Those key assumptions included valuation date stock price, expected volatility, correlation coefficients, risk-free rate of return, and expected dividend yield. The valuation date stock price is based on the dividend-adjusted closing price on the grant date. Expected volatility is calculated using historical daily closing prices over a period that is commensurate with the length of the performance period. The correlation coefficients are based on the price data used to calculate the historical volatilities. The risk-free rate of return is based on the yield of U.S. Treasury zero coupon securities with a maturity equal to the length of the performance period. The expected dividend yield was based on our and our peer group’s expected dividend rate over the performance period. PSUs are tied to the achievement of certain market performance conditions, namely relative total shareholder return as compared to the S&P 500 index (“TSR-based PSUs”).

We estimate expected forfeitures of equity awards at the date of grant and recognize compensation expense only for those awards expected to vest. The forfeiture assumption is ultimately adjusted to the actual forfeiture rate. Estimated forfeiture is ultimately adjusted to actual forfeiture. Changes in the forfeiture assumptions may impact the total amount of expense ultimately recognized, as well as the timing of expense recognized over the requisite service period.

Excess tax benefit from exercised stock options, lapsing of restricted stock and PSUs is recorded as an income tax benefit in our accompanying consolidated statements of operations. This tax benefit is calculated as the excess of the intrinsic value of options exercised and of the market value of restricted stock lapsed over the compensation recognized for financial reporting purposes.

(k) *Research and Development Costs*

Research and development costs, which are primarily related to personnel and related overhead costs incurred in developing new services for customers, are expensed as incurred. Such costs were \$43.1 million, \$47.1 million, and \$44.6 million for the years ended December 31, 2022, 2021, and 2020, respectively, and were included in our accompanying consolidated statements of operations.

(l) *Advertising Costs*

Advertising costs, which are primarily associated with promoting our brand, names and solutions provided, are expensed as incurred. Such costs were \$14.7 million, \$12.0 million, and \$8.5 million for the years ended December 31, 2022, 2021, and 2020, respectively.

(m) *Income Taxes*

We account for income taxes under the asset and liability method under ASC 740, *Income Taxes* (“ASC 740”), which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined based on the differences between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

Deferred tax assets are recorded to the extent these assets are more likely than not to be realized. In making such determination, we consider all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax planning strategies, and recent financial operations. Valuation allowances are recognized to reduce deferred tax assets if it is determined to be more likely than not that all or some of the potential deferred tax assets will not be realized.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

We follow ASC 740-10, *Income Taxes* (“ASC 740-10”), which clarifies the accounting for uncertainty in income taxes recognized in the financial statements. ASC 740-10 provides that a tax benefit from an uncertain tax position may be recognized based on the technical merits when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes. Income tax positions must meet a more likely than not recognition threshold in accordance with ASC 740-10. This standard also provides guidance on measurement, derecognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition.

We recognize interest and penalties related to unrecognized tax benefits within the income tax expense line in our accompanying consolidated statements of operations. Accrued interest and penalties are included within “Other liabilities” on our accompanying consolidated balance sheets.

(n) *Earnings Per Share*

Basic and diluted earnings per share (“EPS”) are determined in accordance with ASC 260, *Earnings per Share*, which specifies the computation, presentation and disclosure requirements for EPS. Basic EPS excludes all dilutive common stock equivalents. It is based upon the weighted average number of common shares outstanding during the period. Diluted EPS, as calculated using the treasury stock method, reflects the potential dilution that would occur if our dilutive outstanding stock options and stock awards were issued.

(o) *Pension and Postretirement Benefits*

We account for our pension and postretirement benefits under ASC 715, *Compensation — Retirement Benefits* (“ASC 715”). ASC 715 requires the recognition of the funded status of a benefit plan in the balance sheet, the recognition in other comprehensive income (loss) of gains or losses and prior service costs arising during the period, but which are not included as components of periodic benefit cost or credit, and the measurement of defined benefit plan assets and obligations as of the balance sheet date. We utilize a valuation date of December 31.

(p) *Product Warranty Obligations*

We provide warranty coverage for certain of our solutions. We recognize a product warranty obligation when claims are probable and can be reasonably estimated. As of December 31, 2022 and 2021, product warranty obligations were not material.

In the ordinary course of business, we enter into numerous agreements that contain standard indemnities whereby we indemnify another party for breaches of confidentiality, infringement of intellectual property or gross negligence. Such indemnifications are primarily granted under licensing of computer software. Most agreements contain provisions to limit the maximum potential amount of future payments that we could be required to make under these indemnifications; however, we are not able to develop an estimate of the maximum potential amount of future payments to be made under these indemnifications as the triggering events are not subject to predictability.

(q) *Loss Contingencies*

We accrue for costs relating to litigation, claims, and other contingent matters when such liabilities become probable and reasonably estimable. Such estimates are based on management’s judgment. Actual amounts paid may differ from amounts estimated, and such differences will be charged to operations in the period in which the final determination of the liability is made.

(r) *Goodwill and Indefinite-Lived Intangible Assets*

Goodwill represents the excess of acquisition costs over the fair value of tangible net assets and identifiable intangible assets of our businesses acquired. Goodwill and intangible assets deemed to have indefinite lives are not amortized. Intangible assets determined to have finite lives are amortized over their useful lives. Goodwill and intangible assets with indefinite lives are subject to impairment testing annually as of June 30 or whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. This test compares the carrying value of each reporting unit to its fair value. If the fair value of the reporting unit exceeds the carrying value of our net assets, including goodwill assigned to that reporting unit, goodwill is not impaired. If the carrying value of the reporting unit’s net assets, including goodwill, exceeds the fair value of the reporting unit, then an impairment loss is recorded for the difference between the carrying amount and the fair value of the reporting unit. As part of our annual evaluation, we did not recognize any additional impairment charges related to our goodwill and indefinite-lived intangible assets.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

(s) *Recent Accounting Pronouncements*

Accounting Standard	Description	Effective Date	Effect on Consolidated Financial Statements or Other Significant Matters
Business Combinations (Topic 805) In October 2021, the FASB issued Accounting Standards Update "ASU" No. 2021-08, "Accounting for Contract Assets and Contract Liabilities from Contracts with Customers" ("ASU No. 2021-08")	This amendment requires an acquirer to recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with Accounting Standards Codification "ASC" 606. At the acquisition date, an acquirer should account for the related revenue contracts in accordance with ASC 606 as if it had originated the contracts. An acquirer should assess how the acquiree applied ASC 606 to determine what to record for the acquired revenue contracts. If the acquiree prepared financial statements in accordance with GAAP, this should result in an acquirer recognizing and measuring the acquired contract assets and contract liabilities consistent with how they were recognized and measured in the acquiree's financial statements. In circumstances in which the acquirer is unable to assess or rely on how the acquiree applied ASC 606, the acquirer should consider the terms of the acquired contracts, such as timing of payment, identify each performance obligation in the contracts, and allocate the total transaction price to each identified performance obligation on a relative standalone selling price basis as of the date the acquiree entered into the contracts to determine what should be recorded at the acquisition date.	Fiscal years beginning after December 15, 2022 with early adoption permitted.	We elected to early adopt ASU No. 2021-08 on January 1, 2022 on a prospective basis to all business combinations that occurred on or after the date of adoption. The adoption of ASU No. 2021-08 did not have a material impact on our Consolidated Financial Statements.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

3. Cash and Cash Equivalents:

Cash and cash equivalents consist of cash in banks, commercial paper, money-market funds, and other liquid instruments with original maturities of 90 days or less at the time of purchase.

4. Accounts Receivable:

Accounts receivable, net consisted of the following at December 31:

	2022	2021
Billed receivables	\$ 273.7	\$ 268.0
Unbilled receivables	30.7	47.3
Total receivables	304.4	315.3
Less allowance for doubtful accounts	(14.3)	(15.4)
Accounts receivable, net	<u>\$ 290.1</u>	<u>\$ 299.9</u>

5. Concentration of Credit Risk:

Financial instruments that potentially expose us to credit risk consist primarily of cash and cash equivalents as well as accounts receivable, net, which are generally not collateralized. We maintain our cash and cash equivalents in higher credit quality financial institutions in order to limit the amount of credit exposure. The total domestic cash balances are insured by the Federal Deposit Insurance Corporation ("FDIC") to a maximum amount of \$250.0 thousand per bank as of December 31, 2022 and 2021. As of December 31, 2022 and 2021, we had cash balances on deposit with five banks that exceeded the balance insured by the FDIC limit by approximately \$36.0 million and \$29.4 million, respectively. As of December 31, 2022 and 2021, we also had cash on deposit with foreign banks of approximately \$74.9 million and \$80.8 million, respectively.

We consider the concentration of credit risk associated with our accounts receivable to be commercially reasonable and believe that such concentration does not result in the significant risk of near-term severe adverse impacts. Our top fifty customers represent approximately 41% of revenues for 2022, 38% for 2021 and 40% for 2020, respectively, with no individual customer accounting for more than approximately 3% of revenues for the years ended December 31, 2022, 2021, and 2020. No individual customer comprised more than approximately 6% and 3% of accounts receivable as of December 31, 2022 and 2021, respectively.

6. Revenues:

Disaggregated revenues by type of service and by country are provided below for the years ended December 31, 2022, 2021, and 2020. No individual country outside of the U.S. accounted for more than 10.0% of our consolidated revenues for the years ended December 31, 2022, 2021, or 2020.

	2022	2021	2020
Insurance:			
Underwriting & Rating	\$ 1,734.5	\$ 1,555.1	\$ 1,413.0
Claims	702.5	651.8	595.7
Total Insurance	2,437.0	2,206.9	2,008.7
Specialized Markets	22.4	112.8	104.0
Financial Services	37.6	142.8	156.7
Total revenues	<u>\$ 2,497.0</u>	<u>\$ 2,462.5</u>	<u>\$ 2,269.4</u>

	2022	2021	2020
Revenues:			
United States	\$ 2,120.1	\$ 2,057.7	\$ 1,911.2
United Kingdom	169.5	169.0	141.2
Other countries	207.4	235.8	217.0
Total revenues	<u>\$ 2,497.0</u>	<u>\$ 2,462.5</u>	<u>\$ 2,269.4</u>

Contract assets are defined as an entity's right to consideration in exchange for goods or services that the entity has transferred to a customer when that right is conditioned on something other than the passage of time. As of December 31, 2022 and 2021, we had no contract assets.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Contract liabilities are defined as an entity's obligation to transfer goods or services to a customer for which the entity has received consideration (or an amount of consideration is due) from the customer. As of December 31, 2022 and 2021, we had contract liabilities that primarily related to unsatisfied performance obligations to provide customers with the right to use and update the online content over the remaining contract term of \$321.7 million and \$349.3 million, respectively. Contract liabilities, which are current and noncurrent, are included in "Deferred revenues" and "Other noncurrent liabilities" in our consolidated balance sheets, respectively, as of December 31, 2022 and 2021.

The following is a summary of the change in contract liabilities from December 31, 2020 through December 31, 2022:

Contract Liabilities at December 31, 2020	\$ 322.7
Revenue	(2,462.5)
Acquisitions	1.8
Billings	2,487.3
Contract Liabilities at December 31, 2021	349.3
Revenue	(2,497.0)
Acquisitions	3.4
Dispositions	(61.0)
Billings	2,527.0
Contract Liabilities at December 31, 2022	\$ 321.7

Our most significant remaining performance obligations relate to providing customers with the right to use and update the online content over the remaining contract term. Our disclosure of the timing for satisfying the performance obligation is based on the requirements of contracts with customers. However, from time to time, these contracts may be subject to modifications, impacting the timing of satisfying the performance obligations. These performance obligations, which are expected to be satisfied within one year, comprised approximately 98% and 97% of the balance as of December 31, 2022 and 2021, respectively.

We recognize an asset for incremental costs of obtaining a contract with a customer if we expect the benefits of those costs to be longer than one year. As of December 31, 2022 and 2021, we had deferred commissions of \$69.7 million and \$68.2 million, respectively, which have been included in "Prepaid expenses" and "Other noncurrent assets" in our accompanying consolidated balance sheets.

7. Fair Value Measurements:

Certain assets and liabilities are reported at fair value in our accompanying consolidated balance sheets. Such assets and liabilities include amounts for both financial and non-financial instruments. To increase consistency and comparability of assets and liabilities recorded at fair value, ASC 820-10 established a three-level fair value hierarchy to prioritize the inputs to valuation techniques used to measure fair value. ASC 820-10 requires disclosures detailing the extent to which companies' measure assets and liabilities at fair value, the methods and assumptions used to measure fair value, and the effect of fair value measurements on earnings. In accordance with ASC 820-10, we applied the following fair value hierarchy:

Level 1 — Assets or liabilities for which the identical item is traded on an active exchange, such as publicly-traded instruments.

Level 2 — Assets and liabilities valued based on observable market data for similar instruments.

Level 3 — Assets or liabilities for which significant valuation assumptions are not readily observable in the market; instruments valued based on the best available data, some of which is internally-developed, and considers risk premiums that a market participant would require.

The fair value of cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities, and short-term debt approximate their carrying amounts because of the short-term nature of these instruments. Our investments in registered investment companies, which are Level 1 assets measured at fair value on a recurring basis using quoted prices in active markets multiplied by the number of shares owned, were \$4.0 million and \$5.0 million as of December 31, 2022 and 2021, respectively. Our investments in registered investment companies have been included in "Other current assets" in our consolidated balance sheets as of December 31, 2022 and 2021.

We elected not to carry our long-term debt at fair value. The carrying value of our long-term debt represents the amortized cost, inclusive of unamortized premium, and net of unamortized discount and debt issuance costs. We assess the fair value of these financial instruments based on an estimate of interest rates available to us for financial instruments with similar features, our current credit rating, and spreads applicable to us. The following table summarizes the carrying value and estimated fair value of these financial instruments as of December 31, 2022 and 2021, respectively:

	Fair Value Hierarchy	2022		2021	
		Carrying Value	Estimated Fair Value	Carrying Value	Estimated Fair Value
Financial instrument not carried at fair value:					
Senior Notes (Note 15)	Level 2	\$ 2,342.6	\$ 2,113.3	\$ 2,692.0	\$ 3,017.4

On March 23, 2022, we made an additional \$37.0 million cash investment in Vexcel Group, Inc. ("Vexcel") for an additional 4.6% in ownership, bringing our interest to 43.3%. As of December 31, 2022 and 2021, we had an investment of \$181.1 million and \$144.1 million, respectively, related to such interest. The value of our investment is based on management's estimates with the assistance of valuations performed by third-party specialists. This investment

was included in "Other noncurrent assets" in our accompanying consolidated balance sheets.

As of December 31, 2022 and 2021, we had securities without readily determinable market values, inclusive of Vexcel, of \$201.5 million and \$161.6 million, respectively, which were accounted for at cost. We do not have the ability to exercise significant influence over the investees' operating and financial policies or do not hold investments in common stock or in-substance common stock in such entities. As of December 31, 2022 and 2021, we also had investments in private companies of \$28.3 million and \$54.6 million, respectively, accounted for in accordance with ASC 323-10-25, *The Equity Method of Accounting for Investments in Common Stock* ("ASC 323-10-25") as equity method investments. All such investments were included in "Other noncurrent assets" in our accompanying consolidated balance sheets. For the years ended December 31, 2022 and 2021, there was no provision for credit losses related to these investments.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

8. Leases:

We have operating and finance leases for corporate offices, data centers, and certain equipment that are accounted for under ASC 842. The lease term for our corporate headquarters ends in 2033 and includes the options to extend for one 10-year renewal period and two 5-year renewal periods. Extension and termination options are considered in the calculation of our right-of-use ("ROU") assets and lease liabilities when we determine it is reasonably certain that we will exercise those options.

The following table presents the consolidated lease cost and cash paid for amounts included in the measurement of lease liabilities for finance and operating leases for the years ended December 31, 2022 and 2021:

	2022	2021
Lease cost:		
Operating lease cost ⁽¹⁾	\$ 47.7	\$ 52.5
Sublease income	(2.0)	(1.7)
Finance lease cost		
Depreciation of finance lease assets ⁽²⁾	12.8	13.9
Interest on finance lease liabilities ⁽³⁾	0.5	0.8
Total lease cost	<u>\$ 59.0</u>	<u>\$ 65.5</u>
Other information:		
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash outflows from operating leases	\$ (46.4)	\$ (51.3)
Operating cash outflows from finance leases	\$ (0.5)	\$ (0.8)
Financing cash outflows from finance leases	\$ (14.3)	\$ (18.2)

⁽¹⁾ Included in "Cost of revenues" and "Selling, general and, administrative" expenses in our accompanying consolidated statements of operations

⁽²⁾ Included in "Depreciation and amortization of fixed assets" in our accompanying consolidated statements of operations

⁽³⁾ Included in "Interest expense" in our accompanying consolidated statements of operations

The following table presents weighted-average remaining lease terms and weighted-average discount rates for the consolidated finance and operating leases for the years ended December 31, 2022 and 2020:

	2022	2021
Weighted-average remaining lease term - operating leases (in years)	8.5	8.5
Weighted-average remaining lease term - finance leases (in years)	1.7	1.6
Weighted-average discount rate - operating leases	3.8%	3.8%
Weighted-average discount rate - finance leases	2.6%	3.8%

Our ROU assets and lease liabilities for finance leases were \$10.7 million and \$4.2 million, respectively, as of December 31, 2022. Our ROU assets and lease liabilities for finance leases were \$19.0 million and \$13.5 million, respectively, as of December 31, 2021. Our ROU assets for finance leases were included in "Fixed assets, net" in our accompanying consolidated balance sheets. Our lease liabilities for finance leases were included in the "Short-term debt and current portion of long-term debt" and "Long-term debt" in our accompanying consolidated balance sheets (See [Note 15](#), Debt).

Maturities of the continuing lease liabilities for the years through 2028 and thereafter are as follows:

Years Ending	Operating Leases	Finance Leases
2023	\$ 34.6	\$ 3.1
2024	28.8	0.8
2025	28.2	0.3
2026	26.5	0.1
2027	26.3	-
2028 and thereafter	119.0	-
Total lease payments	263.4	4.3
Less: Amount representing interest	(44.0)	(0.1)
Present value of total lease payments	<u>\$ 219.4</u>	<u>\$ 4.2</u>

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

9. Fixed Assets

The following is a summary of fixed assets:

	Useful Life (in years)	Cost	Accumulated Depreciation and Amortization	Net
December 31, 2022				
Furniture and office equipment	3 - 10	\$ 199.2	\$ (177.1)	\$ 22.1
Leasehold improvements	Lease term	118.3	(54.6)	63.7
Purchased software	3	65.1	(61.0)	4.1
Software development costs	3 - 7	945.4	(504.5)	440.9
Leased equipment	3 - 4	64.4	(53.7)	10.7
Total fixed assets		<u>\$ 1,392.4</u>	<u>\$ (850.9)</u>	<u>\$ 541.5</u>
December 31, 2021				
Furniture and office equipment	3 - 10	\$ 234.1	\$ (204.0)	\$ 30.1
Leasehold improvements	Lease term	123.9	(47.9)	76.0
Purchased software	3	74.5	(68.4)	6.1
Software development costs	3 - 7	861.7	(461.5)	400.2
Leased equipment	3 - 4	60.5	(41.5)	19.0
Total fixed assets		<u>\$ 1,354.7</u>	<u>\$ (823.3)</u>	<u>\$ 531.4</u>

Depreciation and amortization of fixed assets for the years ended December 31, 2022, 2021, and 2020 were \$164.2 million, \$170.3 million, and \$159.2 million, of which \$138.3 million, \$137.5 million, and \$120.6 million related to amortization of internal-use software development costs, respectively. Amortization expense related to development of software for sale in accordance with ASC 985-20 was \$7.6 million, \$11.7 million, and \$11.3 million for the years ended December 31, 2022, 2021, and 2020, respectively. We had unamortized software development costs that had been capitalized in accordance with ASC 350-40 of \$389.1 million and \$341.0 million as of December 31, 2022 and 2021, respectively. We had unamortized software development costs that had been capitalized in accordance with ASC 985-20 of \$51.7 million and \$59.3 million as of December 31, 2022 and 2021, respectively. Leased assets include amounts held under finance leases for automobiles, computer software, and computer equipment.

Due to the deterioration in the performance of our former Financials Services reporting unit and the finalization of the sale price, we reassessed the recoverability of long-lived assets during the first quarter of 2022, resulting in a \$73.7 million impairment. During the fourth quarter of 2021, we recognized a \$134.0 million impairment to the long-lived assets for our Financial Services reporting unit including \$88.2 million to intangible assets and \$45.8 million to fixed assets. These impairments are included within "Other operating (income) loss" in our consolidated statements of operations.

10. Acquisitions

2022 Acquisitions

On March 1, 2022, we acquired 100 percent of the stock of Opta Information Intelligence Corp. ("Opta") for a net cash purchase price of \$217.5 million excluding working capital adjustments, of which \$0.8 million represents indemnity escrows. Opta, a leading provider of property intelligence and innovative technology solutions in Canada, has become a part of the underwriting & rating category within our Insurance segment. We believe this acquisition further expands our footprint in the Canadian market and supports Verisk in reshaping risk management with valuable business intelligence.

On February 11, 2022, we acquired 100 percent of the membership interest of Infutor Data Solutions, LLC ("Infutor") for a net cash purchase price of \$220.7 million excluding working capital adjustments, of which \$1.5 million represents a working capital escrow, plus a contingent earn-out payment of up to \$25.0 million subject to the achievement of certain revenue and other performance targets. Infutor, a leading provider of identity resolution and consumer intelligence data, has become a part of the underwriting & rating category within our Insurance segment. We believe this acquisition further enhances Verisk's marketing solutions offerings to companies across several industries, including the insurance industry.

The "Other" column includes other immaterial acquisitions that have occurred during the period. The preliminary purchase price allocation of the 2022 acquisitions resulted in the following:

	Opta	Infutor	Others	Total
Cash and cash equivalents	\$ 0.4	\$ 17.0	\$ -	\$ 17.4
Accounts receivable	5.2	10.7	-	15.9
Other current assets	1.3	3.8	0.1	5.2
Fixed assets	1.5	0.9	0.3	2.7
Operating lease right-of-use assets, net	1.1	2.3	-	3.4
Intangible assets	87.0	83.4	2.3	172.7
Goodwill	141.1	140.3	3.0	284.4
Other assets	-	0.1	-	0.1
Total assets acquired	237.6	258.5	5.7	501.8
Current liabilities	4.9	14.4	0.1	19.4
Deferred revenues	0.2	3.1	0.1	3.4
Operating lease liabilities	1.1	3.3	-	4.4
Deferred income tax, net	13.5	-	0.5	14.0
Other liabilities	-	-	0.2	0.2
Total liabilities assumed	19.7	20.8	0.9	41.4
Net assets acquired	217.9	237.7	4.8	460.4
Less: Cash acquired	0.4	17.0	-	17.4
Net cash purchase price	\$ 217.5	\$ 220.7	\$ 4.8	\$ 443.0

The preliminary amounts assigned to intangible assets by type for our 2022 acquisitions are summarized in the table below:

	Weighted Average Useful Life (in years)	Total
Technology-based	6	\$ 48.5
Marketing-related	4	2.0
Customer-related	13	122.2
Total intangible assets		<u>\$ 172.7</u>

The preliminary allocations of the purchase price for the 2022 acquisitions with less than a year of ownership are subject to revisions as additional information is obtained about the facts and circumstances that existed as of each acquisition date. The revisions may have a significant impact on our consolidated financial statements. The allocations of the purchase price will be finalized once all the information is obtained, but not to exceed one year from the acquisition date. The primary areas of the purchase price allocation that are not yet finalized relate to income and non-income taxes, deferred revenues, the valuation of intangible assets acquired, right-of-use assets and operating lease liabilities and residual goodwill. The goodwill associated with our acquisitions include the acquired assembled work force, the value associated with the opportunity to leverage the work force to continue to develop the technology and content assets, as well as our ability to grow through adding additional customer relationships or new solutions in the future. Of the \$284.4 million in goodwill associated with our acquisitions, \$144.5 million is not deductible for tax purposes. The preliminary amounts assigned to intangible assets by type for these acquisitions were based upon our valuation model and historical experiences with entities with similar business characteristics.

For the year ended December 31, 2022, we incurred transaction costs related to acquisitions of \$1.8 million, which are included within "Selling, general and administrative expenses in the accompanying consolidated statements of operations. Refer to [Note 12](#). Goodwill and Intangible Assets for further discussion.

Our 2022 acquisitions were not significant, both individually and in the aggregate, to our consolidated financial statements for the years ended December 31, 2022, 2021 and 2020, and therefore, supplemental information disclosure on an unaudited pro forma basis is not presented.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

2021 Acquisitions

On December 23, 2021, we acquired approximately 96.7 percent of the stock of ACTINEO GmbH ("ACTINEO") with an option to acquire the remaining shares at a future date, for a net cash purchase price of \$148.9 million. ACTINEO offers a comprehensive portfolio of services, technology and data solutions to support the entire bodily injury settlement process. With this acquisition, we add ACTINEO's established claims management solutions to our leading data analytics and insurance ecosystem, providing customers with digitalization and medical expertise solutions throughout the entire claims process. ACTINEO is part of the claims vertical within our Insurance segment.

On November 2, 2021, we acquired 100 percent of the stock of Data Driven Safety, LLC ("Data Driven Safety") for a net cash purchase price of \$93.5 million, of which \$2.0 million represents indemnity escrows. Data Driven Safety, a leading public record data aggregation firm that specializes in driver risk assessment in the U.S., has become a part of the underwriting & rating category within our Insurance segment. We believe that Data Driven Safety will expand our robust auto insurance analytics, providing insurers with information to further refine underwriting, improve the customer experience and promote public safety.

On September 1, 2021, we acquired 100 percent of the stock of Ignite Software Systems Limited ("Ignite") for a net cash purchase price of \$13.8 million. Ignite, a provider of insurance policy administration systems to brokers, managing general agents, and insurers, has become a part of the underwriting & rating category within our Insurance segment. We believe that Ignite's client focus and deep domain knowledge will fit into our business model providing new and existing clients with access to a broader expert advice and service.

On June 17, 2021, we acquired 100 percent of the stock of Roskill Holdings Limited ("Roskill") for a net cash purchase price of \$22.1 million, of which \$4.8 million represents indemnity escrows. Roskill, a provider of metals and materials supply chain intelligence, has become part of our Energy and Specialized Markets segment. Roskill's capabilities reinforce our ability to provide comprehensive analysis across the energy, and metals and mining value chain while adding analysis, data, and insight on battery raw materials metals. This acquisition was excluded from the table below due to the announcement of the sale of our Energy business.

On March 2, 2021, we acquired a 51.0 percent ownership in Whitespace Software Limited ("Whitespace") for a net cash purchase price of \$16.8 million. The remaining 49.0 percent ownership interest in Whitespace will be acquired by us, in three equal proportions over the next three years, at a purchase price determined based upon a fixed revenue multiple and adjusted for any free cash flow shortfall. Whitespace, a provider of digital placing technology to the (re)insurance market, has become part of the underwriting & rating category within our Insurance segment. We expect our investment in Whitespace to enable a seamless real-time quote-to-bind electronic placing and global distribution solution, with straight-through submissions for our customers.

The final purchase price allocations, inclusive of closing adjustments, of our 2021 acquisitions resulted in the following:

	ACTINEO	Data Driven Safety	Others	Total
Cash and cash equivalents	\$ 0.2	\$ 2.5	\$ 3.7	\$ 6.4
Accounts receivable	1.8	1.0	1.4	4.2
Other current assets	-	2.0	1.0	3.0
Fixed assets	1.4	-	0.1	1.5
Operating lease right-of-use assets, net	4.2	0.4	1.3	5.9
Intangible assets	48.3	42.1	19.0	109.4
Goodwill	121.9	74.1	39.6	235.6
Other assets	-	—	0.1	0.1
Total assets acquired	177.8	122.1	66.2	366.1
Current liabilities (1)	2.1	2.7	1.7	6.5
Deferred revenues	0.0	0.4	1.4	1.8
Operating lease liabilities	4.2	0.4	1.4	6.0
Deferred income tax, net	15.8	-	3.7	19.5
Other liabilities	-	21.7	—	21.7
Total liabilities assumed	22.1	25.2	8.2	55.5
Net assets acquired	155.7	96.9	58.0	310.6
Less: Noncontrolling interests	6.6	-	19.8	26.4
Cash acquired	0.2	3.4	3.7	7.3
Net cash purchase price	\$ 148.9	\$ 93.5	\$ 34.5	\$ 276.9

The final amounts assigned to intangible assets by type for our 2021 acquisitions are summarized in the table below:

	Weighted Average Useful Life (in years)	Total
Technology-based	5	\$ 21.1
Marketing-related	3	1.1
Customer-related	13	81.2
Database-related	6	6.0

For the year ended December 31, 2022, we finalized the purchase accounting for our 2021 acquisitions during the measurement periods in accordance with ASC 805, *Business Combinations*. The impact of finalization of the purchase accounting associated with these acquisitions was not material to our accompanying financial statements for the years ended December 31, 2022 and 2021.

Of the \$235.6 million in goodwill associated with our acquisitions, \$161.3 million is not deductible for tax purposes. The preliminary amounts assigned to intangible assets by type for these acquisitions were based upon our valuation model and historical experiences with entities with similar business characteristics. For the year ended December 31, 2021, we incurred transaction costs related to acquisitions of \$2.8 million, which are included within "Selling, general and administrative" expenses in our accompanying consolidated statements of operations. Refer to [Note 12](#), Goodwill and Intangible Assets for further discussion.

Our 2021 acquisitions were not significant, both individually and in the aggregate, to our consolidated financial statements for the years ended December 31, 2021 and 2020, and therefore, supplemental information disclosure on an unaudited pro forma basis is not presented.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

2020 Acquisitions

On December 16, 2020, we acquired 100 percent of the stock of Lead Intelligence, Inc. ("Jornaya"), a provider of consumer behavioral data and intelligence, for a net cash purchase price of \$124.9 million. The acquisition added Jornaya's proprietary view of consumer buying journeys to our growing set of marketing solutions for the insurance and financial services markets, as well as provide customers with the intelligence and agility to time and tailor interactions based on actual in-market behaviors. Jornaya has become part of the underwriting & rating category within our Insurance segment. The final purchase price allocation of the acquisition is presented in the table below.

On September 9, 2020, we acquired 100 percent of the stock of Franco Signor LLC ("Franco Signor") for a net cash purchase price of \$159.7 million, of which \$8.0 million represents indemnity escrows. Franco Signor is a Medicare Secondary Payer compliance solutions provider to large employers, insurers and third-party administrators in the U.S. Franco Signor has become part of the claims category within our Insurance segment and enhanced the solutions we currently offer, as well as added professional administrative services for Medicare Set Asides to our suite of solutions. The final purchase price allocation of the acquisition is presented in the table below.

The final purchase price allocations, inclusive of closing adjustments, of our 2020 acquisitions resulted in the following:

	Lead Intelligence	Franco Signor	Total
Cash and cash equivalents (1)	\$ 5.9	\$ 10.9	\$ 16.8
Accounts receivable	2.8	2.2	5.0
Other current assets	1.4	0.9	2.3
Fixed assets	0.8	0.4	1.2
Operating lease right-of-use assets, net	1.6	1.5	3.1
Intangible assets	64.3	59.1	123.4
Goodwill	69.9	101.5	171.4
Other assets	0.1	8.0	8.1
Total assets acquired	<u>146.8</u>	<u>184.5</u>	<u>331.3</u>
Current liabilities	2.1	8.3	10.4
Deferred revenues	2.6	0.3	2.9
Operating lease liabilities	1.6	1.5	3.1
Deferred income tax, net	9.7	1.5	11.2
Other liabilities	-	8.0	8.0
Total liabilities assumed	<u>16.0</u>	<u>19.6</u>	<u>35.6</u>
Net assets acquired	130.8	164.9	295.7
Less: Cash and cash equivalents	5.9	10.9	16.8
Restricted cash	-	(5.7)	(5.7)
Cash acquired	<u>5.9</u>	<u>5.2</u>	<u>11.1</u>
Net cash purchase price	<u>\$ 124.9</u>	<u>\$ 159.7</u>	<u>\$ 284.6</u>

(1) Within cash and cash equivalents, there is \$5.7 million of restricted cash related to Franco Signor's professional administrative services for Medicare Set Asides, with an offsetting liability of \$5.7 million included within current liabilities.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The final amounts assigned to intangible assets by type for our 2020 acquisitions are summarized in the table below:

	Weighted Average Useful Life (in years)	Total
Technology-based	11	\$ 30.8
Marketing-related	5	2.1
Customer-related	11	90.5
Total intangible assets		<u>\$ 123.4</u>

For the year ended December 31, 2021, we finalized the purchase accounting for our 2020 acquisitions during the measurement periods in accordance with ASC 805, *Business Combinations*. The impact of finalization of the purchase accounting associated with these acquisitions was not material to our accompanying financial statements for the years ended December 31, 2020.

The goodwill of \$171.4 million associated with the purchases of Jornaya and Franco Signor \$90.6 million is not deductible for tax purposes. For the year ended December 31, 2020, we incurred transaction costs related to acquisitions of \$2.2 million, which are included within "Selling, general and administrative" expenses in our accompanying consolidated statements of operations. Refer to [Note 12](#), Goodwill and Intangible Assets for further discussion.

Our 2020 acquisitions were not significant, both individually and in the aggregate, to our consolidated financial statements for the year ended December 31, 2020 and therefore, supplemental information disclosure on an unaudited pro forma basis is not presented.

Acquisition Escrows and Related Liabilities

Pursuant to the related acquisition agreements, we have funded various escrow accounts to satisfy pre-acquisition indemnity and tax claims arising subsequent to the acquisition dates, as well as a portion of the contingent payment. During the years ended December 31, 2022 and 2021, we released \$12.8 million and \$12.1 million of indemnity escrows related to various acquisitions. At December 31, 2022 and 2021, the current portion of the escrows amounted to \$0 million and \$10.6 million, and the noncurrent portion of the escrows amounted to \$0 million. The current and noncurrent portions of the escrows have been included in "Other current assets" and "Other noncurrent assets" in our accompanying consolidated balance sheets, respectively.

The acquisitions of Rebmark Legal Solutions, ACTINEO GmbH, Data Driven Safety, LLC, and Infutor Data Solutions, LLC, included acquisition-related contingent payments, for which the sellers of these acquisitions could receive additional payments by achieving the specific predetermined revenue, EBITDA, and EBITDA margin earn-out targets for exceptional performance. We believe that the liabilities recorded as of December 31, 2021 and 2020 reflect the best estimate of acquisition-related contingent payments. The associated current portion of contingent payments were \$29.9 million and \$0.5 million as of December 31, 2022 and 2021, respectively. The associated noncurrent portion of contingent payments were \$0 million and \$21.7 million as of December 31, 2022 and 2021, respectively.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

11. Dispositions and Discontinued Operations:

Dispositions

On March 11, 2022 the sale of our environmental health and safety business ("3E Company Environmental, Ecological, and Engineering"), which made up our Supply Chain reporting unit, within the Energy and Specialized Markets segment, to New Mountain Capital, was completed for proceeds of \$575.0 million, net of cash and excluding contingent consideration. In the first quarter of 2022, we recognized a gain of \$450.8 million. This \$450.8 million recognized gain is included within "Other operating (income) loss" in our consolidated statements of operations. The major classes of assets and liabilities disposed of, reflected in our consolidated balance sheets as of March 11, 2022, are presented below. We assessed the sale of our environmental health and safety business per the guidance in ASC 205-20, *Discontinued Operations*, and determined that this transaction did not qualify as a discontinued operation as its total revenues and assets did not meet the thresholds exemplified in the guidance to represent a strategic shift, quantitatively or qualitatively, that has or will have a major effect on our operations and financial results.

On April 8, 2022, the sale of Verisk Financial Services, our Financials Services reportable segment, to TransUnion, a global information and insights company, was completed for net cash proceeds of \$498.3 million. An impairment loss of \$73.7 million and a loss on the sale of \$15.6 million were recognized in the first and second quarter of 2022, respectively. In the fourth quarter of 2021, we recognized a \$134.0 million impairment to the long-lived assets for our Financial Services reporting unit including \$88.2 million to intangible assets and \$45.8 million to fixed assets. The impairments were included within "Other operating (income) loss" within our accompanying consolidated statements of operations. We assessed the sale of our Financial Services segment per the guidance in ASC 205-20, *Discontinued Operations*, and determined that this transaction did not qualify as a discontinued operation as it did not represent a strategic shift, quantitatively or qualitatively, that has or will have a major effect on our operations and financial results. Verisk Financial Services generated revenue of \$37.6 million 2022.

The major classes of assets and liabilities disposed of, reflected in our consolidated balance sheets as of March 11, 2022 and April 8, 2022, respectively, are presented below:

	3E Company Environmental, Ecological and Engineering	Verisk Financial Services	Total
Cash and cash equivalents	\$ 12.7	\$ 9.3	\$ 22.0
Accounts receivable, net of allowance for doubtful accounts	24.4	36.2	60.6
Prepaid expenses	3.5	3.2	6.7
Other current assets	0.4	1.0	1.4
Current assets	41.0	49.7	90.7
Fixed assets, net	16.4	3.5	19.9
Operating lease right-of-use assets, net	6.4	1.4	7.8
Intangible assets, net	24.2	5.3	29.5
Goodwill	116.5	473.2	589.7
Other noncurrent assets	4.8	7.0	11.8
Noncurrent assets	168.3	490.4	658.7
Total assets	209.3	540.1	749.4
Accounts payable and accrued liabilities	9.6	12.9	22.5
Deferred revenues	54.1	6.9	61.0
Operating lease liabilities	1.7	3.4	5.1
Income taxes payable	11.9	(1.7)	10.2
Current liabilities	77.3	21.5	98.8
Deferred income tax liabilities	(0.8)	8.3	7.5
Operating lease liabilities	6.1	5.1	11.2
Other noncurrent liabilities	2.5	-	2.5
Noncurrent liabilities	7.8	13.4	21.2
Total liabilities	85.1	34.9	120.0
Net assets sold as part of dispositions	124.2	505.2	629.4
Less: Cash sold	12.7	9.3	22.0
Net assets sold as part of dispositions, net of cash sold	\$ 111.5	\$ 495.9	\$ 607.4

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Discontinued Operations

On October 28, 2022, we entered into an equity purchase agreement to sell our Energy business to Planet Jersey Buyer Ltd, an entity that was formed on behalf of, and is controlled by, The Veritas Capital Fund VIII, L.P. and its affiliated funds and entities (“Veritas Capital”), for a purchase price of \$3,100.0 million (subject to customary purchase price adjustments for, among other things, the cash, working capital and indebtedness of the Energy business as of the closing) and up to \$200.0 million of additional contingent cash consideration based on Veritas Capital’s future return on its investment paid through a Class C Partnership interest.

The Energy business, which was part of the Energy and Specialized Markets segment, qualified as held for sale in the fourth quarter of 2022 and was classified as a discontinued operation per ASC 205-20, *Discontinued Operations*, as we determined, qualitatively and quantitatively, that this transaction represents a strategic shift that has or will have a major effect on our operations and financial results. Accordingly, all results of the Energy business have been removed from continuing operations and presented as discontinued operations in our consolidated statements of operations for all periods presented. Additionally, all assets and liabilities of the Energy business have been classified as assets and liabilities held for sale within our consolidated balance sheet as of December 31, 2022 and December 31, 2021. In connection with the held for sale classification, we recognized an impairment of \$303.7 million, partially offset by a deferred tax benefit of \$75.9 million on the remeasurement of the disposal group held for sale, which has been included in discontinued operations in our consolidated statement of operations for the year ended December 31, 2022. Upon classification of the Energy business as held for sale, its cumulative foreign currency translation adjustment within shareholders’ equity was included with its carry value, which primarily resulted in the impairment.

On February 1, 2023, we closed on and completed the sale of our Energy business. We do not expect to have any continuing involvement in the Energy business subsequent to closing.

The following table presents financial results from discontinued operations, net of income taxes in our consolidated statement of income for the periods indicated:

	For the Year Ended December 31,		
	2022	2021	2020
Revenues	\$ 537.3	\$ 536.1	\$ 515.2
Operating expenses:			
Cost of revenues (exclusive of items shown separately below)	207.4	204.1	202.2
Selling, general and administrative	117.2	109.5	105.7
Depreciation and amortization of fixed assets	32.9	36.6	33.0
Amortization of intangible assets	68.5	96.8	92.5
Impairment loss	303.7	-	-
Other operating loss	33.9	-	-
Total operating expenses	763.6	447.0	433.4
Operating (loss) income	(226.3)	89.1	81.8
Other income (expense):			
Investment income (loss) and others, net	7.0	(0.2)	(2.8)
Total other income (expense), net	7.0	(0.2)	(2.8)
(Loss) income from discontinued operations before income taxes	(219.3)	88.9	79.0
Income tax benefit (expense)	131.5	(29.7)	(20.1)
(Loss) income from discontinued operations, net of income taxes	\$ (87.8)	\$ 59.2	\$ 58.9

The consolidated statements of cash flows have not been adjusted to separately disclose cash flows related to discontinued operations. The following table presents selected cash flow information associated with our discontinued operations:

	For the Year Ended December 31,		
	2022	2021	2020
Significant non-cash operating activities:			
Depreciation and amortization of fixed assets	\$ 32.9	\$ 36.6	\$ 33.0
Amortization of intangible assets	68.5	96.8	92.5
Impairment loss	303.7	-	-
Operating lease right-of-use assets, net	7.6	7.7	3.0
Investing activities:			
Capital expenditures	(72.6)	(59.7)	(43.4)
Fixed assets included in accounts payable and accrued liabilities	3.0	5.0	-

The following table presents the aggregate carrying amounts of the held for sale assets and liabilities of the Energy business in the consolidated balance sheet as of the date indicated:

	December 31, 2022	December 31, 2021
Cash and Cash Equivalents	\$ 180.2	\$ 168.4
Accounts receivable, net	150.8	146.4

Prepaid expenses	17.8	14.9
Other current assets	13.8	5.3
Total current assets:	362.6	335.0
Fixed assets, net	157.1	126.8
Operating lease right-of-use assets, net	29.8	29.1
Intangible assets, net	616.9	743.6
Goodwill	2,136.3	2,283.6
Other noncurrent assets	16.3	21.1
Total noncurrent assets	2,956.4	3,204.2
Total assets held for sale:	3,319.0	3,539.20
Net impairment of asset group ⁽¹⁾	(227.8)	-
Total assets held for sale, net	<u>\$ 3,091.2</u>	<u>\$ 3,539.2</u>
Accounts payable and accrued liabilities	68.6	58.6
Operating lease liabilities	6.9	9.5
Deferred revenues	176.6	153.2
Income taxes payable	30.2	10.8
Current liabilities held-for-sale:	282.3	232.1
Deferred income tax liabilities	144.1	175.5
Noncurrent lease liabilities	30.8	23.4
Other noncurrent liabilities	2.7	11.0
Noncurrent liabilities held-for-sale	177.6	209.9
Total liabilities held for sale	<u>\$ 459.9</u>	<u>\$ 442.0</u>

(1) In connection with the held for sale classification, we recognized a \$303.7 million impairment, partially offset by a deferred tax benefit of \$75.9 million on the remeasurement of the disposal group held for sale. This impairment was charged to a contra asset account within "Other noncurrent assets" per ASC 205-20, *Discontinued Operations*.

12. Goodwill and Intangible Assets:

We completed the required annual impairment test as of June 30, 2022, 2021 and 2020, which resulted in no impairment of goodwill. Subsequent to performing our annual impairment test, we continued to monitor these reporting units for events that would trigger an interim impairment test; other than the impairment of the Energy business that was triggered when the entity was classified as held for sale (Note 11), we did not identify any other triggering events.

Due to the continued deterioration in the performance of our Financial Services reporting unit and the finalization of the sale price, we reassessed the recoverability of these long-lived assets during the first quarter of 2022, resulting in an a \$73.7 million impairment. This \$73.7 million impairment is included within "Other operating income, net" in our consolidated statements of operations.

The following is a summary of the change in goodwill from December 31, 2020 through December 31, 2022, both in total and as allocated to our reportable segments:

	Insurance	Specialized Markets	Financial Services	Total
Goodwill at December 31, 2020	\$ 1,208.6	\$ 136.5	\$ 475.9	\$ 1,821.0
Acquisitions	235.9	-	-	235.9
Purchase accounting reclassifications	(0.3)	-	-	(0.3)
Current period adjustment ⁽¹⁾	15.8	(15.8)	-	-
Foreign currency translation adjustment	(5.2)	(3.3)	(0.5)	(9.0)
Goodwill at December 31, 2021	1,454.8	117.4	475.4	2,047.6
Acquisitions	284.4	-	-	284.4
Purchase accounting reclassifications	(0.5)	-	-	(0.5)
Disposition of sold businesses	-	(116.5)	(473.2)	(589.7)
Impairment Charge	-	-	(1.7)	(1.7)
Foreign currency translation adjustment	(62.7)	(0.9)	(0.5)	(64.1)
Goodwill at December 31, 2022	<u>\$ 1,676.0</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 1,676.0</u>

(1) This adjustment relates to a segment reclassification; refer to [Note 19](#). Segment Reporting

Our intangible assets and related accumulated amortization consisted of the following:

	Weighted Average Useful Life (in years)	Cost	Accumulated Amortization	Net
December 31, 2022				
Technology-based	8	\$ 355.1	\$ (229.3)	\$ 125.8
Marketing-related	6	41.3	(35.5)	5.8
Contract-based	6	5.0	(5.0)	-
Customer-related	13	510.7	(146.7)	364.0
Database-based	8	15.0	(5.8)	9.2
Total intangible assets		<u>\$ 927.1</u>	<u>\$ (422.3)</u>	<u>\$ 504.8</u>
December 31, 2021				
Technology-based	8	\$ 382.4	\$ (263.0)	\$ 119.4
Marketing-related	6	65.3	(56.5)	8.8
Contract-based	6	5.0	(5.0)	—
Customer-related	12	585.1	(262.8)	322.3
Database-based	8	53.8	(22.0)	31.8
Total intangible assets		<u>\$ 1,091.6</u>	<u>\$ (609.3)</u>	<u>\$ 482.3</u>

Amortization expense related to intangible assets for the years ended December 31, 2022, 2021, and 2020, was \$74.4 million, \$80.0 million, and \$73.4 million, respectively. Estimated amortization expense in future periods through 2028 and thereafter for intangible assets subject to amortization is as follows:

Years Ending	Amount
2023	\$ 69.4
2024	66.8
2025	58.2
2026	56.3
2027	48.5
2028 and thereafter	205.6
Total	<u>\$ 504.8</u>

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

13. Income Taxes:

Domestic and foreign income before income taxes was as follows:

	2022	2021	2020
U.S.	\$ 1,277.1	\$ 784.1	\$ 823.5
Foreign	(14.7)	2.4	(5.1)
Total income before income taxes	<u>\$ 1,262.4</u>	<u>\$ 786.5</u>	<u>\$ 818.4</u>

The components of the provision for income taxes for the years ended December 31 were as follows:

	2022	2021	2020
Current:			
Federal	\$ 247.8	\$ 123.8	\$ 113.0
State and local	64.7	19.5	22.8
Foreign	1.1	3.0	3.3
Total current provision for income taxes	<u>313.6</u>	<u>146.3</u>	<u>139.1</u>
Deferred:			
Federal	(43.3)	20.6	21.2
State and local	(11.2)	10.5	5.8
Foreign	(38.8)	2.0	(1.5)
Total deferred provision for income taxes	<u>(93.3)</u>	<u>33.1</u>	<u>25.5</u>
Provision for income taxes	<u>\$ 220.3</u>	<u>\$ 179.4</u>	<u>\$ 164.6</u>

The reconciliation between our effective tax rate and the statutory tax rate is as follows for the years ended December 31:

	2022	2021	2020
Federal statutory rate	21.0%	21.0%	21.0%
State and local taxes, net of federal tax benefit	3.4	2.8	2.7
Impact of dispositions	(3.0)	-	-
UK valuation allowance release	(2.4)	-	-
Global Intangible Low-taxed Income	0.4	2.6	-
Stock-based compensation	(1.7)	(3.5)	(3.7)
Other	(0.2)	(0.1)	0.1
Effective tax rate	<u>17.5%</u>	<u>22.8%</u>	<u>20.1%</u>

The decrease in the effective tax rate in 2022 compared to 2021 was primarily due to a tax rate benefit in connection with the sale of our environmental health and safety business for which a benefit was recognized for the difference between book and tax basis of our investment. The 2022 rate was also lower than 2021 due to a release of a United Kingdom valuation allowance related to interest expense utilization and a reduced Global Intangible Low Taxed Income ("GILTI") inclusion in the current period versus the prior period, partially offset by reduced stock option exercises resulting in lower tax benefits from equity compensation in the current period versus the prior period.

The tax effects of significant items comprising our deferred tax assets as of December 31 are as follows:

	2022	2021
Deferred tax assets:		
Employee wages and other benefits	\$ 54.9	\$ 46.7
Deferred rent	9.2	9.6
Net operating loss carryover	12.0	11.7
Capital and other unrealized losses	1.6	1.5
Interest expense	31.1	34.7
Book/tax energy basis difference	112.2	—
Other	15.2	5.2
Total	<u>236.2</u>	<u>109.4</u>
Less valuation allowance	(45.3)	(38.3)
Deferred tax assets	<u>190.9</u>	<u>71.1</u>
Deferred tax liabilities:		
Fixed assets and intangible assets	(223.9)	(280.6)
Commissions	(16.8)	(16.1)
Pensions	(56.5)	(54.2)
Other	(7.6)	(8.7)
Deferred tax liabilities	<u>(304.8)</u>	<u>(359.6)</u>
Deferred tax liabilities, net	<u>\$ (113.9)</u>	<u>\$ (288.5)</u>

The net deferred tax liabilities of \$113.9 million consist primarily of timing differences involving amortization.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The ultimate realization of the deferred tax assets depends on our ability to generate sufficient taxable income in the future. We have provided a valuation allowance against the deferred tax assets associated with the interest expense deduction limitation in the U.K. We have also provided for a valuation allowance against the deferred tax assets associated with the net operating losses of certain subsidiaries. Our net operating loss carryforwards expire as follows:

Years Ending	Amount
2023 - 2030	\$ 20.8
2031 - 2035	11.7
2036 - 2042	52.8
Total	<u>\$ 85.3</u>

A valuation allowance has been established based on our evaluation of the likelihood of utilizing these benefits before they expire. We have determined that the generation of future taxable income from certain subsidiaries to fully realize the deferred tax assets is uncertain. Other than these items, we have determined, based on our historical operating performance, that our taxable income will more likely than not be sufficient to fully realize the deferred tax assets.

As of December 31, 2022, we have not made a provision for U.S. or additional foreign withholdings taxes for any additional outside basis difference inherent in our foreign subsidiaries, as these amounts continue to be indefinitely reinvested in foreign operations. Determining the amount of unrecognized deferred tax liability related to any additional outside basis difference in these entities is not practicable. We do not rely on these unremitted earnings as a source of funds for our domestic business as we expect to have sufficient cash flow in the U.S. to fund our U.S. operational and strategic needs.

We follow ASC 740-10 which prescribes a comprehensive model for the financial statement recognition, measurement, presentation, and disclosure of uncertain tax positions taken or expected to be taken in income tax returns. For each tax position, we must determine whether it is more likely than not that the position will be sustained upon examination based on the technical merits of the position, including resolution of any related appeals or litigation. A tax position that meets the more likely than not recognition threshold is then measured to determine the amount of benefit to recognize within the financial statements. No benefits may be recognized for tax positions that do not meet the more likely than not threshold. A reconciliation of the beginning and ending amount of unrecognized tax benefit is as follows:

	2022	2021	2020
Unrecognized tax benefit as of January 1	\$ 3.4	\$ 9.9	\$ 11.5
Gross increase in tax positions in prior period	1.0	1.3	0.5
Gross decrease in tax positions in prior period	-	(0.1)	(0.2)
Settlements	(0.6)	—	—
Lapse of statute of limitations	(0.6)	(7.7)	(1.9)
Unrecognized tax benefit as of December 31	<u>\$ 3.2</u>	<u>\$ 3.4</u>	<u>\$ 9.9</u>

Of the total unrecognized tax benefits as of December 31, 2022, 2021, and 2020, \$3.2 million, \$3.4 million, and \$8.1 million, respectively, represent the amounts that, if recognized, would have a favorable effect on our effective tax rate in any future periods.

The total gross amount of accrued interest and penalties for the years ended December 31, 2022, 2021, and 2020 was \$0.4 million, \$0.5 million, and \$3.9 million, respectively. Our practice is to recognize interest and penalties associated with income taxes as a component of “Provision for income taxes” in our accompanying consolidated statements of operations.

We do not expect a significant increase in unrecognized benefits related to federal, state, or foreign tax exposures within the coming year. In addition, we believe that it is reasonably possible that approximately \$0.9 million of our currently remaining unrecognized tax positions, each of which is individually insignificant, may be recognized by the end of 2023 as a result of a combination of audit settlements and lapses of statute of limitations, net of additional uncertain tax positions.

We are subject to tax in the U.S., various state, and foreign jurisdictions. Joined by our domestic subsidiaries, we file a consolidated income tax return. With a few exceptions, none of which are material to our consolidated financial statements as of December 31, 2022, we are no longer subject to U.S. federal, state and local, or non-US income tax examinations by tax authorities for tax years before 2018. In City of Philadelphia, we are being audited for the years ended December 31, 2019 through 2021. We do not expect that the results of this examination will have a material effect on our financial position, results of operations, or cash flow.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

14. Composition of Certain Financial Statement Caption:

The following table presents the components of “Accounts payable and accrued liabilities” as of December 31:

	2022	2021
Accounts payable and accrued liabilities:		
Accrued salaries, benefits and other related costs	\$ 117.4	\$ 142.5
Escrow liabilities	0.4	10.6
Accrued interest	16.3	16.3
Trade accounts payable and other accrued expenses	128.7	92.2
Acquisition-related liabilities	30.0	0.5
Total accounts payable and accrued liabilities	<u>\$ 292.8</u>	<u>\$ 262.1</u>

The following table presents the components of "Other noncurrent assets" as of December 31:

	2022	2021
Other noncurrent assets:		
Pension benefits	\$ 89.0	\$ 130.5
Other assets - prepaid expenses	50.7	59.9
Investments in nonpublic companies	229.8	216.2
Deposits and other	1.9	2.8
Total other noncurrent assets	<u>\$ 371.4</u>	<u>\$ 409.4</u>

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

15. Debt:

The following table presents short-term and long-term debt by issuance as of December 31:

	Issuance Date	Maturity Date	2022	2021
Short-term debt and current portion of long-term debt:				
Syndicated revolving credit facility	Various	Various	\$ 990.0	\$ 610.0
Bilateral revolving credit facility	Various	Various	275.0	-
Bilateral term loan facility	Various	Various	125.0	-
Senior notes:				
4.125% senior notes, less unamortized discount and debt issuance costs of \$(0.4)	9/12/2012	9/12/2022	-	349.6
Finance lease liabilities ⁽¹⁾	Various	Various	2.9	11.7
Short-term debt and current portion of long-term debt			1,392.9	971.3
Long-term debt:				
Senior notes:				
3.625% senior notes, less unamortized discount and debt issuance costs of \$(10.0) and \$(10.3), respectively	5/13/2020	5/15/2050	490.0	489.7
4.125% senior notes, inclusive of unamortized premium, and net of unamortized discount and debt issuance costs of \$9.4 and \$10.9, respectively	3/6/2019	3/15/2029	609.4	610.9
4.000% senior notes, less unamortized discount and debt issuance costs of \$(2.8) and \$(4.1), respectively	5/15/2015	6/15/2025	897.2	895.9
5.500% senior notes, less unamortized discount and debt issuance costs of \$(4.0) and \$(4.1), respectively	5/15/2015	6/15/2045	346.0	345.9
Finance lease liabilities ⁽¹⁾	Various	Various	1.3	1.6
Syndicated revolving credit facility debt issuance costs	Various	Various	(0.7)	(1.2)
Long-term debt			2,343.2	2,342.8
Total debt			\$ 3,736.1	\$ 3,314.1

⁽¹⁾ Refer to [Note 8](#). Leases

Accrued interest associated with our outstanding debt obligations was \$16.3 million as of December 31, 2022 and 2021, respectively, and included in “Accounts payable and accrued liabilities” within our accompanying consolidated balance sheets. Interest expense associated with our finance lease and outstanding debt obligations, including amortization of debt issuance costs and original discounts, was \$135.5 million, \$127.0 million, and \$138.3 million for the years ended December 31, 2022, 2021, and 2020, respectively.

As of December 31, 2022 and December 31, 2021, we had senior notes with an aggregate principal amount of \$2,350.0 million and \$2,700.0 million outstanding, respectively, and were in compliance with our financial and other debt covenants. In the third quarter we repaid the 4.125% senior notes in full in the amount of \$350.0 million utilizing a combination of borrowings from the credit facility and cash from operations.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

We have a Syndicated Credit Facility with a borrowing capacity of \$1,000.0 million with Bank of America N.A., HSBC Bank USA, N.A., JP Morgan Chase Bank, N.A., Wells Fargo Bank, National Association, Citibank, N.A., Credit Suisse AG, Cayman Islands Branch, Morgan Stanley Bank, N.A., First Commercial Bank, Ltd., Los Angeles Branch, TD Bank, N.A., and the Northern Trust Company. The Syndicated Credit Facility also contains certain financial and other covenants that, among other things, impose certain restrictions on indebtedness, liens, investments, and capital expenditures. These covenants place restrictions on mergers, asset sales, sale/leaseback transactions, and certain transactions with affiliates. The financial covenants require that, at the end of any fiscal quarter, we have a consolidated funded debt leverage ratio of less than 3.5 to 1.0. At our election, the maximum consolidated funded debt leverage ratio could be permitted to increase one time each to 4.0 to 1.0 and 4.25 to 1.0. The Syndicated Credit Facility may be used for general corporate purposes, including working capital needs and capital expenditures, acquisitions, dividends, and the share repurchase program ("Repurchase Program"). As of December 31, 2022, we were in compliance with all financial and other debt covenants under the Syndicated Credit Facility. As of December 31, 2022 and 2021, the available capacity under the Syndicated Credit Facility was \$5.6 million and \$384.9 million, net of the letters of credit of \$4.4 million and \$5.1 million, respectively. Subsequent to December 31, 2022 we have made repayments of 990.0 million under the Syndicated Credit Facility. As a result of this activity, we now have the ability to draw up to \$995.6 million from our Syndicated Credit Facility.

On March 11, 2022, we entered into a \$125.0 million Bilateral Term Loan Facility with Bank of America, N.A. At each roll over period, we can continue the loan for a period of one or three months until the agreed maturity date of September 12, 2022. On September 9, 2022, we amended the \$125.0 million Bilateral Term Loan Facility to provide a one-year extension with an agreed maturity date of September 9, 2023. The Bilateral Term Loan Facility carries an interest rate of 135 basis points plus the one-month BSBY margin at the time. Subsequent to December 31, 2022 we repaid the full \$125.0 million outstanding principal amount under our Bilateral Term Loan Facility agreement.

On September 9, 2022 we also added a 364-day \$275.0 million Bilateral Revolving Credit Facility to be available starting October 3, 2022. The Bilateral Revolving Credit Facility carries an interest rate of 135 basis points plus the one-month BSBY margin at the time. Our Bilateral Credit Facilities may be used for general corporate purposes, including working capital needs and capital expenditures, acquisitions, dividend payments, and the Repurchase Program. In December 2022, we borrowed an additional \$275.0 million on the Bilateral Revolving Credit Facility, of which \$250.0 million was utilized for share repurchases in the fourth quarter of 2022. Subsequent to December 31, 2022 we made a repayment of \$275.0 million under our Bilateral Revolving Credit Facility, resulting in zero outstanding borrowings under our bilateral revolving credit facility as of February 28, 2023.

Debt Maturities

The following table reflects our debt maturities:

Years Ending	Amount
2023	\$ 1,392.9
2024	0.8
2025	900.4
2026	0.1
2027	-
2028 and thereafter	1,450.0
Total	\$ 3,744.2

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

16. Stockholders' Equity:

We have 2,000,000,000 shares of authorized common stock as of December 31, 2022 and 2021. The common shares have rights to any dividend declared by our Board of Directors, subject to any preferential or other rights of any outstanding preferred stock, and voting rights to elect all eleven members of our Board of Directors. At December 31, 2022, 2021, and 2020, the adjusted closing price of our common stock was \$176.42, \$228.73, and \$206.34 per share, respectively.

We have 80,000,000 shares of authorized preferred stock, par value \$0.001 per share. The preferred shares have preferential rights over the common shares with respect to dividends and net distribution upon liquidation. We did not issue any preferred shares as of December 31, 2022 and 2021.

On February 16, 2022, April 27, 2022, July 27, 2022, and October 26, 2022, our board approved a cash dividend of \$0.31 per share of common stock issued and outstanding to the holders of record as of March 15, 2022, June 15, 2022, September 15, 2022, and December 15, 2022, respectively. Cash dividends of \$195.2 million and \$188.2 million were paid during the years ended December 31, 2022 and 2021, and recorded as a reduction to retained earnings, respectively.

Share Repurchase Program

In December 2021, March 2022, June 2022, and September 2022, we entered into Accelerated Share Repurchase ("ASR") agreements to repurchase shares of our common stock for an aggregate purchase price of \$100.0 million, \$325.0 million, \$300.0 million, and \$100.0 million, respectively, with Citibank, N.A., Morgan Stanley, Citibank, N.A., and HSBC Bank USA. The ASR agreements are each accounted for as a treasury stock transaction and a forward stock purchase agreement indexed to our common stock. The forward stock purchase agreements are each classified as an equity instrument under ASC 815-40, *Contracts in Entity's Own Equity* ("ASC 815-40") and were deemed to have a fair value of zero at the respective effective date. Upon payments of the aggregate purchase price on January 4, 2022, April 1, 2022, July 1, 2022, and October 3, 2022, we received an aggregate delivery of 360,913, 1,211,387, 1,386,562, and 469,126 shares of our common stock, respectively. Upon the final settlement of the ASR agreements in February 2022, May 2022, September 2022, and December 2022, we received additional shares of 141,766, 349,762, 217,024, and 108,508 as determined by the volume weighted average share price of our common stock of \$198.93, \$208.18, \$187.08, and \$173.12 during the term of the ASR agreements, respectively. The aggregate purchase price was recorded as a reduction to stockholders' equity in our consolidated statements of changes in stockholders' equity for the year ended December 31, 2022. These repurchases resulted in a reduction of outstanding shares used to calculate the weighted average common shares outstanding for basic and diluted earnings per share ("EPS").

In December 2022, we entered into an additional ASR agreement to repurchase shares of our common stock for an aggregate purchase price of \$250.0 million with Bank of America USA, NA. The ASR agreement is accounted for as a treasury stock transaction and a forward stock purchase agreement indexed to our common stock. Upon the payment of the aggregate purchase price of \$250.0 million on December 14, 2022, we received 1,168,224 shares of our common stock at a price of \$182.01 per share, representing an initial delivery of approximately 85 percent of the aggregate purchase price. Upon the final settlement of this ASR agreement in February 2023, we received additional shares of 247,487 as determined by the daily volume weighted average share price of our common stock of \$176.68 during the term of this ASR agreement.

For the year ended December 31, 2022, we repurchased 8,600,963 shares of common stock as part of the Repurchase Program, inclusive of the ASRs and open market repurchases, at a weighted average price of \$188.93 per share. We utilized cash from operations and borrowings from our Bilateral Revolving Credit Facility to fund these repurchases. As of December 31, 2022, we had \$441.3 million available to repurchase shares through our Repurchase Program, inclusive of the \$1,000.0 million and \$500 million authorizations approved by our Board on February 16, 2022 and November 8, 2022, respectively. On November 8, 2022, our board also approved an additional \$3.0 billion authorization to repurchase shares of our common stock conditioned upon and effective only after the closing of the sale of our Energy business.

Treasury Stock

As of December 31, 2022, our treasury stock consisted of 389,301,902 shares of common stock. During the years ended December 31, 2022, 2021, and 2020, we transferred 1,650,460, 1,379,304, and 1,811,046 shares of common stock, from the treasury shares at a weighted average price of \$14.25, \$11.78, and \$10.67 per share, respectively.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Earnings Per Share

The following is a reconciliation of the numerators and denominators of our basic and diluted EPS computations for the years ended December 31:

	2022	2021	2020
	(In millions, except for share and per share data)		
Numerator used in basic and diluted EPS:			
Income from continuing operations	\$ 1,041.7	\$ 607.0	\$ 653.8
Income from discontinued operations, net of tax	(87.8)	59.2	58.9
Net income attributable to Verisk	\$ 953.9	\$ 666.2	\$ 712.7
Denominator:			
Weighted average number of common shares used in basic EPS	157,905,718	161,841,441	162,610,586
Effect of dilutive shares:			
Potential common shares issuable from stock options and stock-based awards	1,023,224	1,497,468	2,710,123
Weighted average number of common shares and dilutive potential common shares used in diluted EPS	158,928,942	163,338,909	165,320,709

The potential shares of common stock that were excluded from diluted EPS were 1,350,159, 620,241, and 513,137 at December 31, 2022, 2021, and 2020, respectively, because the effect of including those potential shares was anti-dilutive.

Accumulated Other Comprehensive Losses

The following is a summary of accumulated other comprehensive losses as of December 31:

	2022	2021
Foreign currency translation adjustment	\$ (636.9)	\$ (338.0)
Pension and postretirement adjustment, net of tax	(94.3)	(56.6)
Accumulated other comprehensive losses	\$ (731.2)	\$ (394.6)

The before tax and after tax amounts of other comprehensive (loss) income for the years ended December 31, 2022, 2021, and 2020 are summarized below:

	Before Tax	Tax Benefit (Expense)	After Tax
December 31, 2022			
Foreign currency translation adjustment attributable to Verisk	\$ (298.9)	\$ —	\$ (298.9)
Foreign currency translation adjustment attributable to noncontrolling interests	(1.4)	—	(1.4)
Foreign currency translation adjustment	(300.3)	—	(300.3)
Pension and postretirement adjustment before reclassifications	(45.7)	13.5	(32.2)
Amortization of net actuarial loss and prior service benefit reclassified from accumulated other comprehensive losses (1)	(4.4)	(1.1)	(5.5)
Pension and postretirement adjustment	(50.1)	12.4	(37.7)
Total other comprehensive loss	\$ (350.4)	\$ 12.4	\$ (338.0)
December 31, 2021			
Foreign currency translation adjustment attributable to Verisk	\$ (45.8)	\$ —	\$ (45.8)
Foreign currency translation adjustment attributable to noncontrolling interests	(0.5)	—	(0.5)
Foreign currency translation adjustment	(46.3)	—	(46.3)
Pension and postretirement adjustment before reclassifications	39.8	(9.8)	30.0
Amortization of net actuarial loss and prior service benefit reclassified from accumulated other comprehensive losses (1)	(4.1)	1.0	(3.1)
Pension and postretirement adjustment	35.7	(8.8)	26.9
Total other comprehensive loss	\$ (10.6)	\$ (8.8)	\$ (19.4)
December 31, 2020			
Foreign currency translation adjustment	\$ 107.9	\$ —	\$ 107.9
Pension and postretirement adjustment before reclassifications	11.1	(2.9)	8.2
Amortization of net actuarial loss and prior service benefit reclassified from accumulated other comprehensive losses (1)	(6.7)	1.8	(4.9)
Pension and postretirement adjustment	4.4	(1.1)	3.3
Total other comprehensive income	\$ 112.3	\$ (1.1)	\$ 111.2

(1) These accumulated other comprehensive loss components, before tax, are included under “Cost of revenues” and “Selling, general and administrative” in our accompanying consolidated statements of operations. These components are also included in the computation of net periodic (benefit) cost (See [Note 18](#), Pension and Postretirement Benefits for additional details).

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

17. Compensation Plans:

KSOP

We have established the KSOP for the benefit of eligible employees in the U.S. and Puerto Rico. The KSOP includes both an employee savings component and an employee stock ownership component. The purpose of the combined plan is to enable our employees to participate in a tax-deferred savings arrangement under Internal Revenue Service Code Sections 401(a) and 401(k) (the “Code”), and to provide our employees equity participation through the employee stock ownership plan (“ESOP”) accounts.

Under the KSOP, eligible employees may make pre-tax and after-tax cash contributions as a percentage of their compensation, subject to certain limitations under the applicable provisions of the Code. The maximum pre-tax contribution that can be made to the 401(k) account as determined under the provisions of Code Section 401(g) is \$20.5 thousand for 2022 and \$19.5 thousand for 2021 and 2020. Certain eligible participants (age 50 and older) may contribute an additional \$6.5 thousand on a pre-tax basis for 2022, 2021 and 2020. After-tax contributions are limited to 10.0% of a participant’s compensation. Effective January 1, 2019, we increased the matching contributions to 100.0% of the first 6.0% of the participant’s contribution. The 401(k) matching contributions under the KSOP for the years ended December 31, 2022, 2021, and 2020, were \$40.0 million, \$33.7 million, and \$31.6 million, respectively; which, at our option, were funded in cash.

In 2005, we established the ISO Profit Sharing Plan (the “Profit Sharing Plan”), a defined contribution plan, to replace the qualified pension plan for all eligible employees hired on or after March 1, 2005. The Profit Sharing Plan is a component of the KSOP. Eligible employees participated in the Profit Sharing Plan if they completed 1,000 hours of service each plan year and were employed on December 31 of that year. We can make a discretionary contribution to the Profit Sharing Plan based on our annual performance. Participants vest once they have completed four years and 1,000 hours of service. For the years ended December 31, 2022, 2021, and 2020, there were no profit sharing contributions.

Equity Compensation Plans

All of our outstanding stock options, restricted stock awards, deferred stock units, and PSUs are covered under our 2021 Incentive Plan, our 2013 Incentive Plan, or our 2009 Incentive Plan. Awards under our 2021 Incentive Plan may include one or more of the following types: (i) stock options (both nonqualified and incentive stock options), (ii) stock appreciation rights, (iii) restricted stock, (iv) restricted stock units, (v) performance awards, (vi) other share-based awards and (vii) cash. Employees, non-employee directors, and consultants are eligible for awards under our 2021 Incentive Plan. We transferred common stock under these plans from our treasury shares. As of December 31, 2022, there were 13,899,609 shares of common stock reserved and available for future issuance under our 2021 Incentive Plan. Cash received from stock option exercises for December 31, 2022 and December 31, 2021 was \$132.3 million and \$84.3 million, respectively. We issued common stock under these plans from our treasury shares. We have granted equity awards to key employees and directors. The ultimate realization of the PSUs may range from 0% to 200% of the recipient’s target levels established on the grant date.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

A summary of the status of the stock options, restricted stock, and PSUs awarded under our 2021 Incentive Plan as of December 31, 2022, 2021, and 2020 and changes during the years is presented below.

	Stock Option			Restricted Stock		PSU	
	Number of Options	Weighted Average Exercise Price	Aggregate Intrinsic Value (in millions)	Number of Shares	Weighted Average Grant Date Fair Value Per Share	Number of Shares	Weighted Average Grant Date Fair Value Per Share
Outstanding at January 1, 2020	6,432,814	\$ 79.51	\$ 449.2	428,729	\$ 107.96	93,960	\$ 158.50
Granted	936,843	\$ 159.28		163,441	\$ 159.96	50,736	\$ 192.93
Dividend reinvestment	—	\$ —		—	\$ —	913	N/A
Exercised or lapsed	(1,623,740)	\$ 56.83	\$ 189.8	(178,317)	\$ 102.00	—	\$ —
Canceled, expired or forfeited	(134,140)	\$ 125.95		(23,799)	\$ 124.40	—	\$ —
Outstanding at December 31, 2020	5,611,777	\$ 98.28	\$ 613.4	390,054	\$ 131.63	145,609	\$ 170.75
Granted	750,822	\$ 189.29		162,378	\$ 189.23	59,144	\$ 210.07
Dividend reinvestment	—	\$ —		—	\$ —	980	N/A
Exercised or lapsed	(1,146,422)	\$ 73.30	\$ 147.6	(173,726)	\$ 120.94	(42,610)	\$ 140.70
Canceled, expired or forfeited	(149,079)	\$ 155.40		(27,202)	\$ 157.79	—	\$ —
Outstanding at December 31, 2021	5,067,098	\$ 115.73	\$ 572.6	351,504	\$ 161.33	163,123	\$ 192.99
Granted	653,802	\$ 196.64		201,617	\$ 193.33	111,333	\$ 168.63
Dividend reinvestment	—	\$ —		—	\$ —	1,371	N/A
Exercised or lapsed	(1,435,673)	\$ 92.38	\$ 129.1	(205,407)	\$ 157.22	(54,927)	\$ 174.42
Canceled, expired or forfeited	(261,411)	\$ 181.48		(40,139)	\$ 182.35	(21,406)	\$ 202.55
Outstanding at December 31, 2022	4,023,816	\$ 132.90	\$ 193.3	307,575	\$ 182.07	199,494	\$ 195.34
Exercisable at December 31, 2022	2,702,075	\$ 110.02	\$ 182.6				
Exercisable at December 31, 2021	3,173,592	\$ 89.14	\$ 443.0				
Nonvested at December 31, 2022	1,321,741			307,575		199,494	
Expected to vest at December 31, 2022	1,107,594			273,646		73,775	(1)

(1) Includes estimated performance achievement

The fair value of our stock options granted was estimated on the date of grant using a Black-Scholes option valuation model that uses the weighted-average assumptions noted in the following table during the years ended December 31:

	2022	2021	2020
Expected volatility	25.33%	23.66%	18.48%
Risk-free interest rate	1.55%	0.39%	1.51%
Expected term in years	4.2	4.3	4.3
Dividend yield	0.60%	0.63%	0.71%
Weighted average grant date fair value per stock option	\$ 42.25	\$ 35.15	\$ 25.87

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

A summary of the status of our nonvested options and changes are presented below:

	Number of Options	Weighted Average Grant-Date Fair Value Per Share
Nonvested balance at January 1, 2020	2,256,959	\$ 20.17
Granted	936,843	\$ 25.87
Vested	(942,049)	\$ 18.30
Cancelled or expired	(134,140)	\$ 22.40
Nonvested balance at December 31, 2020	2,117,613	\$ 23.39
Granted	750,822	\$ 35.15
Vested	(825,850)	\$ 21.62
Cancelled or expired	(149,079)	\$ 27.54
Nonvested balance at December 31, 2021	1,893,506	\$ 28.49
Granted	653,802	\$ 42.25
Vested	(964,156)	\$ 22.97
Cancelled or expired	(261,411)	\$ 35.23
Nonvested balance at December 31, 2022	1,321,741	\$ 34.65

Intrinsic value for stock options is calculated based on the exercise price of the underlying awards and the quoted price of our common stock as of the reporting date. Excess tax benefits of \$26.5 million, \$35.9 million, and \$42.9 million from exercised stock options were recorded as income tax benefit in our accompanying consolidated statements of operations for the years ended December 31, 2022, 2021, and 2020, respectively. Stock-based compensation expense for the years ended December 31, 2022, 2021, and 2020 was \$56.5 million, \$55.7 million, and \$47.6 million, respectively. As of December 31, 2022, the weighted average remaining contractual terms were 5.9 years and 4.9 years for outstanding and exercisable stock options, respectively. As of December 31, 2021, the weighted average remaining contractual terms were 6.0 years and 4.8 years for outstanding and exercisable stock options, respectively.

As of December 31, 2022, there was \$93.9 million of total unrecognized compensation cost, exclusive of the impact of vesting upon retirement eligibility, related to nonvested share-based compensation arrangements granted under our 2021 and 2013 Incentive Plans. That cost is expected to be recognized over a weighted-average period of 2.15 years.

Our U.K. Sharesave Plan offers qualifying employees in the United Kingdom the opportunity to own shares of our common stock. Employees who elect to participate are granted stock options, of which the exercise price is equal to the average of the closing price on the five trading days immediately preceding the plan invitation date discounted by 5%, and enter into a savings contract, the proceeds of which are then used to exercise the options upon the three-year maturity of the savings contract. During the years ended December 31, 2022, 2021, and 2020, we granted 9,370, 11,254, and 8,174 stock options under the U.K. Sharesave Plan at a discounted exercise price of \$178.26, \$166.16, and \$159.98, respectively. As of December 31, 2022, there were 453,155 shares of common stock reserved and available for future issuance under our U.K. Sharesave Plan.

We also offer eligible employees the opportunity to participate in an ESPP. Under our ESPP, participating employees may authorize payroll deductions of up to 20.0% of their regular base salary and up to 50.0% of their short-term incentive compensation, both of which in total may not exceed \$25.0 thousand in any calendar year, to purchase shares of our common stock at a 5.0% discount of its fair market value at the time of purchase. In accordance with ASC 718, our ESPP is noncompensatory as the purchase discount is 5.0% or less from the fair market value, substantially all employees that meet limited employment qualifications may participate, and it incorporates no option features. During the years ended December 31, 2022, 2021, and 2020, we issued 30,398, 33,974, and 32,502 shares of common stock at a weighted average discounted price of \$174.66, \$181.77, and \$164.44 respectively. As of December 31, 2022, there were 1,195,894 shares of common stock reserved and available for future issuance under our ESPP.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

18. Pension and Postretirement Benefits:

We have a frozen qualified defined benefit pension plan for certain of our employees through membership in the Pension Plan for Insurance Organizations (the "Pension Plan"), a multiple-employer trust. Prior to the freeze, we applied a cash balance formula to determine future benefits. Under the cash balance formula, each participant has an account, which was credited annually based on salary rates determined by years of service, as well as the interest earned on the previous year-end cash balance. We also have a non-qualified frozen supplemental cash balance plan ("SERP") for certain employees. Our SERP is funded from our general assets. We contributed \$0.8 million to our SERP in 2022 and \$0.7 million in 2021, respectively, and expect to contribute \$0.8 million in 2023.

Our Pension Plan's funding policy is to contribute annually at an amount between the minimum funding requirements set forth in the Employee Retirement Income Security Act of 1974 and the maximum amount that can be deducted for federal income tax purposes. No minimum contribution requirement was and is expected for 2022 and 2023, respectively.

We also provide certain healthcare and life insurance benefits for both active and retired employees. The Postretirement Health and Life Insurance Plan (the "Postretirement Plan"), which has been frozen, is contributory, requiring participants to pay a stated percentage of the premium for coverage. We do not expect to contribute to our Postretirement Plan in 2023.

The following table sets forth the changes in the benefit obligations and the plan assets, the funded status of the Pension Plan, SERP, and Postretirement Plan, and the amounts recognized in our consolidated balance sheets at December 31:

	Pension Plan and SERP		Postretirement Plan	
	2022	2021	2022	2021
Change in benefit obligation:				
Benefit obligation at January 1	\$ 431.7	\$ 459.9	\$ 6.0	\$ 7.5
Interest cost	14.7	11.0	0.1	0.1
Actuarial gain	(86.6)	(9.0)	(0.4)	(0.9)
Plan participants' contributions	—	—	1.3	1.5
Benefits paid	(28.9)	(30.2)	(2.8)	(2.2)
Benefit obligation at December 31	<u>\$ 330.9</u>	<u>\$ 431.7</u>	<u>\$ 4.2</u>	<u>\$ 6.0</u>
Accumulated benefit obligation at December 31	<u>\$ 330.9</u>	<u>\$ 431.7</u>		
Change in plan assets:				
Fair value of plan assets at January 1	\$ 546.2	\$ 520.8	\$ 9.5	\$ 10.5
Actuarial (gain) loss	(111.8)	54.9	(1.1)	(0.2)
Employer contributions, net	0.8	0.7	0.7	(0.1)
Plan participants' contributions	—	—	1.3	1.5
Benefits paid	(28.9)	(30.2)	(2.8)	(2.2)
Fair value of plan assets at December 31	<u>\$ 406.3</u>	<u>\$ 546.2</u>	<u>\$ 7.6</u>	<u>\$ 9.5</u>
Funded status at December 31	<u>\$ (75.4)</u>	<u>\$ (114.5)</u>	<u>\$ (3.4)</u>	<u>\$ (3.5)</u>
Amounts recognized in the consolidated balance sheets consist of:				
Pension assets, noncurrent (1)	\$ (85.6)	\$ (127.0)	\$ (3.4)	\$ (3.5)
Pension, SERP and postretirement benefits, current (2)	0.8	1.4	—	—
Pension, SERP and postretirement benefits, noncurrent (3)	9.4	11.1	—	—
Total Pension, SERP and Postretirement benefits	<u>\$ (75.4)</u>	<u>\$ (114.5)</u>	<u>\$ (3.4)</u>	<u>\$ (3.5)</u>

(1) Included in "Other noncurrent assets" in our accompanying consolidated balance sheets

(2) Included in "Accounts payable and accrued liabilities" in our accompanying consolidated balance sheets

(3) Included in "Other noncurrent liabilities" in our accompanying consolidated balance sheets

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The pre-tax components included within accumulated other comprehensive losses as of December 31 are summarized below:

	Pension Plan and SERP		Postretirement Plan	
	2022	2021	2022	2021
Prior service benefit cost (credit)	\$ 2.6	\$ 2.8	\$ —	\$ —
Actuarial losses	147.8	98.3	3.2	2.4
Accumulated other comprehensive losses, pretax	<u>\$ 150.4</u>	<u>\$ 101.1</u>	<u>\$ 3.2</u>	<u>\$ 2.4</u>

The pre-tax components of net periodic benefit (credit) cost and the amounts recognized in other comprehensive loss are summarized below for the years ended December 31:

	Pension Plan and SERP			Postretirement Plan		
	2022	2021	2020	2022	2021	2020
Interest cost	\$ 14.7	\$ 11.0	\$ 12.6	\$ 0.1	\$ 0.1	\$ 0.2
Expected return on plan assets	(28.2)	(32.8)	(29.9)	(0.2)	(0.2)	(0.2)
Amortization of prior service cost (credit) reclassified from accumulated other comprehensive losses	0.2	0.2	0.2	—	(0.1)	(0.1)
Amortization of net actuarial loss reclassified from accumulated other comprehensive losses	4.0	3.8	6.3	0.2	0.2	0.3
Net periodic benefit (credit) cost	(9.3)	(17.8)	(10.8)	0.1	—	0.2
Amortization of prior service (cost) credit reclassified from accumulated other comprehensive losses	(0.2)	(0.2)	(0.2)	—	0.1	0.1
Amortization of actuarial (loss) gain reclassified from accumulated other comprehensive losses	(0.2)	(0.2)	(0.2)	—	—	—
Net loss recognized reclassified from accumulated other comprehensive losses	(3.8)	(3.6)	(6.1)	(0.2)	(0.2)	(0.3)
Actuarial loss (gain)	53.5	(31.1)	2.4	1.0	(0.5)	(0.3)
Total recognized in other comprehensive income	49.3	(35.1)	(4.1)	0.8	(0.6)	(0.5)
Total recognized in net periodic benefit credit and other comprehensive (income) loss	<u>\$ 40.0</u>	<u>\$ (52.9)</u>	<u>\$ (14.9)</u>	<u>\$ 0.9</u>	<u>\$ (0.6)</u>	<u>\$ (0.3)</u>

The weighted-average assumptions used to determine benefit obligations as of December 31, 2022 and 2021 and net periodic benefit (credit) cost for the years 2022, 2021 and 2020 are provided below:

	Pension Plan and SERP			Postretirement Plan		
	2022	2021		2022	2021	
Weighted-average assumptions used to determine benefit obligations:						
Discount rate	5.49%	2.75%		5.25%	2.25%	
Expected return on plan assets	6.25%	6.25%		1.75%	1.75%	
Cash balance interest credit rate	2.57%	2.57%		N/A		
Weighted-average assumptions used to determine net periodic benefit (credit) cost:						
Discount rate	2.75%	2.49%	2.83%	2.25%	1.50%	2.50%
Expected return on plan assets	6.25%	6.50%	6.75%	1.75%	2.00%	2.00%
Cash balance interest credit rate	2.57%	2.57%	2.57%		N/A	

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table presents the estimated future benefit payments for the respective plans. The future benefit payments for the Postretirement Plan are net of the federal Medicare subsidy.

	Pension Plan and SERP	Postretirement Plan		
	Gross Benefit Amount	Gross Benefit Amount	Medicare Subsidy Payments	Net Benefit Amount
2023	\$ 29.8	\$ 0.9	\$ (0.1)	\$ 0.8
2024	\$ 30.2	\$ 0.8	\$ (0.1)	\$ 0.7
2025	\$ 29.0	\$ 0.7	\$ (0.1)	\$ 0.6
2026	\$ 28.9	\$ 0.6	\$ (0.1)	\$ 0.5
2027	\$ 28.7	\$ 0.5	\$ —	\$ 0.5
2027 and thereafter	\$ 128.2	\$ 1.6	\$ —	\$ 1.6

The healthcare cost trend rate for 2022 was 7.50% gradually decreasing to 4.50% in 2035. Assumed healthcare cost trend rates have a significant effect on the amounts reported for the healthcare plan.

The subsidy benefit from the Medicare Prescription Drug, Improvement and Modernization Act of 2003 reduced our accumulated postretirement benefit assets by approximately \$0.8 million as of December 31, 2022 and 2021. The subsidy cost increased the net periodic benefit cost by approximately \$80.7 thousand, \$75.8 thousand, and \$58.2 thousand in fiscal 2022, 2021 and 2020, respectively.

The expected return on our Pension Plan assets as of December 31, 2022 and 2021 was 6.25%, respectively, which was determined by taking into consideration our analysis of our actual historical investment returns to a broader long-term forecast after adjusting for the target investment allocation and reflecting the current economic environment. During the first quarter of 2022, we changed the investment guidelines on our Pension Plan assets to target investment allocation of 45% to equity securities and 55% to debt securities from our previous target allocation of 50% to equity securities and 50% to debt securities as of December 31, 2021. Our Pension Plan assets consist primarily of investments in various fixed income and equity funds. Investment guidelines are established with each investment manager. These guidelines provide the parameters within which the investment managers agree to operate, including criteria that determine eligible and ineligible securities, diversification requirements and credit quality standards, where applicable. Investment managers are prohibited from entering into any speculative hedging transactions. The investment objective is to achieve a maximum total return with strong emphasis on preservation of capital in real terms.

The asset allocation at December 31, 2022 and 2021, and target allocation by asset category are as follows:

Asset Category	Target Allocation	Percentage of Plan Assets	
		2022	2021
Equity securities	45.0%	41.4%	45.8%
Debt securities	55.0	52.9	47.8
Real Estate	—	5.0	6.4
Other	—	0.7	—
Total	100.0%	100.0%	100.0%

We have used the target investment allocation to derive the expected return as we believe this allocation will be retained on an ongoing basis that will be commensurate with the projected cash flows of the plan. The expected return for each investment category within the target investment allocation is developed using average historical rates of return for each targeted investment category, considering the projected cash flow of our Pension Plan. The difference between this expected return and the actual return on plan assets is generally deferred and recognized over subsequent periods through future net periodic benefit costs. We believe that the use of the average historical rates of returns is consistent with the timing and amounts of expected contributions to the plans and benefit payments to plan participants. These considerations provide the basis for reasonable assumptions with respect to the expected long-term rate of return on plan assets.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

We also maintain a voluntary employees beneficiary association plan (the “VEBA Plan”) under Section 501(c)(9) of the Internal Revenue Code to fund the Postretirement Plan. The asset allocation for our VEBA Plan at December 31, 2022 and 2021 was 100% in debt securities.

There were no transfers among Levels 1, 2, or 3 for the years ended December 31, 2022 and 2021. Refer to [Note 7](#). Fair Value Measurements for further discussion with respect to fair value hierarchy. The following table summarizes the fair value measurements by level of our Pension Plan and Postretirement Plan assets:

	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
December 31, 2022			
Equity			
Managed equity accounts (1)	\$ 128.8	\$ 128.8	\$ —
Equity — pooled separate account (2)	39.7	—	39.7
Debt			
Fixed income manager — separately managed account (5)	133.6	—	133.6
Fixed income manager — pooled separate account (2)	81.5	—	81.5
Fixed income manager — government securities (3)	7.7	7.7	—
Others			
Cash — pooled separate account (2)	2.7	—	2.7
Global real estate account (4)	20.2	—	20.2
Total	<u>\$ 414.2</u>	<u>\$ 136.5</u>	<u>\$ 277.7</u>
December 31, 2021			
Equity			
Managed equity accounts (1)	\$ 195.0	\$ 195.0	\$ —
Equity — pooled separate account (2)	54.9	—	54.9
Debt			
Fixed income manager — separately managed account (5)	163.7	—	163.7
Fixed income manager — pooled separate account (2)	97.9	—	97.9
Fixed income manager — government securities (3)	9.5	9.5	—
Others			
Cash — pooled separate account (2)	(0.1)	—	(0.1)
Global real estate account (4)	34.8	—	34.8
Total	<u>\$ 555.7</u>	<u>\$ 204.5</u>	<u>\$ 351.2</u>

- (1) Valued at the closing price of shares for domestic stocks within the managed equity accounts, and valued at the net asset value (“NAV”) of shares for mutual funds at either the closing price reported in the active market or based on yields currently available on comparable securities of issuers with similar credit ratings for corporate bonds held by the Pension Plan in these managed accounts.
- (2) The pooled separate accounts invest in domestic and foreign stocks, bonds and mutual funds. The fair values of these stocks, bonds and mutual funds are publicly quoted and are used in determining the NAV of the pooled separate account, which is not publicly quoted.
- (3) The fund invested in the U.S. government, its agencies or instrumentalities or securities that are rated AAA by S&P, AAA by Fitch, or Aaa by Moody’s, including but not limited to mortgage securities such as agency and non-agency collateralized mortgage obligations, and other obligations that are secured by mortgages or mortgage backed securities, and valued at the closing price reported in the active market.
- (4) The funds invested in common stocks and other equity securities issued by domestic and foreign real estate companies, including real estate investment trusts (“REIT”) and similar REIT-like entities. The fair values of these stocks, bonds and mutual funds are publicly quoted and are used in determining the NAV of the funds, which is not publicly quoted.
- (5) The separately managed accounts invest in U.S. Treasury Bonds and U.S. Treasury Separate Trading of Registered Interest and Principal of Securities (“UST STRIPS”). The fair values of these bonds and UST STRIPS are publicly quoted and are used in determining the NAV of the separately managed account, which is not publicly quoted.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

19. Segment Reporting

ASC 280-10, *Disclosures About Segments of an Enterprise and Related Information* (“ASC 280-10”), establishes standards for reporting information about operating segments. ASC 280-10 requires that a public business enterprise reports financial and descriptive information about its reportable operating segments. Operating segments are components of an enterprise for which separate financial information is available that is evaluated regularly by the chief operating decision maker (“CODM”) in deciding how to allocate resources and in assessing performance. Our President and CEO is identified as the CODM as defined by ASC 280-10.

Each of our reportable segments, Insurance, Energy and Specialized Markets, and Financial Services has a portion of its revenue from more than one of the three revenue types described within the revenue recognition policy within [Note 2](#). Basis of Presentation and Summary of Significant Accounting Policies. Below is the overview of the solutions offered within each reportable segment.

Insurance: We are the leading provider of statistical, actuarial, and underwriting data for the U.S. P&C insurance industry. Our databases include cleansed and standardized records describing premiums and losses in insurance transactions, casualty and property risk attributes for commercial buildings and their occupants, and fire suppression capabilities of municipalities. We use this data to create policy language and proprietary risk classifications that are industry standards and to generate prospective loss cost estimates used to price insurance policies, which are accessed via a hosted platform. We also develop solutions that our customers use to analyze key processes in managing risk. Our combination of algorithms and analytic methods incorporates our proprietary data to generate solutions. We also help businesses and governments better anticipate and manage climate and weather-related risks. In most cases, our customers integrate the solutions into their models, formulas or underwriting criteria in order to predict potential loss events, ranging from hurricanes to earthquakes. We develop catastrophe and extreme event models and offer solutions covering natural and man-made risks, including acts of terrorism. We further develop solutions that allow customers to quantify costs after loss events occur. Our multiter, multispectral terrestrial imagery and data acquisition, processing, analytics, and distribution system using the remote sensing and machine learning technologies help gather, store, process, and deliver geographic and spatially referenced information that supports uses in many markets. Additionally, we offer fraud-detection solutions including review of data on claim histories, analysis of claims to find emerging patterns of fraud, and identification of suspicious claims in the insurance sector. Our underwriting & rating, insurance anti-fraud claims, catastrophe modeling, and loss quantification are included in this segment. During the first quarter of 2021, due to management restructuring, our CODM reorganized AER, an immaterial component of the Energy and Specialized Markets segment, to the Insurance segment. Consequently, AER became part of the underwriting and rating category within the Insurance segment. The inclusion of AER within our Insurance segment better aligns with how our CODM makes operating decisions, assesses the performance of the business, and allocates resources. Our prior year results have been recast to reflect this change. The related impact to our consolidated financial statements was not material for all periods presented.

Energy and Specialized Markets: In the first quarter of 2022, the sale of our environmental health and safety business (which comprised of our Specialized Market) was completed. On February 1, 2023, we completed the sale of our Energy segment. We determined that the transaction met the criteria to be classified as discontinued operations and its assets and liabilities are classified as held for sale. As a result, the financial operations of Energy are excluded from the segment disclosure. See [Note 11](#), Dispositions and Discontinued Operations for further discussion. Prior to the sale, we were a leading provider of data analytics via hosted platform for the global energy, chemicals, and metals and mining industries. Our research and consulting solutions focused on exploration strategies and screening, asset development and acquisition, commodity markets, and corporate analysis in the areas of business environment, business improvement, business strategies, commercial advisory, and transaction support. We gathered and managed proprietary information, insight, and analysis are on oil and gas fields, mines, refineries, and other assets across the interconnected global energy sectors to advise customers in making asset investment and portfolio allocation decisions. Our analytical tools measured and observed environmental properties and translated those measurements into actionable information based on customer needs. In addition, we provided market and cost intelligence to energy companies to optimize financial results. We further offered a suite of data and information services that enable improved compliance with global Environmental Health and Safety requirements related to the safe manufacturing, distribution, transportation, usage, and disposal of chemicals and products.

Financial Services: On April 8, 2022, the sale of this segment was completed. See [Note 11](#), Dispositions and Discontinued Operations for further discussion. Prior to the sale, we maintained a bank account consortia to provide competitive benchmarking, decisioning algorithms, business intelligence, and customized analytic services that help financial institutions, payment networks and processors, alternative lenders, regulators, and merchants make better strategy, marketing, and risk decisions. Customers applied our solutions in the areas of tailored data management and media effectiveness that include business intelligence platforms, profile views, mobile data solutions, enterprise database services, and fraud risk scoring algorithms for marketing, fraud, and risk mitigation.

The three aforementioned reportable segments represent the segments for which discrete financial information is available and upon which operating results are regularly evaluated by our CODM in order to assess performance and allocate resources. We use EBITDA as the profitability measure for making decisions regarding ongoing operations. EBITDA is net income before interest expense, provision for income taxes, depreciation and amortization of fixed and intangible assets. EBITDA is the measure of operating results used to assess corporate performance and optimal utilization of debt and acquisitions. Operating expenses consist of direct and indirect costs principally related to personnel, facilities, software license fees, consulting, travel, and third-party information services. Indirect costs are generally allocated to the segments using fixed rates established by management based upon estimated expense contribution levels and other assumptions that management considers reasonable. We do not allocate interest expense and provision for income taxes, since these items are not considered in evaluating the segment’s overall operating performance. In addition, our CODM does not evaluate the financial performance of each segment based on assets. See [Note 6](#). Revenues for information on disaggregated revenues by type of service and by country.

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table provides our revenue and EBITDA by reportable segment for the years ended December 31, as well as a reconciliation of EBITDA to income before income taxes for all periods presented in our accompanying consolidated statements of operations:

	2022				2021				2020			
	Insurance	Energy and Specialized Markets	Financial Services	Total	Insurance	Energy and Specialized Markets	Financial Services	Total	Insurance	Energy and Specialized Markets	Financial Services	Total
Revenues	\$ 2,437.0	\$ 22.4	\$ 37.6	\$ 2,497.0	\$ 2,206.9	\$ 112.8	\$ 142.8	\$ 2,462.5	\$ 2,008.7	\$ 104.0	\$ 156.7	\$ 2,269.4
Expenses:												
Cost of revenues (exclusive of items shown separately below)	(781.9)	(19.1)	(23.6)	(824.6)	(704.4)	(58.9)	(90.4)	(853.7)	(644.3)	(54.6)	(92.8)	(791.7)
Selling, general and administrative	(347.4)	(26.7)	(7.4)	(381.5)	(239.1)	(44.9)	(29.2)	(313.2)	(248.1)	(40.5)	(19.6)	(308.2)
Other operating (loss) income	-	450.0	(95.8)	354.2	-	-	(134.0)	(134.0)	15.9	-	3.5	19.4
Investment (loss) income and others, net	(4.7)	(0.4)	(0.2)	(5.3)	1.8	0.6	(0.3)	2.1	0.3	-	0.1	0.4
EBITDA from discontinued operations	-	(117.9)	-	(117.9)	-	222.3	-	222.3	-	204.5	-	204.5
EBITDA	<u>\$ 1,303.0</u>	<u>\$ 308.3</u>	<u>\$ (89.4)</u>	<u>\$ 1,521.9</u>	<u>\$ 1,265.2</u>	<u>\$ 231.9</u>	<u>\$ (111.1)</u>	<u>\$ 1,386.0</u>	<u>\$ 1,132.5</u>	<u>\$ 213.4</u>	<u>\$ 47.9</u>	<u>\$ 1,393.8</u>
EBITDA from discontinued operations				117.9				(222.3)				(204.5)
Depreciation and amortization of fixed assets				(164.2)				(170.3)				(159.2)
Amortization of intangible assets				(74.4)				(79.9)				(73.4)
Interest expense				(138.8)				(127.0)				(138.3)
Income before income taxes				<u>\$ 1,262.4</u>				<u>\$ 786.5</u>				<u>\$ 818.4</u>

Long-lived assets by country are provided below as of December 31:

	2022	2021
Long-lived assets:		
U.S.	\$ 2,876.5	\$ 3,527.6
U.K.	2,428.9	2,754.0
Other countries	730.6	623.9
Total long-lived assets	<u>\$ 6,036.0</u>	<u>\$ 6,905.5</u>

VERISK ANALYTICS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

20. Related Parties:

We consider our stockholders that own more than 5% of the outstanding stock within the class to be related parties as defined within ASC 850, *Related Party Disclosures*. We had no material transactions with related parties owning more than 5% of the entire class of stock for the years ended December 31, 2022 and 2021.

In addition, we had no revenues from related parties for the years ended December 31, 2022, 2021, and 2020.

21. Commitments and Contingencies:

ERISA Litigation

On September 24, 2020, former employees Jillyn Peterson, Gabe Hare, Robert Heynen and Adam Krajewski ("Plaintiffs"), filed suit in the United States District Court, District of New Jersey (No. 2:20-cv-13223-CCC-MF) against Defendants Insurance Services Office Inc. ("ISO"), the Plan Administration Committee of Insurance Services Office Inc. and its members ("Committee Defendants"), and the Trust Investment Committee of Insurance Services Office Inc. and its members. The class action complaint alleges violations of the Employee Retirement Income Security Act, as amended ("ERISA"). The class is defined as all persons who were participants in or beneficiaries of the ISO 401(k) Savings and Employee Stock Ownership Plan ("Plan"), at any time between September 24, 2014 through the date of judgment. The complaint alleges that all defendants are fiduciaries with respect to the Plan. Plaintiffs challenge the amount of fees paid by Plan participants to maintain the investment funds in the plan portfolio and the amount of recordkeeper fees paid by participants. Plaintiffs allege that by permitting the payment of excessive fees, the Committee Defendants breached their ERISA duties of prudence and loyalty. Plaintiffs further allege that ISO breached its ERISA duty by failing to monitor the Committee Defendants who they allege committed known breaches of their fiduciary duties. The complaint does not specify damages but alleges the fiduciary breaches cost Plan participants millions of dollars. Defendants filed their motion to dismiss the complaint on January 12, 2021, which the Court partially denied on April 13, 2021. Fact discovery has been completed. The litigation is currently stayed through April 4, 2023 pending the outcome of the parties' mediation. At this time, it is not possible to reasonably estimate the liability related to this matter, as the case is still in its early stages.

Financial Services Government Inquiry

We continue to cooperate with a civil inquiry by the Department of Justice related to government contracts within our former Financial Services segment, which was sold to TransUnion in April 2022. In addition, in March 2022, we were informed that the SEC is conducting an inquiry related to certain contracts of our former Financial Services segment. These inquiries are ongoing, we are producing documents, and we cannot anticipate the timing, outcome or possible impact of the inquiries, financial or otherwise. Under the stock purchase agreement, we entered into with TransUnion pursuant to which TransUnion acquired our former Financial Services segment, we agreed to indemnify TransUnion for certain losses with respect to the DOJ inquiries.

Data Privacy Litigation

On January 30, 2023, Plaintiffs Justin Ahringer and Michael Donner filed a putative class action lawsuit in the United States District Court, Central District of California, titled *Ahringer et al. v. LoanDepot, Inc. and Verisk Analytics, Inc. d/b/a Jornaya*, Case No.: 8:23-cv-00186. Plaintiffs assert violations of California's Invasion of Privacy Act, Unfair Competition Law, and a violation of class members' privacy rights under the California Constitution. Plaintiffs allege that the Defendants recorded visitors' electronic communications without their consent. Plaintiffs seek to certify a nationwide class of individuals who visited LoanDepot.com and provided personal information on the website's forms to receive a quote or apply for a loan. They allege that the aggregate claims of all members of the proposed class exceeds \$5,000,000. Plaintiffs seek compensatory, statutory or punitive damages or restitution, as well as reasonable attorney's fees and other costs. At this time, it is not possible to reasonably estimate the liability related to this matter, as the case is still in its early stages.

On June 27, 2022, Plaintiff Loretta Williams brought a putative class action against Lead Intelligence, Inc. d/b/a Jornaya ("we," "our," or "us") in the United States District Court for the Northern District of California, titled *Williams v. DDR Media, LLC and Lead Intelligence, Inc. d/b/a Jornaya*, Civil Action No. 3:22-cv-03789. The Complaint alleges that the Defendants violated the California Invasion of Privacy Act, Cal. Penal Code 631 ("CIPA") and invaded Plaintiff's and class members' privacy rights when Defendants purportedly recorded visitors' visits to the scrappyrent2.own.com website without prior express consent. It is further alleged that this conduct constitutes a violation of the California Unfair Competition Law, Cal. Bus. Prof. Code Section 17200 *et seq.* and the California Constitution. The Complaint seeks class certification, injunctive relief, statutory damages in the amount of \$5,000 for each violation, attorneys fees and other litigation costs. As of January 27, our responsive pleading was fully briefed but has not yet been heard or decided. At this time, it is not possible to reasonably estimate the liability related to this matter, as the case is still in its early stages.

On December 15, 2021, Plaintiff Jillian Cantinieri brought a putative class action against Verisk Analytics, Insurance Services Office and ISO Claims Services, Inc. ("we," "our," or "us") in the United States District Court for the Eastern District of New York, titled *Cantinieri v. Verisk Analytics Inc., et al.*, Civil Action No. 2:21-cv-6911. The Complaint alleges that we failed to safeguard the personally identifiable information (PII) of Plaintiff and the members of the proposed classes from a purported breach of our databases by unauthorized entities. Plaintiff and class members allege actual and imminent injuries, including theft of their PII, fraudulent activity on their financial accounts, lowered credit scores, and costs associated with detection and prevention of identity theft and fraud. They seek to recover compensatory, statutory and punitive damages, disgorgement of earnings and profits, and attorney's fees and costs. We filed our motion to dismiss Plaintiff's claims on April 22, 2022. As of June 15, 2022, the motion to dismiss was fully briefed but has neither been heard nor decided. Discovery is ongoing. At this time, it is not possible to reasonably estimate the liability related to this matter, as the case is still in its early stages.

On December 10, 2020, we were served with a putative class action lawsuit brought by Erica Jackson in the Court of Common Pleas of Lackawanna County, Pennsylvania against Lead Intelligence, Inc. d/b/a Jornaya ("we" or "us"), Case No. 2020 CV 03695. The class complaint alleges that we violated Pennsylvania's Wiretap Act ("PWA"), 18 Pa. Const. Stat. § 5701 *et seq.* by "wiretapping" and "intercepting" the plaintiff's communications on the website colleges.educationgrant.com. The plaintiff alleges a class of all persons whose electronic communications were intercepted through the use of our wiretapping on the website. The complaint claims damages pursuant to the PWA for actual damages, but not less than liquidated damages computed at the rate of \$100 a day for each day of violation, or \$1,000, whichever is higher, punitive damages, and reasonable attorney's fees and other litigation costs. On February 16, 2021, we filed preliminary objections to the plaintiff's complaint, the plaintiff opposed, and the Court ultimately denied our preliminary objections. We subsequently filed a petition to compel arbitration and a motion to stay this action pending the completion of the parties' arbitration proceedings. On September 30, 2021, the court denied our motions and directed the parties to proceed with discovery. On October 8, 2021, we filed a Notice of Appeal to seek review of the lower court's decision with the Pennsylvania appellate court system. The appeal was fully briefed. The parties subsequently reached a settlement in November 2022 and the appellate court discontinued the appeal. This case has been closed.

22. Subsequent Events:

In February 2023, we made a repayment of \$275.0 million under our Bilateral Revolving Credit Facility, resulting in zero outstanding borrowings under our bilateral revolving credit facility as of February 28, 2023.

In February 2023, we repaid the full \$125.0 million outstanding principal amount under our Bilateral Term Loan Facility agreement.

On February 1, 2023, we entered into an agreement to acquire Maveria for a net cash purchase price of \$29.3 million, of which \$4.2 million represents indemnity escrows. Maveria is a Sweden-based InsurTech firm with a strong regional presence and established customer base for its personal injury claims management platform. This addition of the Nordics personal injury market leader will support our expansion in Continental Europe and its continued growth as a technology and analytics partner to the global insurance industry.

On February 1, 2023, we closed on and completed the sale of our Energy business, for a purchase price of \$3,100.0 million (subject to customary purchase price adjustments for, among other things, the cash, working capital and indebtedness of the Energy business as of the closing) and up to \$200.0 million of additional contingent cash consideration based on the purchaser's future return on its investment paid through a Class C Partnership interest. We do not expect to have any continuing involvement in the Energy business subsequent to closing.

In January and February 2023 we made repayments of \$20.0 million and \$970.0 million, respectively, under the Syndicated Credit Facility. As a result of this activity, we now have the ability to draw up to \$995.6 million from our Syndicated Credit Facility.

Supplementary Financial Information (Unaudited)

Schedule II Valuation and Qualifying Accounts and Reserves For the Years Ended December 31, 2022, 2021, and 2020 (In millions)

Description	Balance at Beginning of Year	Charged to Costs and Expenses (1)	Deductions— Write-offs (2)	Balance at End of Year
Year ended December 31, 2022				
Allowance for doubtful accounts	\$ 15.4	\$ 6.4	\$ (7.5)	\$ 14.3
Valuation allowance for income taxes	\$ 38.3	\$ 41.2	\$ (34.2)	\$ 45.3
Year ended December 31, 2021				
Allowance for doubtful accounts	\$ 14.1	\$ 13.8	\$ (12.5)	\$ 15.4
Valuation allowance for income taxes	\$ 30.6	\$ 8.1	\$ (0.4)	\$ 38.3
Year ended December 31, 2020				
Allowance for doubtful accounts	\$ 9.5	\$ 8.2	\$ (3.6)	\$ 14.1
Valuation allowance for income taxes	\$ 46.5	\$ 5.8	\$ (21.7)	\$ 30.6

(1) Primarily additional reserves for bad debts

(2) Primarily accounts receivable balances written off, net of recoveries, the expiration of loss carryforwards, and businesses held for sale

EXHIBIT INDEX

Exhibit Number	Description
<u>3.1</u>	Restated Certificate of Incorporation of Verisk Analytics, Inc. effective May 25, 2022, incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K dated May 25, 2022.
<u>3.2</u>	Amended and Restated By-Laws of Verisk Analytics, Inc. effective May 25, 2022, incorporated herein by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K dated May 25, 2022.
<u>4.1</u>	Form of Common Stock Certificate, incorporated herein by reference to Exhibit 4.1 to Amendment No. 6 to the Company's Registration Statement on Form S-1 dated September 21, 2009.
<u>4.2</u>	Senior Notes Indenture, dated as of April 6, 2011, among Verisk Analytics, Inc., the guarantors named therein and Wells Fargo Bank, National Association, as Trustee, incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated April 6, 2011.
<u>4.3</u>	First Supplemental Indenture, dated as of April 6, 2011, among Verisk Analytics, Inc., the guarantors named therein and Wells Fargo Bank, National Association, as Trustee, incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K dated April 6, 2011.
<u>4.4</u>	Third Supplemental Indenture, dated as of September 12, 2012, among Verisk Analytics, Inc., the guarantors named therein and Wells Fargo Bank, National Association, as Trustee, incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K dated September 12, 2012.
<u>4.5</u>	Fifth Supplemental Indenture, dated as of May 15, 2015, between Verisk Analytics, Inc. and Wells Fargo Bank, National Association, as Trustee, incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K dated May 15, 2015.
<u>4.6</u>	Senior Notes Indenture, dated March 6, 2019, among Verisk Analytics, Inc. and Wells Fargo Bank, National Association, as Trustee, incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated March 6, 2019.
<u>4.7</u>	First Supplemental Indenture, dated March 6, 2019, between Verisk Analytics, Inc. and Wells Fargo Bank, National Association, as Trustee, incorporated herein by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K dated March 6, 2019.
<u>4.8</u>	Second Supplemental Indenture, dated May 13, 2020, between Verisk Analytics, Inc. and Wells Fargo Bank, National Association, as Trustee, incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K dated May 13, 2020.
<u>4.9</u>	Description of Verisk Analytics, Inc.'s securities registered pursuant to Section 12 of the Securities Exchange Act, incorporated herein by reference to Exhibit 4.8 to the Company's Annual Report on Form 10-K dated February 18, 2020.
<u>10.1</u>	401(k) Savings Plan and Employee Stock Ownership Plan, incorporated herein by reference to Exhibit 10.1 to the Company's Registration Statement on Form S-1 dated August 12, 2008.
<u>10.2</u>	Verisk Analytics, Inc. 2009 Equity Incentive Plan, incorporated herein by reference to Exhibit 10.2 to Amendment No. 6 to the Company's Registration Statement on Form S-1 dated September 21, 2009.
<u>10.3</u>	Form of Letter Agreement, incorporated herein by reference to Exhibit 10.3 to Amendment No. 1 to the Company's Registration Statement on Form S-1 dated October 7, 2008.
<u>10.4</u>	Form of Master License Agreement and Participation Supplement, incorporated herein by reference to Exhibit 10.4 to Amendment No. 1 to the Company's Registration Statement on Form S-1 dated October 7, 2008.

Exhibit Number	Description
10.5	Schedule of Master License Agreements Substantially Identical in All Material Respects to the Form of Master License Agreement and Participation Supplement, incorporated herein by reference to Exhibit 10.5 to Amendment No. 2 to the Company's Registration Statement on Form S-1 dated November 20, 2008.
10.6	Form of Change of Control Severance Agreement, incorporated herein by reference to Exhibit 10.8 to Amendment No. 6 to the Company's Registration Statement on Form S-1 dated September 21, 2009.
10.7	Insurance Services Office, Inc. 1996 Incentive Plan and Form of Stock Option Agreement thereunder, incorporated herein by reference to Exhibit 10.9 to Amendment No. 7 to the Company's Registration Statement on Form S-1 dated September 29, 2009.
10.8	Form of Stock Option Award Agreement under the Verisk Analytics, Inc. 2009 Equity Incentive Plan, incorporated herein by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q dated November 16, 2009.
10.9	Insurance Services Office, Inc. Supplemental Cash Balance Plan dated January 1, 2009 as amended by the Amendment to the Insurance Services Office, Inc. Supplemental Cash Balance Plan dated February 10, 2012 incorporated by reference to Exhibit 10.12 to the Company's Annual Report on Form 10-K dated February 25, 2014.
10.10	Insurance Services Office, Inc. Supplemental Executive Retirement Savings Plan dated January 1, 2009 incorporated by reference to Exhibit 10.13 to the Company's Annual Report on Form 10-K dated February 25, 2014.
10.11	Verisk Analytics, Inc. 2013 Equity Incentive Plan, incorporated herein by reference to Appendix A to the Company's Proxy Statement on Schedule 14A dated April 1, 2013.
10.12	Form of Stock Option Award Agreement under Verisk Analytics, Inc. 2013 Equity Incentive Plan, incorporated herein by reference to Exhibit 99.2 to Company's Registration Statement on Form S-8 dated May 15, 2013.
10.13	Form of Restricted Stock Award Agreement under Verisk Analytics, Inc. 2013 Equity Incentive Plan, incorporated herein by reference to Exhibit 99.3 to Company's Registration Statement on Form S-8 dated May 15, 2013.
10.14	Second Amended and Restated Credit Agreement dated April 22, 2015 among Verisk Analytics, Inc., as borrower, and the lenders and agents party thereto, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated April 24, 2015.
10.15	First Amendment to Second Amended and Restated Credit Agreement dated July 24, 2015 among Verisk Analytics, Inc., as borrower, and the lenders and agents party thereto, incorporated herein by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q dated July 28, 2015.
10.16	Second Amendment to the Second Amended and Restated Credit Agreement dated May 26, 2016 among Verisk Analytics, Inc., as borrower, and the lenders and agents party thereto, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated May 26, 2016.
10.17	Third Amendment to the Second Amended Restated Credit Agreement dated May 18, 2017 among Verisk Analytics, Inc., as borrower, and the lenders and agents party thereto, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated May 19, 2017.
10.18	Fourth Amendment dated August 15, 2019 to the Second Amended and Restated Credit Agreement dated April 22, 2015 among Verisk Analytics, Inc., as borrower, and the lenders and agents party thereto, incorporated herein by reference to Exhibit 10.18 to the Company's Current Report on Form 8-K dated August 16, 2019.

Exhibit Number	Description
10.19	Verisk Analytics, Inc. 2021 Equity Incentive Plan incorporated herein by reference to Appendix B to the Company's Proxy Statement on Schedule 14A dated April 2, 2021.
10.20	Purchase Agreement, dated as of January 21, 2022, by and among Verisk Analytics, Inc., Tamarack Buyer, L.L.C. and, solely for the limited purpose set forth therein, 3E Company Environmental, Ecological and Engineering, incorporated herein by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K dated January 24, 2022.
10.21	Verisk Analytics, Inc. Senior Executive Severance Benefits Plan, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated April 5, 2022.
10.22	Transition and Consulting Agreement dated May 10, 2022 by and between Verisk Analytics, Inc. and Scott G. Stephenson incorporated herein by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q dated August 2, 2022.
10.23	Amendment No. 3 to the Verisk Analytics, Inc. 2012 Employee Stock Purchase Plan, as amended, incorporated herein by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q dated August 2, 2022.
10.24	Amended and Restated Loan Agreement dated September 9, 2022 among Verisk Analytics, Inc., as borrower, and Bank of America, N.A. as the initial lender and administrative agent, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated September 15, 2022.
10.25	Equity Purchase Agreement dated October 28, 2022 by and between Verisk Analytics, Inc. and Planet Jersey Buyer Ltd, incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K dated October 31, 2022.
10.26	Separation Agreement dated December 23, 2022 by and between Verisk Analytics, Inc. and Mark Anquillare, incorporated herein by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K, dated December 30, 2022.
21.1	Subsidiaries of the Registrant.*
23.1	Consent of Deloitte & Touche LLP.*
31.1	Certification of the Chief Executive Officer of Verisk Analytics, Inc. pursuant to Rule 13a-14 under the Securities Exchange Act of 1934.*
31.2	Certification of the Chief Financial Officer of Verisk Analytics, Inc. pursuant to Rule 13a-14 under the Securities Exchange Act of 1934.*
32.1	Certification of the Chief Executive Officer and Chief Financial Officer of Verisk Analytics, Inc. pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.*
101.INS	Inline XBRL Instance Document.*
101.SCH	Inline XBRL Taxonomy Extension Schema.*
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase.*
101.DEF	Inline XBRL Taxonomy Definition Linkbase.*
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase.*
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase.*
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).*

* Filed herewith.

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 February 28, 2023.

VERISK ANALYTICS, INC.
(Registrant)

/S/ Lee M. Shavel

Lee M. Shavel
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on February 28, 2023.

Signature

Capacity

/S/ LEE M. SHAVEL

Lee M. Shavel

Chief Executive Officer (principal executive officer and director)

/S/ ELIZABETH MANN

Elizabeth Mann

Chief Financial Officer
(principal financial officer)

/S/ DAVID J. GROVER

David J. Grover

Controller and Chief Accounting Officer
(principal accounting officer)

/S/ BRUCE HANSEN

Bruce Hansen

Independent Chair

/S/ ANNELL BAY

Annell R. Bay

Director

/S/ VINCENT BROOKS

Vincent K. Brooks

Director

/S/ JEFFREY DAILEY

Jeffrey Dailey

Director

/S/ CHRISTOPHER M. FOSKETT

Christopher M. Foscett

Director

/S/ KATHLEEN HOGENSON

Kathleen A. Hogenson

Director

/S/ CONSTANTINE P. IORDANOU

Constantine P. Iordanou

Director

/S/ WENDY LANE

Wendy Lane

Director

/S/ SAMUEL G. LISS

Samuel G. Liss

Director

/S/ OLUMIDE SOROYE

Olumide Soroye

Director

/S/ KIMBERLY S. STEVENSON

Kimberly S. Stevenson

Director

/S/ THERESE M. VAUGHAN

Therese M. Vaughan

Director

/S/ DAVID B. WRIGHT

David B. Wright

Director

LIST OF SUBSIDIARIES OF THE REGISTRANT		
NAME OF SUBSIDIARY		JURISDICTION
AIR Worldwide Corporation		Delaware
Insurance Services Office, Inc.		Delaware
ISO Services, Inc.		Delaware
Wood Mackenzie Holdings Limited		United Kingdom
Wood Mackenzie Limited		United Kingdom
Xactware Solutions, Inc.		Delaware

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-237408, 333-216966, 333-194874 and 333-173135 on Form S-3 and Registration Statement Nos. 333-188629, 333-183476, 333-256332, and 333-165912 on Form S-8 of our reports dated February 28, 2023, relating to the financial statements of Verisk Analytics, Inc., and the effectiveness of Verisk Analytics, Inc.'s internal control over financial reporting, appearing in this Annual Report on Form 10-K of Verisk Analytics, Inc. for the year ended December 31, 2022.

/s/ Deloitte & Touche LLP
Morristown, New Jersey
February 28, 2023

CERTIFICATION

I, Lee M. Shavel, certify that:

1. I have reviewed this annual report on Form 10-K of Verisk Analytics, 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.

/s/ Lee M. Shavel

Lee M. Shavel
Chief Executive Officer

Date: February 28, 2023

CERTIFICATION

I, Elizabeth D. Mann, certify that:

1. I have reviewed this annual report on Form 10-K of Verisk Analytics, 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.

/s/ Elizabeth D. Mann

Elizabeth D. Mann

Chief Financial Officer

(Principal Financial Officer and Fully Authorized Officer)

Date: February 28, 2023

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

The certification set forth below is being submitted in connection with the annual report on Form 10-K of Verisk Analytics, Inc. (the “Company”) for the year ending December 31, 2022, as filed with the Securities and Exchange Commission (the “Report”), for the purpose of complying with Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 (the “Exchange Act”) and Section 1350 of Chapter 63 of Title 18 of the United States Code.

Lee M. Shavel, the Chief Executive Officer of the Company, and Elizabeth D. Mann, the Chief Financial Officer of the Company, each hereby certifies that, to the best of his/her knowledge:

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

/s/ Lee M. Shavel

Lee M. Shavel
Chief Executive Officer

/s/ Elizabeth D. Mann

Elizabeth D. Mann
Chief Financial Officer
(Principal Financial Officer and Duly Authorized Officer)

Date: February 28, 2023