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

FORM 10-K

■ ANNUAL REPORT PURSUANT TO SECTION 13 OR 1:	For the fiscal year ended May 3		
☐ TRANSITION REPORT PURSUANT TO SECTION 13 C For the T	OR OR 15(d) OF THE SECURITIES F Transition Period From	XCHANGE ACT OF 193	14
	Commission file number 0-1	1330	
	Paychex, In		
(Exa	act name of registrant as specified		
Delaware (State or other jurisdiction of incorporation or organization) 911 Panorama Trail South Rochester, NY (Address of principal executive offices)	telephone number, including area	· ·	16-1124166 R.S. Employer Identification No.) 14625-2396 (Zip Code)
Securities registered pursuant to Section 12(b) of the Act:	telephone number, including area	1 code. (303) 303-0000	
Title of each class	Trading Symbol(s)	Name of ea	ch exchange on which registered
Common Stock, \$0.01 par value	PAYX	Nas	daq Global Select Market
Securities registered pursuant to Section 12(g) of the Act: No	ne		•
Indicate by check mark if the registrant is a well-known	wn seasoned issuer, as defined in	Rule 405 of the Securitie	s Act. Yes ☑ No □
Indicate by check mark if the registrant is not require			
Indicate by check mark whether the registrant (1) has the preceding 12 months (or for such shorter period that the r past 90 days. Yes \square No \square			
Indicate by check mark whether the registrant has su Regulation S-T (\S 232.405 of this chapter) during the preceding files). Yes \square No \square	abmitted electronically every Integral 12 months (or for such shorter	ractive Data File required period that the registrant	to be submitted pursuant to Rule 405 of was required to submit such
Indicate by check mark whether the registrant is a lar emerging growth company. See the definitions of "large accel 12b-2 of the Exchange Act.	rge accelerated filer, an accelerate lerated filer," "accelerated filer," "	d filer, a non-accelerated smaller reporting compar	filer, a smaller reporting company, or an ny," and "emerging growth company" in Rule
Large accelerated filer ✓ Accelerated f	filer Non-accele	rated filer	Smaller reporting company ☐ Emerging growth company ☐
If an emerging growth company, indicate by check n revised financial accounting standards provided pursuant to			ansition period for complying with any new or
Indicate by check mark whether the registrant has fil over financial reporting under Section 404(b) of the Sarbanes-report. ☑			
Indicate by check mark whether the registrant is a sh	1 2 .	,	
As of November 30, 2019, the last business day of the aggregate market value of \$27,530,894,822 based on the closing	ng price reported for such date on	the Nasdaq Global Selec	eld by non-affiliates of the registrant had an t Market.
As of June 30, 2020, 358,769,682 shares of the registr	, 1	,	
Portions of the registrant's definitive proxy statement to 2020, to the extent not set forth herein, are incorporated by re		Annual Meeting of Stoc	kholders to be held on or about October 15,

PAYCHEX, INC.

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For the fiscal year ended May 31,2020

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PART I

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS PURSUANT TO THE UNITED STATES PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995

Certain written and oral statements made by management of Paychex, Inc. and its wholly owned subsidiaries ("we," "our," "us," "Paychex," or the "Company") may constitute "forward-looking statements" within the meaning of the safe harbor provisions of the United States ("U.S.") Private Securities Litigation Reform Act of 1995. Forward-looking statements can be identified by such words and phrases as "we expect," "expected to," "estimates," "estimated," "intend," "overview," "outlook," "guidance," "we look forward to," "would equate to," "projects," "projectons," "projected," "projected to be," "anticipates," "anticipated," "we believe," "believes," "could be," "targeting," and other similar words or phrases. Examples of forward-looking statements include, among others, statements we make regarding operating performance, events, or developments that we expect or anticipate will occur in the future, including statements relating to our outlook, revenue growth, earnings-per-share growth, or similar projections.

Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations, and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy, and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks, and changes in circumstances that are difficult to predict, many of which are outside our control. Our actual results and financial conditions may differ materially from those indicated in the forward-looking statements. Important factors that could cause our actual results and financial condition to differ materially from those indicated in the forward-looking statements include, among others, the following:

- the impact of the outbreak of COVID-19 on the U.S. and global economy and on our ability to provide services to our clients;
- · changes in governmental regulations and policies;
- our ability to comply with U.S. and foreign laws and regulations;
- our ability to keep pace with changes in technology and to provide timely enhancements to our products and services;
- our compliance with data privacy laws and regulations;
- the possibility of cyberattacks, security vulnerabilities and Internet disruptions, including breaches of data security and privacy leaks, data loss and business interruptions;
- the possibility of failure of our operating facilities, computer systems, or communication systems during a catastrophic event, including the outbreak of COVID-19;
- the failure of third-party service providers to perform their functions;
- the possibility that we may be subject to additional risks related to our co-employment relationship with our professional employer organization ("PEO");
- changes in health insurance and workers' compensation insurance rates and underlying claim trends;
- · our clients' failure to reimburse us for payments made by us on their behalf;
- the effect of changes in government regulations mandating the amount of tax withheld or the timing of remittances;
- volatility in the political and economic environment;
- risks related to acquisitions and the integration of the businesses we acquire, including integrating Oasis Outsourcing Group Holdings, L.P.'s ("Oasis") business with ours;
- our failure to comply with covenants in our debt agreements;
- changes in the availability of qualified people, including management, technical, compliance and sales personnel;

- our failure to protect our intellectual property rights;
- the possible effects of negative publicity on our reputation and the value of our brand; and
- potential outcomes related to pending or future litigation matters.

Any of these factors, as well as such other factors as discussed in Part I, Item 1A, "Risk Factors" and throughout Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Annual Report on Form 10-K ("Form 10-K"), as well as in our periodic filings with the Securities and Exchange Commission (the "SEC"), could cause our actual results to differ materially from our anticipated results. The information provided in this Form 10-K is based upon the facts and circumstances known as of the date of this report, and any forward-looking statements made by us in this Form 10-K speak only as of the date on which they are made. Except as required by law, we undertake no obligation to update these forward-looking statements after the date of filing this Form 10-K with the SEC to reflect events or circumstances after such date, or to reflect the occurrence of unanticipated events.

Our investor presentation regarding the financial results for the fiscal year ended May 31, 2020 is available and accessible at Paychex's Investor Relations page at https://www.paychex.com/investors. Information available on our website is not a part of, and is not incorporated into, this Form 10-K. We intend to make future investor presentations available exclusively through our Investor Relations page.

Item 1. Business

Unless we state otherwise or the context otherwise requires, the terms "Paychex," "we," "our" and the "Company" refer to Paychex, Inc., a Delaware corporation, and its consolidated subsidiaries.

Overview

We are a leading provider of integrated human capital management ("HCM") solutions for human resources ("HR"), payroll, benefits, and insurance services for small- to medium-sized businesses. Our purpose is to allow our customers the freedom to succeed. The workplace is evolving, and we lead the way by making complex HR, payroll, and benefits simple for our clients.

Paychex incorporated in Delaware in 1979 and has a fiscal year that ends May 31st. We maintain our corporate headquarters in Rochester, New York, and serve clients throughout the U.S. and parts of Europe. As of May 31, 2020, we served greater than 680,000 payroll and PEO clients.

For any organization, a key function is the effective management of human capital which requires both resources and expertise. Organizations are faced with complex and ever-changing requirements, including diverse federal, state and local regulations across multiple jurisdictions. In addition, the workplace is rapidly changing as employees increasingly become mobile, work remotely, and expect a user experience similar to consumer-oriented Internet applications. We focus on helping small- to medium-sized businesses who do not have the resources or expertise to adapt to the constantly evolving environment. The COVID-19 environment has further accelerated certain trends and increased regulatory complexity.

Paychex offers a wide range of services – including a fully outsourced HR solution, payroll processing, retirement services, and insurance – allowing us to customize our offering to the client's business, whether it is small or large, simple or complex. We believe that we have the breadth of solutions to cover the spectrum of the employee life cycle, but we also allow integration with some of the most popular HR, accounting, point-of-sale, and productivity applications on the market today.

Our comprehensive solutions allow our clients to manage their workforces effectively from hire to retire. We provide leading-edge HCM technology solutions, coupled with human expertise, to make complex HR, payroll, and benefits issues simple for our clients. The key features of our solutions are:

- Comprehensive cloud-based platform optimized to meet the payroll and HCM needs of small and medium-sized organizations;
- Streamlined workforce management that combines technology with flexible service options;
- Modern, mobile, and intuitive user experience and self-service capabilities that significantly increase employee engagement;
- Scalable and customizable platform that allows clients the ability to add services as they grow;
- Software as a service, or "SaaS", delivery model that reduces total cost of ownership for our clients; and
- Over 45 years of expertise in HR and payroll with our technology backed by over 200 compliance experts and 600 HR business partners.

We market our solutions through our direct and virtual sales forces which are supported by various corporate lead generation and marketing initiatives. Over 50% of our revenues are gained from our services beyond payroll processing. We focus on providing an industry-leading client experience, and continue to see improving client satisfaction scores and retention.

Company Strategy

Our mission is to be the leading provider of HR, payroll, benefits, and insurance solutions by being an essential partner to small and medium-sized businesses across the U.S. and parts of Europe. We believe that success in this mission will lead to strong, long-term financial performance. We intend to strengthen and extend our position as a leading provider through continued investments in both our technology and service offerings. Key elements of our strategy include:

Providing industry-leading, integrated technology. We continue to invest significantly in our award-winning Paychex Flex[®] platform and mobility applications to increase efficiency and functionality for our clients and their employees.

- Increasing client satisfaction. Our flexible service model and technology-enabled service allows us to provide a personalized service experience for our clients and their employees. We continue to invest in artificial intelligence and machine learning and self-service capabilities to allow clients and their employees easy, intuitive, and flexible service how, when, and where they want it.
- Expanding our leadership in HR. We have a comprehensive suite of value-added HR Solutions for our clients and their employees. Greater than half of our revenues are from HR and benefits solutions beyond payroll. After several strategic PEO acquisitions over the past several years, we are now the second largest provider of PEO services in the nation. With over 600 HR business partners, we have extensive expertise that we believe sets us apart in the industry.
- Growing our client base. We believe there is significant potential to grow within our current target markets. We have invested significantly in new
 demand generation and sales tools and expanding certain areas of our sales force. We continue to focus on sales productivity with the intent of
 expanding our market share across all our product lines.
- Engaging in strategic acquisitions. In the past, we utilized acquisitions as a mean to expand our portfolio, enter new markets or increase our scale. We continue to evaluate and monitor potential acquisitions and will utilize this when the acquisitions are in alignment with our overall strategy.

Our Solutions

Our solutions bring together payroll and HCM software with flexible, personalized technology-enabled service capabilities. Clients have the option of doing payroll online using our SaaS technology, outsourcing to our payroll specialists or using a combination of those solutions. Payroll is then integrated with HCM software modules for clients who have more complex HR needs. We also provide comprehensive HR outsourcing through our administrative services organization ("ASO") and PEO solutions. The integration of leading-edge technology and flexible service options allows us to meet our clients' needs how, when, and where they want.

HCM Technology: Paychex Flex is our proprietary HCM SaaS platform that unites HR, payroll, time and attendance, and benefits processes to maximize efficiency and savings. Paychex Flex helps clients manage the employee life cycle from recruiting and hiring to retirement, providing an integrated suite of solutions including recruiting, onboarding, HR, time and attendance and employee benefits. It utilizes a single cloud-based platform, with single client and employee records. Clients can select the modules they need and easily add on additional services as they grow. In addition, Paychex Flex presents function-focused analytics throughout the platform, assisting HR leaders with making more informed business decisions. Paychex Flex uses a mobile-first design throughout our HCM suite, which allows full functionality of all application components, regardless of device or screen size. We believe our Paychex mobile applications add greater value and convenience for our clients and their employees by allowing them instant access on their mobile device.

We continue to invest in Paychex Flex, making significant enhancements designed to simplify the complexity of HR. The latest enhancements include expansion of our integration capabilities to connect users with some of the world's leading business tools, a Help Center that gives users access to training and how-to tutorials, a pay-on-demand solution to grant employees access to earned wages before their scheduled pay day, a custom dashboard, and a newly enhanced grid entry view which offers more flexibility, customization, and visibility into employee pay data. We also expanded into wearable technology where Paychex Flex Time users can also use our smartwatch solution, which enables users to track time worked via their smartwatch, making the time and attendance tracking process easier for an increasingly remote workforce.

HR and Compliance Expertise: Paychex supports its HCM software solutions with over 45 years of experience. We have over 600 HR professionals who are dedicated to our clients and have the experience and training to provide HR best practices and advice. Our HR business partners are available to provide our ASO and PEO clients with specific guidance on HR issues. In addition, we have over 200 compliance professionals who are in real-time contact with tax agencies and regulators to understand upcoming or newly enacted laws and regulations, and advocate for our clients' interests. The contributions of these compliance experts are intended to ensure that our HCM solutions are updated timely to adhere to regulations and to help our clients stay in compliance.

Technology-Enabled Client Service: Paychex Flex also provides technology-enabled service with options that include self-service, a 24/7 dedicated service center, an individual payroll specialist, and integrated service via a multi-product service center. In addition, mid-market clients can utilize a relationship manager for more personalized service. This flexible platform services our small-to medium-sized clients, and a portion of our PEO business.

Within Paychex Flex there is embedded technology to assist clients. The Paychex Flex Intelligence Engine includes the Flex Assistant, a customer service chatbot who can answer over 200 commonly asked questions. Our Flex Intelligence Engine allows clients to elect their preference for learning – via written how-to-documents, tutorial-style video vignettes, or a guided interactive tour. At any time, a live Paychex agent is just a click away, with the entire chat conversation available real-time to provide a better, more personalized service experience.

The platform embeds self-service capabilities that empower client employees to manage their HR and benefits information from any location, on any device. These self-service capabilities allow for greater access and convenience for client employees and greater productivity for clients.

Our Clients

Paychex has HR solutions to fit the needs of any small- to medium-sized business, from do-it-yourself payroll to comprehensive HR outsourcing. The target market for our integrated HCM solutions is small- to medium-sized businesses. Within this space, we serve a diverse base of clients operating in a broad range of industries throughout the U.S. and parts of Europe. The flexibility and scalability of our solutions allow our clients to define the solution that best meets their needs and to grow within the Flex platform. We utilize service agreements and arrangements with clients that generally do not contain specified contract periods, and may be terminated by either party with 30-days' notice of termination. For the fiscal year ended May 31, 2020 ("fiscal 2020"), client retention was at record levels of over 83% of our beginning client base for the fiscal year.

We support our small-business clients, reducing the complexity and risk of running their own payroll, while ensuring greater accuracy with up-to-date tax rates and regulatory information. We simplify their payroll with a combination of our products and customer service options for a quick and easy payday. Clients may choose to have our service team handle everything for them, or process payroll themselves utilizing our proprietary, robust SaaS Paychex Flex platform and our SurePayroll® SaaS-based products. Both products allow users to process payroll when they want, how they want, and on any device (desktop, tablet, and mobile phone).

Our mid-market clients generally have more complex payroll and employee benefit needs, though with the environment of increasing regulations, we believe the need for HR outsourcing services has been moving down-market. Any of our clients on Paychex Flex can opt for the integrated suite of HCM solutions, which allows clients to choose the services and software that will meet the needs of their business.

While Paychex Flex is our primary SaaS-based platform utilized by the majority of our clients for their HCM needs, there are some clients that use other platforms, including SurePayroll clients, certain PEO clients, and some smaller tenured clients.

Both our small and mid-market clients can choose one of our comprehensive HR outsourcing services, which include ASO and PEO solutions, and participate in our benefits offerings, which include our insurance and retirement services. Our insurance services simplify the insurance process to make it easy to find plans with the features and affordability to meet the client's needs. Our retirement services product line offers many plan design options to meet the client's requirements, as well as investment options.

Description of Services

Within our HCM solutions we offer a comprehensive portfolio of services and products that allow our clients to meet their diverse HR and payroll needs. Clients can select services on an á la carte basis or as part of various product bundles. Our offerings often leverage the information gathered in our base payroll processing service, allowing us to provide comprehensive outsourcing services covering the HCM spectrum.

Our portfolio of services is comprised of the following:

Management Solutions:

• **Payroll processing services:** Our payroll processing services include the calculation, preparation, and delivery of employee payroll checks; production of internal accounting records and management reports; preparation of federal, state, and local payroll tax returns; and collection and remittance of clients' payroll obligations.

- Payroll tax administration services: Payroll tax administration services provide for accurate preparation and timely filing of quarterly and year-end tax returns, as well as the electronic transfer of funds to the applicable federal, state, and local tax or regulatory agencies. In connection with these services, we electronically collect payroll taxes from clients' bank accounts, typically on payday, prepare and file the applicable tax returns, and remit taxes to the applicable tax or regulatory agencies on the respective due dates. These taxes are typically paid between one and 30 days after receipt of collections from clients, with some items extending up to 90 days. We handle regulatory correspondence, amendments, and penalty and interest disputes.
- Employee payment services: Our employee payment services provide an employer the option of paying their employees by direct deposit, payroll debit card, a check drawn on a Paychex account (Readychex®), or a check drawn on the employer's account and electronically signed by us. For each of the first three methods, we electronically collect net payroll from the clients' bank accounts, typically one business day before payday, and provide payment to the employees on payday. Our Readychex service provides a cost-effective solution that offers the benefit of convenient, one-step payroll account reconciliation for employers.

We also allow employers to opt for more flexible pay options. Same day ACH functionality is also available for clients using direct deposit, allowing employers the flexibility to pay employees via direct deposit on the same day they initiate payroll. In addition, we are giving business owners the ability to leverage real-time payments to process payroll and deliver net pay to their employees immediately for time worked. Pay-on-demand functionality enables an employee to request access to a portion of earned pay before the scheduled pay date, which is deposited into a traditional bank account or a third-party account.

- Regulatory compliance services: We offer new-hire reporting services, which enable clients to comply with federal and state requirements to report information on newly hired employees. This information aids the government in enforcing child support orders and minimizes fraudulent unemployment and workers' compensation insurance claims. Our gamishment processing service provides deductions from employees' pay, forwards payments to third-party agencies, including those that require electronic payments, and tracks the obligations to fulfillment. These services enable employers to comply with legal requirements and reduce the risk of penalties. We also offer comprehensive solutions to help employers and employees with certain mandates under the Affordable Care Act ("ACA"), which sets forth specific coverage and reporting requirements that employers must meet.
- HR Solutions (ASO): Our ASO offers businesses a combined package that includes payroll, employer compliance, HR and employee benefits administration, risk management outsourcing, and the on-site availability of a professionally trained HR representative, among other services. Paychex HR Essentials is an ASO product that provides support to our clients over the phone or online to help manage employee-related topics.
- Retirement services administration: Our retirement services product line offers a variety of options to clients, including 401(k) plans, 401(k) SIMPLE plans, SIMPLE IRAs, 401(k) plans with safe harbor provisions, owner-only 401(k) plans, profit sharing plans, and money purchase plans. These services provide plan implementation, ongoing compliance with government regulations, employee and employer reporting, participant and employer online access, electronic funds transfer, and other administrative services. Auto enrollment is an optional plan feature that allows employers to automatically enroll employees in their company's 401(k) plan and increase overall plan participation. Clients may choose from a group of pre-defined fund selections or customize their investment options within their plan. We are the largest 401(k) recordkeeper for small businesses in the U.S. Our large-market retirement services clients include relationships with financial advisors.
- *HR administration services:* We offer cloud-based HR administration software for employee benefits management and administration, time and attendance solutions, recruiting, and onboarding.
 - Paychex HR Online offers powerful tools for managing employee personnel information, performance management, HR compliance and reporting. Our Learning Management solution compliments our performance management. When combined with our workflow and approval engine, we offer clients the flexibility to capture ongoing performance feedback, recommend and enroll employees in specific training courses, and leverage automated workflows to track progress and approve compensation changes tied to performance.
 - Benefits administration software manages the employee-benefit enrollment process for both open-enrollment and life events.

- Time and attendance products, including our integrated Flex Time software, provide timekeeping, scheduling, and workforce analytics. The InVisionTM IRIS Time Clock, a biometric clock that scans the iris, provides fast and accurate time capture. Paychex Flex Time also works with wearable technology to allow for employees to clock in and out using their smartwatch.
- Applicant tracking suite provides technology that streamlines, simplifies, and drives the applicant workflow and onboarding process for companies of all sizes.
- Other HR services and products: We offer the outsourcing of plan administration under section 125 of the Internal Revenue Code, allowing employees to
 use pre-tax dollars to pay for certain health insurance benefits and health and dependent care expenses not covered by insurance. All required
 implementation, administration, compliance, claims processing and reimbursement, and coverage tests are provided with these services. We offer state
 unemployment insurance services, which provide clients with prompt processing for all claims, appeals, determinations, change statements, and requests
 for separation documents.
- Business services: We offer various business services to small- to medium-sized businesses. Our wholly owned subsidiary, Paychex Advance, LLC, provides a portfolio of services to the temporary staffing industry, including payroll funding (via the purchase of accounts receivable) and outsourcing services, which include payroll processing, invoicing, and tax preparation. Paychex Promise, a subscription-based service, offers protection against payroll interruptions and solutions to address routine challenges of running a successful business. The primary offering is payroll protection, which extends the collection of payroll funds from a client's bank account by seven days without interruption of service or charges for insufficient funds. In addition, through partnerships with third-party providers, we provide clients opportunities for services such as payment processing services, financial fitness programs, and a small-business loan resource center.

PEO and Insurance Solutions:

- **PEO solutions:** Our licensed subsidiaries, Paychex Business Solutions, LLC, HR Outsourcing Holdings, Inc. ("HROi"), and Oasis offer businesses a combined package that includes payroll, employer compliance, HR and employee benefits administration, risk management outsourcing, and the on-site availability of a professionally trained HR representative, among other services. What differentiates our PEO solutions from our ASO solutions is that we serve as a co-employer of our clients' employees, offer health care coverage to PEO client employees, and assume the risks and rewards of workers' compensation insurance and certain benefit insurance offerings. We are certified under the Small Business Efficiency Act to provide PEO solutions.
- Insurance solutions: Our licensed insurance agency, Paychex Insurance Agency, Inc., provides insurance through a variety of carriers, allowing employers to expand their employee benefit and corporate offerings at an affordable cost. Insurance offerings include property and casualty coverage such as workers' compensation, business-owner policies, cyber security protection, commercial auto, and health and benefits coverage, including health, dental, vision, and life. Our insurance services simplify the insurance process to make it easy to find plans with the features and affordability to meet the client's needs. With access to numerous top national and regional insurance carriers, our professional insurance agents have access to a wide selection of plans from which they can best match the insurance needs of small businesses. Additionally, clients have the option to integrate their insurance plans with Paychex payroll processing for easy, accurate plan administration.

Sales and Marketing

We market and sell our services primarily through our direct sales force based in the markets we serve. Our direct sales force includes sales representatives who have defined geographical territories and specialize within our portfolio of services. Our sales representatives are also supported by marketing, advertising, public relations, trade shows, and telemarketing programs. Our virtual sales force manages inbound sales leads for the under 10 employee space, sales in areas without a direct sales force presence, and sales of various ancillary services.

In addition to our direct selling and marketing efforts, we utilize other indirect sales channels such as our relationships with existing clients, certified public accountants ("CPAs"), and banks for new client referrals. Approximately 50% of our new small-market payroll clients (excluding business acquisitions) come from these referral sources. Our dedicated business development group drives sales through banking, national associations, and franchise channels. We also utilize digital marketing as a means to market our services.

We have a long-standing partnership with the American Institute of Certified Public Accountants ("AICPA") as the preferred payroll provider for its AICPA Business Solutions TM Program. Our current partnership agreement with the AICPA is in place through September 2021. We also partner with numerous state CPA society organizations.

Our website is available at www.paychex.com. It is a cost-efficient channel that serves as a source of leads and new sales, while complementing the efforts of our direct and virtual sales forces. The website allows us to market to existing and prospective clients that want to learn more about our products and services and offers information about our core lines of business: human resources (www.paychex.com/human-resources), payroll (www.paychex.com/payroll), benefits (www.paychex.com/employee-benefits), and insurance (www.paychex.com/business-insurance).

Paychex also builds on its reputation as an expert in the HCM industry by providing education and assistance primarily to clients and the CPA community. We provide free webinars, white papers, and other information on our website to aid existing and prospective clients with the impact of regulatory change as well as HR and business best practices. Paychex WORX, available at www.paychex.com/worx, is a digital destination for insightful resources useful for businesses at every stage, from entrepreneur to enterprise. Paychex WORX highlights our expertise, and ability to help businesses of all sizes with a wide range of HR and financial information for current clients and prospects alike.

We also track current regulatory issues that impact the business community and provide regulatory updates. We issue small business trend reports through our Paychex | HIS Markit Small Business Employment Watch. Our Paychex Accountant Knowledge Center is a free online resource available through our website that brings valuable information and time-saving online tools to accounting professionals. Through Paychex Flex, AccountantHQ offers access to authorized client payroll and HR data and key account contacts, along with an extensive accountant resource library. AccountantHQ drives efficiency by putting accountants in the best position possible to easily access critical client payroll and HR data, as well as powerful reporting tools, including our Paychex Protection Program ("PPP") loan forgiveness estimator.

Markets and Competition

We remain focused on servicing small- to medium-sized businesses based upon the growth potential that we believe exists in the markets we serve. Our internal database source indicates that there are approximately 8 million employer firms in the target markets that we currently serve in the U.S.

The market for HCM services is highly competitive and fragmented. We have one primary national competitor and we also compete with other national, international, regional, local, and online service providers. In addition to traditional payroll processing and HR service providers, we compete with in-house payroll and HR systems and departments. Payroll and HR systems and software are sold by many vendors. Our products also compete with a variety of providers of HR services, such as retirement services companies, insurance companies, HR and benefits consulting firms, and national and regional PEOs.

Competition in the payroll processing and HR services industry is primarily based on service responsiveness, product quality and reputation, including ease of use and accessibility of technology, breadth of service and product offerings, and price. We believe we are competitive in each of these areas. We believe that our leading-edge technology and mobility applications, combined with personalized service provided by industry professionals and our technology-enabled service capabilities, distinguishes us from our competitors.

Software Maintenance and Development

The ever-changing mandates of federal, state, and local tax and regulatory agencies require us to regularly update our proprietary software to provide payroll and HR services to our clients. We are continually engaged in developing enhancements to and maintaining our various software platforms to meet the changing requirements of our clients and the marketplace. We continue to enhance our SaaS solutions and mobility applications to offer our users an integrated and unified experience. Continued enhancement of the client and client employee experience is important to our future success.

Employees

We believe our ability to attract and retain qualified employees in all areas of our business is important to our future success and growth. As of May 31, 2020, we employed approximately 15,800 people, of which approximately 15,600 people were employed on a full-time basis.

Intellectual Property

We own or license and use a number of trademarks, trade names, copyrights, service marks, trade secrets, computer programs and software, and other intellectual property rights. Collectively, our intellectual property rights are material to the conduct of our business. Where it is determined to be appropriate, we take measures to protect our intellectual property rights, including, but not limited to, confidentiality/non-disclosure agreements or policies with employees, vendors, and others; license agreements with licensees and licensors of intellectual property; and registration of certain trademarks. We believe that the "Paychex" name, trademark, and logo are of material importance to us.

Seasonality

There is no significant seasonality to our business. However, during our third fiscal quarter, which ends in February, the number of new payroll clients, new retirement services clients, and new works ite employees associated with our HR Solutions ASO and PEO businesses tends to be higher than during the rest of the fiscal year, primarily because many new clients prefer to start using our services at the beginning of a calendar year. In addition, calendar year-end transaction processing and client funds activity are traditionally higher during our third fiscal quarter due to clients paying year-end bonuses, clients requesting additional year-end services, and the preparation and delivery of end-of year reporting requirements.

Available Information

We are subject to the informational and reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Therefore, we file periodic reports, proxy statements, and other information with the SEC. The SEC maintains a website (www.sec.gov) that includes our reports, proxy statements, and other information

Our corporate website, www.paychex.com, provides materials for investors and information about our services. Our Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and other SEC filings, as well as any amendments to such reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, are made available, free of charge, on our website as soon as reasonably practicable after such reports have been filed with or furnished to the SEC. The information our website is not incorporated by reference into our Form 10-K. Also, copies of our Annual Report to Stockholders and Proxy Statement, to be issued in connection with our 2020 Annual Meeting of Stockholders, will be made available, free of charge, upon written request submitted to Paychex, Inc., c/o Corporate Secretary, 911 Panorama Trail South, Rochester, New York 14625-2396.

Item 1A. Risk Factors

Our future results of operations are subject to risks and uncertainties that could cause actual results to differ materially from historical and current results, and from our projections. The following risk factors represent our current view of some of the most important risks facing our business and are important to understanding our business. These are not the only risks we face. Additional factors not presently known to us or that we currently deem to be immaterial also may adversely affect, possibly to a material extent, our business, cash flows, financial condition, or results of operations in future periods. In addition, refer to the cautionary note regarding forward-looking statements at the beginning of Part I of this Form 10-K.

Our business and results of operations have been, and our financial condition may be, impacted by the outbreak of COVID-19 and such impact could be materially adverse. The global spread of COVID-19 created significant volatility, uncertainty and economic disruption. In the United States and globally, governmental authorities instituted certain preventative measures, including border closures, travel restrictions, operational restrictions on certain businesses, shelter-in-place orders, quarantines and recommendations to practice social distancing. These restrictions disrupted and may continue to disrupt economic activity, resulting in reduced commercial and consumer confidence and spending, increased unemployment, closure or restricted operating conditions for businesses, volatility in the global capital markets, instability in the credit and financial markets, labor shortages, regulatory recommendations to provide relief for impacted consumers, disruption in supply chains, and restrictions on many hospitality and travel industry operations.

The extent to which the coronavirus pandemic impacts our business, operations, and financial results is uncertain and will depend on future developments, including the duration or recurrence, of the pandemic, the related length and severity of its impact on the U.S. and global economy, and the continued governmental, business and individual actions taken in response to the pandemic and economic disruption. Impacts related to the COVID-19 pandemic are expected to continue to pose risks to our business for the foreseeable future, heightened many of the risks and uncertainties identified below, and could have a materially adverse impact on our business, financial condition, and results of operations.

Our business is substantially dependent on our clients continued use of our solutions and services, and our results of operations will decline if our clients are no longer willing or able to use them. Our clients are sensitive to negative changes in economic conditions. If they cease operations or file for bankruptcy protection, we may not be paid for services we already provided, and our client base will shrink, which will lower our revenue. If under financial pressure, our clients may determine that they are no longer willing to pay for the services and solutions we provide, which would reduce our revenue. Our clients may decrease their workforce, which would decrease their demand for our services. Because of spending constraints on our clients and competition in the industry, we may face pricing pressure on our services and face challenges in onboarding new clients, which would reduce revenue and ultimately impact our results of operations. If the third-party service providers we rely on are unable to perform their services for us and our clients, our operations could be materially disrupted and we could face significant penalties or liabilities.

Our operational risk, including data security risk, has increased during the pandemic as a majority of our employees are working remotely and cybercriminal activity increases in an attempt to profit from the disruption to typical operations.

There has been and may continue to be a significant number of new laws and regulations promulgated by federal, state, local, and foreign governments following the outbreak of the COVID-19 pandemic. We have expended additional resources and incurred additional costs in addressing regulatory requirements applicable to us and our clients. These regulations may be unclear, difficult to interpret or in conflict with other applicable regulations. The failure to comply with these new laws and regulations could result in financial penalties, legal proceedings, and reputational harm.

Our business, services, and financial condition may be adversely impacted by changes in government regulations and policies. Many of our services, particularly payroll tax administration services and employee benefit plan administration services, are designed according to government regulations that often change. Changes in regulations could affect the extent and type of benefits employers are required, or may choose, to provide employees or the amount and type of taxes employers and employees are required to pay. Such changes could reduce or eliminate the need for some of our services and substantially decrease our revenue. Added requirements could also increase our cost of doing business.

Our business and reputation may be adversely impacted if we fail to comply with U.S. and foreign laws and regulations. Our services are subject to various laws and regulations, including, but not limited to, the ACA and anti-money laundering rules. The growth of our international operations via acquisition also subjects us to additional risks, such as compliance with foreign laws and regulations. The enactment of new laws and regulations, modifications of existing laws and regulations, or the adverse application or interpretation of new or existing laws or regulations can adversely affect our business. Failure to update our services to comply with modified or new legislation in the area of health care reform as well as failure to educate and assist our clients regarding this legislation could adversely impact our business reputation and negatively impact our client base. Failure to comply with laws and regulations could result in the imposition of consent orders or civil and criminal penalties, including fines, which could damage our reputation and have an adverse effect on our results of operations or financial condition. In addition, as a U.S. company, we are required to comply with the economic sanctions and embargo programs administered by the Office of Foreign Assets Control and similar multi-national bodies and governmental agencies worldwide, and the Foreign Corrupt Practices Act ("FCPA"). A violation of a sanction or embargo program, or of the FCPA, or similar laws prohibiting certain payments to governmental officials, could subject us, and individual employees, to a regulatory enforcement action as well as significant civil and criminal penalties which could adversely impact our business and operations.

We may not be able to keep pace with changes in technology or provide timely enhancements to our products and services. The market for our products is characterized by rapid technological advancements, changes in customer requirements, frequent new product introductions, and enhancements and changing industry standards. To maintain our growth strategy, we must adapt and respond to technological advances and technological requirements of our clients. Our future success will depend on our ability to: enhance our current products and introduce new products in order to keep pace with products offered by our competitors; enhance capabilities and increase the performance of our internal systems, particularly our systems that meet our clients' requirements; and adapt to technological advancements and changing industry standards. We continue to make significant investments related to the development of new technology. If our systems become outdated, it may negatively impact our ability to meet performance expectations related to quality, time to market, cost and innovation relative to our competitors. The failure to provide more efficient and user-friendly customer-facing digital experience across internet and mobile platforms as well as in physical locations may adversely impact our business and operating results. There can be no assurance that our efforts to update and integrate systems will be successful. If we do not integrate and update our systems in a timely manner, or if our investments in technology fail to provide the expected results, there could be a material adverse effect to our business and results of operations. The failure to continually develop enhancements and use of technologies such as robotics and other workflow automation tools, natural language processing, and artificial intelligence/machine learning may impact our ability to increase the efficiency of and reduce costs associated with operational risk management and compliance activities.

We could be subject to reduced revenues, increased costs, liability claims, or harm to our competitive position as a result of cyberattacks, security vulnerabilities or Internet disruptions. We rely upon information technology ("IT") networks, cloud-based platforms, and systems to process, transmit, and store electronic information, and to support a variety of business processes, some of which are provided by third-party vendors. Cyberattacks and security threats are a risk to our business and reputation. A cyberattack, unauthorized intrusion, malicious software infiltration, network disruption or outage, corruption of data, or theft of personal or other sensitive information, could have a material adverse effect on our business operations or that of our clients, result in liability or regulatory sanction, or cause harm to our business and reputation and result in a loss in confidence in our ability to serve clients all of which could have a material adverse effect on our business. The rapid speed of disruptive innovations involving cyberattacks, security vulnerabilities and Internet disruptions enabled by new and emerging technologies may outpace our organization's ability to compete and/or manage the risk appropriately. In addition, cybercriminals may seek to exploit the disruption caused by the COVID-19 pandemic by attempting to engage in payment-related fraud or by more frequently attempting to gain access to our systems through phishing or other means that may be more successful when most of our employees are working remotely.

<u>Data Security and Privacy Leaks</u>: We collect, use, and retain increasingly large amounts of personal information about our clients, employees of our clients, and our employees, including: bank account numbers, credit card numbers, social security numbers, tax return information, health care information, retirement account information, payroll information, system and network passwords, and other sensitive personal and business information. At the same time, the continued occurrence of high-profile cyber-attacks and data breaches provides evidence of an external environment increasingly hostile to information security. We may be particularly targeted for cyber-attack because of the amount and type of personal and business information that we collect, use, and retain. Vulnerabilities, threats, and more sophisticated and targeted computer crimes pose a risk to the security of our systems and networks, and the confidentiality, availability, and integrity of our data

Our service platforms enable our clients to store and process personal data on premise or, increasingly, in a cloud-based environment that we host. The security of our IT infrastructure is an important consideration in our customers' purchasing decisions. Because the techniques used to obtain unauthorized access, disable or degrade service or sabotage systems change frequently, are increasingly more complex and sophisticated and may be difficult to detect for long periods of time, we may be unable or fail to anticipate these techniques or implement adequate or timely preventative or responsive measures. As cyber threats continue to evolve, we are focused on ensuring that our operating environments safeguard and protect personal and business information. We may be required to invest significant additional resources to comply with evolving cybersecurity regulations and to modify and enhance our information security and controls, and to investigate and remediate any security vulnerabilities. While we have security systems and IT infrastructure in place designed to detect and protect against unauthorized access to such information, if our security measures are breached, our business could be substantially harmed, and we could incur significant liabilities. Any such breach or unauthorized access could negatively affect our ability to attract new clients, cause existing clients to terminate their agreements with us, result in reputational damage, and subject us to lawsuits, regulatory fines, or other actions or liabilities which could materially and adversely affect our business and operating results. Third-parties, including vendors that provide services for our operations, could also be a source of security risk to us in the event of a failure of their own security systems and infrastructure.

Data Loss and Business Interruption: If our systems are disrupted or fail for any reason, including Internet or systems failure, or if our systems are infiltrated by unauthorized persons, both the Company and our clients could experience data loss, financial loss, harm to reputation, or significant business interruption. Hardware, applications and services, including cloud-based services, that we develop or procure from third-party vendors may contain defects in design or other problems that could compromise the integrity and availability of our services. Any delays or failures caused by network outages, software or hardware failures, or other data processing disruptions, could result in our inability to provide services in a timely fashion or at all. We may be required to incur significant costs to protect against damage caused by disruptions or security breaches in the future. Such events may expose us to unexpected liability, litigation, regulatory investigation and penalties, loss of clients' business, unfavorable impact to business reputation, and there could be a material adverse effect on our business and results of operations.

Our reputation, results of operations, or financial condition may be adversely impacted if we fail to comply with data privacy laws and regulations. Our services require the storage and transmission of proprietary and confidential information of our clients and their employees, including personal or identifying information, as well as their financial and payroll data. Our applications are subject to various complex government laws and regulations on the federal, state, and local levels, including those governing personal privacy. In the U.S., we are subject to rules and regulations promulgated under the authority of the Federal Trade Commission, the Health Insurance Portability and Accountability Act of 1996, the Family Medical Leave Act of 1993, the ACA, federal and state labor and employment laws, and state data breach notification and data privacy laws, such as the California Consumer Protection Act, which became effective on January 1, 2020. In addition, the European Union's General Data Privacy Regulation became fully effective in May 2018. Failure to comply with such laws and regulations could result in the imposition of consent orders or civil and criminal penalties, including fines, which could damage our reputation and have an adverse effect on our results of operations or financial condition. The regulatory framework for privacy issues is rapidly evolving and future enactment of more restrictive laws, rules, or regulations and/or future enforcement actions or investigations could have a materially adverse impact on us through increased costs or restrictions on our business and noncompliance could result in regulatory penalties and significant legal liability.

In the event of a catastrophe, our business continuity plan may fail, which could result in the loss of client data and adversely interrupt operations. Our operations are dependent on our ability to protect our infrastructure against damage from catastrophe or natural disaster, severe weather including events resulting from climate change, unauthorized security breach, power loss, telecommunications failure, terrorist attack, public health emergency, or other events that could have a significant disruptive effect on our operations. We have a business continuity plan in place in the event of system failure due to any of these events. Our business continuity plan has been tested in the past by circumstances of severe weather, including hurricanes, floods, and snowstorms, and has been successful. However, these past successes are not an indicator of success in the future. If the business continuity plan is unsuccessful in a disaster recovery scenario, we could potentially lose client data or experience material adverse interruptions to our operations or delivery of services to our clients.

We may be adversely impacted by any failure of third-party service providers to perform their functions. As part of providing services to clients, we rely on a number of third-party service providers. These service providers include, but are not limited to, couriers used to deliver client payroll checks and banks used to electronically transfer funds from clients to their employees. Failure by these service providers, for any reason, to deliver their services in a timely manner and in compliance with applicable laws and regulations could result in material interruptions to our operations, impact client relations, and result in significant penalties or liabilities to us.

We may be exposed to additional risks related to our co-employment relationship within our PEO business. Many federal and state laws that apply to the employer-employee relationship do not specifically address the obligations and responsibilities of the "co-employment" relationship within our PEO business. State and federal positions regarding co-employment relationships are in a constant state of flux and changed with varying degrees of impact on our operations. We cannot predict when changes will occur or forecast whether any future changes will be favorable or unfavorable to our operations. There is a possibility that we may be subject to liability for violations of employment or discrimination laws by our clients and acts or omissions of client employees, who may be deemed to be our agents, even if we do not participate in any such acts or violations. Although our agreements with clients provide that they will indemnify us for any liability attributable to their own or their employees' conduct, we may not be able to effectively enforce or collect such contractual obligations. In addition, we could be subject to liabilities with respect to our employee benefit plans if it were determined that we are not the "employer" under any applicable state or federal laws. Incurring additional liabilities related to our PEO business may adversely affect our results of operations.

We may be adversely impacted by changes in health insurance and workers' compensation rates and underlying claims trends. Within our PEO business, we maintain health and workers' compensation insurance covering worksite employees. The insurance costs are impacted by claims experience and are a significant portion of our PEO costs. If we experience a sudden or unexpected increase in claims activity, our costs could increase. In addition, in the event of expiration or cancellation of existing contracts, we may not be able to secure replacement contracts on competitive terms. Also, as a co-employer in the PEO, we assume or share many of the employer-related responsibilities associated with health care reform, which may result in increased costs. Increases in costs not incorporated into service fees timely or fully could have a material adverse effect on our results of operations. Incorporating cost increases into service fees could also impact our ability to attract and retain clients.

Our clients could have insufficient funds to cover payments we made on their behalf, resulting in financial loss to us. As part of our payroll processing service, we are authorized by our clients to transfer money from their accounts to fund amounts owed to their employees and various taxing authorities. It is possible that we could be held liable for such amounts in the event the client has insufficient funds to cover them. We have in the past, and may in the future, make payments on our clients' behalf for which we may not be reimbursed, resulting in loss to us. If a significant number of our clients are unable to cover payments we make on their behalf, our results of operations will be materially adversely impacted.

Our interest earned on funds held for clients may be impacted by changes in government regulations mandating the amount of tax withheld or timing of remittance. We receive interest income from investing client funds collected but not yet remitted to applicable tax or regulatory agencies or to client employees. A change in regulations either decreasing the amount of taxes to be withheld or allowing less time to remit taxes to applicable tax or regulatory agencies could adversely impact interest income.

We may be adversely impacted by volatility in the political and economic environment. Trade, monetary and fiscal policies, and political and economic conditions may substantially change, and credit markets may experience periods of constriction and variability. These conditions may impact our business due to lower transaction volumes or an increase in the number of clients going out of business. Current or potential clients may decide to reduce their spending on payroll and other outsourcing services. In addition, new business formation may be affected by an inability to obtain credit.

We invest our funds held for clients in high quality, investment-grade marketable securities, money markets, and other cash equivalents. However, these funds held for clients are subject to general market, interest rate, credit, and liquidity risks. These risks may be exacerbated during periods of unusual financial market volatility. The interest we earn on funds held for clients may decrease as a result of a decline in funds available to invest and lower interest rates. In addition, during periods of volatility in the credit markets, certain types of investments may not be available to us or may become too risky for us to invest in, further reducing the interest we may earn on client funds. If we sell available-for-sale securities to satisfy short-term funding requirements, we may recognize losses, which would reduce the interest income earned on funds held for clients.

Constriction in the credit markets may impact the availability of financing, even to borrowers with the highest credit ratings. Historically, we have periodically borrowed against available credit arrangements to meet short-term liquidity needs. However, should we require additional short-term liquidity during days of large outflows of client funds, a credit constriction may limit our ability to access those funds or the flexibility to obtain themat interest rates that would be acceptable to us. Growth in services for funding payrolls of our clients in the temporary staffing industry may be constricted if access to financing becomes limited. In addition, our ability to grow through significant acquisitions may be limited. See also "Item 7A. Quantitative and Qualitative Disclosures About Market Risk." If all of these financial and economic circumstances were to remain in effect for an extended period of time, there could be a material adverse effect on our results of operations and financial condition.

We made and may continue to make acquisitions that involve numerous risks and uncertainties. Acquisitions subject us to risks, including increased debt, assumption of unforeseen liabilities, and difficulties in integrating operations. Successful integration involves many challenges, including the difficulty of developing and marketing new products and services, our exposure to unforeseen liabilities of acquired companies, and the loss of key employees of an acquired business. The integration and conversion of our acquired operations or other future acquisitions, if any, could result in increased operating costs if the anticipated synergies of operating these businesses as one are not achieved, a loss of strategic opportunities if management is distracted by the integration process, and a loss of customers if our service levels drop during or following the integration process. In addition, an acquisition could adversely impact cash flows and/or operating results, and dilute stockholder interests, for many reasons, including charges to our income to reflect the impairment of acquired intangible assets including goodwill, interest costs and debt service requirements for any debt incurred in connection with an acquisition, and any issuance of securities in connection with an acquisition or new business venture that dilutes or lessens the rights of our current stockholders. If the integration of any or all of our acquisitions or future acquisitions is not successful, it could have a material adverse impact on our operating results and stock price.

Certain of our debt agreements contain covenants that may constrain the operation of our business, and our failure to comply with these covenants could have a material adverse effect on our financial condition. The Note Purchase and Guarantee Agreement (the "Agreement") that we entered into in January 2019 in connection with our acquisition of Oasis, contains covenants which may restrict our flexibility to operate our business. These covenants include restrictions regarding the incurrence of liens and indebtedness, substantial changes in the general nature of our business and our subsidiaries (taken as a whole), certain merger transactions, certain sales of assets and other matters, all subject to certain exceptions. The Agreement also contains financial covenants, which are reviewed for compliance on a quarterly basis, that require us not to exceed a maximum leverage ratio of 3.50:1.00 and a minimum interest coverage ratio of 2.00:1.00. In addition, certain of our indebtedness may not exceed 20% of our consolidated stockholders' equity. If we do not comply with these covenants, it could result in material adverse effects on our operating results and our financial condition.

We may not be able to attract and retain qualified people, which could impact the quality of our services and customer satisfaction. Our success, growth, and financial results depend in part on our continuing ability to attract, retain, and motivate highly qualified people at all levels, including management, technical, compliance, and sales personnel. Competition for these individuals can be intense, and we may not be able to retain our key people, or attract, assimilate, or retain other highly-qualified individuals in the future, which could harmour future success.

Failure to protect our intellectual property rights may harm our competitive position and litigation to protect our intellectual property rights or defend against third-party allegations of infringement may be costly. Despite our efforts to protect our intellectual property and proprietary information, we may be unable to do so effectively in all cases. Our intellectual property could be wrongfully acquired as a result of a cyberattack or other wrongful conduct by employees or third-parties. To the extent that our intellectual property is not protected effectively by trademarks, copyrights, patents, or other means, other parties with knowledge of our intellectual property, including former employees, may seek to exploit our intellectual property for their own and others' advantage. Competitors may also misappropriate our trademarks, copyrights or other intellectual property rights or duplicate our technology and products. Any significant impairment or misappropriation of our intellectual property or proprietary information could harm our business and our brand and may adversely affect our ability to compete. Third-parties may claim that we are infringing their intellectual property rights. To the extent we seek to enforce or must defend our intellectual property rights with litigation, we could incur significant expenses and/or be required to pay substantial damages. We may also be obligated to indemnify our customers or vendors in connection with claims or litigation. The litigation to enforce or defend our intellectual property rights could be costly and time-consuming.

In the event we receive negative publicity, our reputation and the value of our brand could be harmed, and clients may not use our products and services, which may have a material adverse effect on our business. Negative publicity relating to events or activities attributed to us, our corporate employees, or others associated with us, whether or not justified, may tarnish our reputation and reduce the value of our brand. If we are unable to maintain quality HCM and employee benefit-related solutions and PEO and insurance solutions, our reputation with our clients may be harmed and the value of our brand may diminish. In addition, if our brand is negatively impacted, it may have a material adverse effect on our business, including challenges retaining clients or attracting new clients and recruiting talent and retaining employees.

We are involved in litigation from time to time arising from the operation of our business and, as such, we could incur substantial judgments, fines, legal fees, or other costs. We are sometimes the subject of complaints or litigation from customers, employees, or other third-parties for various actions. From time to time, we are involved in litigation involving claims related to, among other things, breach of contract, tortious conduct, and employment and labor law matters. The damages sought against us in some of these litigation proceedings could be substantial. Although we maintain liability insurance for some litigation claims, if one or more of the claims were to greatly exceed our insurance coverage limits or if our insurance policies do not cover a claim, this could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

Quantitative and qualitative disclosures about market risk: Refer to the "Market Risk Factors" section contained in Item 7A of this Form 10-K for a discussion on this type of risk, which could have a material adverse effect on our business and results of operations.

Item 1B.	Unresolvea	Staf	f Comments
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None.

Item 2. Properties

We owned and leased the following properties as of May 31, 2020:

	Square feet
Owned facilities:	
Rochester, New York	1,012,000
Other U.S. locations	65,000
International locations	13,000
Total owned facilities	1,090,000
Leased facilities:	
Rochester, New York	97,000
Other U.S. locations	1,937,000
International locations	86,000
Total leased facilities	2,120,000

Our facilities in Rochester, New York house various distribution, processing, and technology functions, certain ancillary functions, a telemarketing unit, and other back-office functions. Facilities outside of Rochester, New York are in various locations throughout the U.S. and house our service centers, fulfillment centers and sales functions. Our international locations primarily house our European operations in Denmark and Germany and a location in India houses information technology, service, and sales support functions. We believe that adequate, suitable lease space will continue to be available to meet our needs.

Item 3. Legal Proceedings

We are subject to various claims and legal matters that arise in the normal course of our business. These include disputes or potential disputes related to breach of contract, tort, employment-related claims, tax claims, patent, statutory, and other matters.

Our management currently believes that resolution of outstanding legal matters will not have a material adverse effect on our financial position or results of operations. However, legal matters are subject to inherent uncertainties and there exists the possibility that the ultimate resolution of these matters could have a material adverse impact on the Company's financial position and the results of operations in the period in which any such effect is recorded.

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

Our common stock trades on the Nasdaq Global Select Market under the symbol "PAYX". Dividends have historically been paid on our common stock in August, November, February, and May. The level and continuation of future dividends are dependent on our future earnings and cash flows and are subject to the discretion of our Board of Directors (the "Board").

As of June 30, 2020, there were 10,075 holders of record of our common stock, which includes registered holders and participants in the Paychex, Inc. Dividend Reinvestment and Stock Purchase Plan. There were also 4,031 participants in the Paychex, Inc. Qualified Employee Stock Purchase Plan and 4,393 participants in the Paychex, Inc. Employee Stock Ownership Plan.

In May 2019, our Board approved a program to repurchase up to \$400.0 million of our common stock with authorization expiring in May 2022. All shares repurchased during fiscal 2020 were retired and were as follows:

In millions, except per share amount	Total number of shares purchased	Average price aid per share	Total dollars	va ma	pproximate dollar alue of shares that ay yet be purchased ander the program
First quarter	2.0	\$ 84.68	\$ 171.9	\$	228.1
Second quarter	_	\$ _	_	\$	228.1
Third quarter	_	\$ _	_	\$	228.1
March 1 to March 31, 2020	_	\$ _	_	\$	228.1
April 1 to April 30, 2020	_	\$ _	_	\$	228.1
May 1 to May 31, 2020		\$ _		\$	228.1
Fiscal year	2.0	\$ 84.68	\$ 171.9		

The following graph shows a five-year comparison of the total cumulative returns of investing \$100 on May 31, 2015, in Paychex common stock, the S&P 500 Index, and a Peer Group Index. All comparisons of stock price performance shown assume reinvestment of dividends. We are a participant in the S&P 500 Index, a market group of companies with a larger than average market capitalization. Our Peer Group is a group of companies with comparable revenue and net income, who are in a comparable industry, or who are direct competitors of Paychex (as detailed below).

Picture 1			

May 31,	2015	2016	2017	2018	2019	2020
Paychex	\$100.00	\$113.56	\$128.03	\$146.48	\$197.81	\$172.03
S&P 500	\$100.00	\$101.72	\$119.48	\$136.67	\$141.84	\$160.05
Peer Group - old	\$100.00	\$102.63	\$120.62	\$155.74	\$177.20	\$193.26
Peer Group - new	\$100.00	\$105.21	\$124.50	\$158.25	\$185.85	\$204.80

There can be no assurance that our stock performance will continue with the same or similar trends depicted in the graph above. We neither make nor endorse any predictions as to future stock performance.

The Governance & Compensation Committee of our Board annually reviews and approves the selection of Peer Group companies, adjusting the group from year to year based upon our business and changes in the Peer Group companies' business or the comparability of their metrics. The Peer Group may also be adjusted in the event of mergers, acquisitions, or other significant economic changes. The Peer Group was adjusted for fiscal 2020. DST Systems, Inc. and Robert Half International, Inc. were removed and replaced with IHS Markit Ltd. and Worldpay, Inc., as they are more closely aligned with the Paychex business. Both the old and new peer groups are presented for this year of transition.

Our new Peer Group for fiscal 2020 is comprised of the following companies:

A III D-t Ct Cti	HIC M-4.4 144
Alliance Data Systems Corporation	IHS Markit, Ltd.
Automatic Data Processing, Inc. (direct competitor)	Intuit Inc.
Broadridge Financial Solutions, Inc.	Moody's Corporation
The Dun & Bradstreet Corporation	TD AMERITRADE Holding Corporation
Equifax, Inc.	Total Systems Services, Inc.
Fiserv, Inc.	The Western Union Company
Global Payments Inc.	Worldpay, Inc.
H&R Block, Inc.	

Item 6. Selected Financial Data

In millions, except per share amounts	In	millions.	except	ner	share	amounts
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Year ended May 31,	2020(1)	2019 ⁽¹⁾	 2018(1),(2),(3)	2017 ⁽¹⁾	2016 ⁽⁴⁾
Service revenue	\$ 3,953.6	\$ 3,691.9	\$ 3,314.2	\$ 3,102.4	\$ 2,905.8
Interest on funds held for clients	86.9	80.6	63.5	50.6	46.1
Total revenue	\$ 4,040.5	\$ 3,772.5	\$ 3,377.7	\$ 3,153.0	\$ 2,951.9
Operating income	\$ 1,460.5	\$ 1,371.3	\$ 1,291.5	\$ 1,253.9	\$ 1,146.6
Net income	\$ 1,098.1	\$ 1,034.4	\$ 994.1	\$ 826.3	\$ 756.8
Basic earnings per share	\$ 3.06	\$ 2.88	\$ 2.77	\$ 2.30	\$ 2.10
Diluted earnings per share	\$ 3.04	\$ 2.86	\$ 2.75	\$ 2.28	\$ 2.09
Cash dividends per common share	\$ 2.48	\$ 2.30	\$ 2.06	\$ 1.84	\$ 1.68
Purchases of property and equipment	\$ 127.0	\$ 123.8	\$ 154.0	\$ 94.3	\$ 97.7
Cash, restricted cash, and total corporate					
investments	\$ 1,013.7	\$ 779.9	\$ 719.7	\$ 777.4	\$ 793.2
Total assets	\$ 8,550.7	\$ 8,676.0	\$ 7,915.4	\$ 7,280.8	\$ 6,440.8
Total debt	\$ 801.9	\$ 796.4	\$ _	\$ _	\$
Stockholders' equity	\$ 2,781.4	\$ 2,619.5	\$ 2,356.8	\$ 2,227.2	\$ 1,911.7
Return on stockholders' equity	41 %	42 %	44 %	39 %	40 %

- (1) In fiscal 2017, we early-adopted new accounting guidance related to employee stock-based compensation payments. As a result, a discrete tax benefit was recognized upon exercise or lapse of stock-based awards. This discrete tax benefit increased diluted earnings per share by approximately \$0.04 per diluted share, \$0.02 per diluted share, \$0.04 per diluted share, and \$0.05 per diluted share for fiscal 2020, fiscal 2019, fiscal 2018, and fiscal 2017, respectively.
- (2) In fiscal 2018, the enactment of the Tax Cuts and Jobs Act (the "Tax Act") significantly impacted our net income, basic and diluted earnings per share, and return on stockholders' equity. Refer to Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," and Item 8, "Financial Statements and Supplementary Data," of this Form 10-K for additional discussion of the impact of the Tax Act.
- (3) In fiscal 2018, an additional expense and corresponding tax benefit was recognized as a result of the termination of certain license agreements. Refer to Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Form 10-K for additional discussion of the impact of the termination of certain license agreements.
- (4) In the fiscal year ended May 31, 2016 ("fiscal 2016"), a net tax benefit was recorded for income derived in prior tax years from customer-facing software we produced. This net tax benefit increased diluted earnings per share by approximately \$0.06 per diluted share.

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

Management's Discussion and Analysis of Financial Condition and Results of Operations reviews the operating results of Paychex, Inc. and its wholly owned subsidiaries ("Paychex," the "Company," "we," "our," or "us") for each of the three fiscal years ended May 31, 2020 ("fiscal 2020" or the "fiscal year"), May 31, 2019 ("fiscal 2019"), and May 31, 2018 ("fiscal 2018"), and our financial condition as of May 31, 2020. This review should be read in conjunction with the accompanying consolidated financial statements and the related Notes to Consolidated Financial Statements contained in Item 8 of this Annual Report on Form 10-K.") and the "Risk Factors" discussed in Item 1A of this Form 10-K. Forward-looking statements in this review are qualified by the cautionary statement under the heading "Cautionary Note Regarding Forward-Looking Statements Pursuant to the United States Private Securities Litigation Reform Act of 1995" contained at the beginning of Part 1 of this Form 10-K.

Overview

We are a leading provider of integrated human capital management ("HCM") solutions for human resources ("HR"), payroll, benefits, and insurance services for small- to medium-sized businesses. Within our HCM solutions, we offer a comprehensive portfolio of services and products that allow our clients to meet their diverse HR and payroll needs.

We support our small-business clients, reducing the complexity and risk of running their own payroll, while ensuring greater accuracy with up-to-date tax rates and regulatory information. Clients may choose to have our service team handle everything for them, or process payroll themselves utilizing our proprietary, robust, software-as-a-service ("SaaS") Paychex Flex® platform and our SurePayroll® SaaS-based products. Our mid-market clients generally have more complex payroll and employee benefit needs. However, in the current environment of increasing regulations, we believe the needs for HR outsourcing solutions have been moving downmarket. Any of our clients using Paychex Flex can opt for the integrated suite of HCM solutions, which allows clients to choose the services and software that will meet the needs of their business.

Our portfolio of HCM and employee benefit-related services is disaggregated into two categories, Management Solutions and Professional Employer Organization ("PEO") and Insurance Solutions, as discussed in Part 1, Item 1 of this Form 10-K.

Our mission is to be the leading provider of HR, payroll, benefits, and insurance solutions by being an essential partner to small and medium-sized businesses across the U.S. and parts of Europe. We believe that success in this mission will lead to strong, long-term financial performance. Our strategy focuses on providing industry-leading, integrated technology; increasing client satisfaction; expanding our leadership in HR; growing our client base; and engaging in strategic acquisitions.

We continue to focus on driving growth in the number of clients, revenue per client, total revenue and profits, while providing industry-leading service and technology solutions to our clients and their employees. We maintain industry-leading margins by managing our personnel costs and expenses while continuing to invest in our business, particularly in leading-edge technology. We believe these investments are critical to our success. Looking to the future, we believe that investing in our products, people, and service capabilities will position us to capitalize on opportunities for long-term growth.

Effective December 20, 2018, the Company acquired Oasis Outsourcing Group Holdings, L.P. ("Oasis"). Upon closing, Oasis became a wholly owned subsidiary of the Company. Oasis is an industry leader in providing HR outsourcing services. The purchase price was \$992.2 million, net of \$262.3 million in cash acquired, including \$132.1 million of restricted cash. The acquisition was financed through a combination of cash on hand and the issuance of long-term private placement debt totaling \$800.0 million.

Fiscal 2020 Financial Highlights

Financial highlights for fiscal 2020, compared to fiscal 2019, are as follows:

- Total revenue increased 7% to \$4.0 billion. Oasis contributed approximately 4% to the growth in total revenue.
- Operating income increased 7% to \$1.5 billion.
- Net income increased 6% to \$1.1 billion. Adjusted net income⁽¹⁾ increased 5% to \$1.1 billion.
- Diluted earnings per share and adjusted diluted earnings per share⁽¹⁾ both increased 6% to \$3.04 per share and \$3.00 per share, respectively.
- Dividends of \$889.4 million were paid to stockholders, representing approximately 81% of net income.
- (1) Adjusted net income and adjusted diluted earnings per share are not U.S. generally accepted accounting principles ("GAAP") measures. Refer to the "Non-GAAP Financial Measures" section of this Item 7 for a discussion of these non-GAAP measures and a reconciliation to the most comparable U.S. GAAP measures of net income and diluted earnings per share.

For further analysis of our results of operations for fiscal years 2020, 2019, and 2018, and our financial position as of May 31, 2020, refer to the tables and analysis in the "Results of Operations" and "Liquidity and Capital Resources" sections of this Item 7.

In March 2020, the World Health Organization declared the outbreak of COVID-19 as a pandemic. The COVID-19 pandemic affected our business, our customers' businesses, and the markets we serve during the three months ended May 31, 2020 (the "fourth quarter"). See the "COVID-19 Response" section of this Item 7 for further discussion on the impact of COVID-19 on our results of operations along with our response to the pandemic.

Business Outlook

Our payroll and PEO client base, including all acquisitions, was greater than 680,000 and approximately 670,000 clients as of May 31, 2020 and May 31, 2019, respectively, and greater than 650,000 clients as of May 31, 2018. Client retention was at record levels of over 83% of the beginning client base for fiscal 2020. Client retention was over 82% for fiscal 2019 and approximately 81% of the beginning client base for fiscal 2018.

While our HR product offerings provide services to employers and employees beyond payroll, they effectively leverage payroll processing data. These services are included as part of the integrated HCM solution within Paychex Flex or provided through the Prism HR PEO platform. The following table illustrates the growth in selected HR product offerings:

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As of May 31,	2020	Change ⁽¹⁾	2019	Change ⁽¹⁾	2018
Paychex HR Solutions and PEO client worksite employees ⁽²⁾	1,428,000	(4)%	1,491,000	29 %	1,157,000
Paychex HR Solutions and PEO clients	55,000	7 %	52,000	26 %	41,000
Health and benefits services applicants	182,000	(4)%	189,000	7 %	177,000
Retirement services plans	91,000	4 %	87,000	6 %	82,000
Asset value of retirement services participants' funds	\$ 32.3	4 %	\$ 31.0	1 %	\$ 30.6

- (1) Percentage changes are calculated based on unrounded numbers.
- (2) Oasis is included in the total number of worksite employees and clients for both fiscal 2020 and fiscal 2019.

Concentrated effort remains on the continued enhancements of Paychex Flex, our robust, cloud-based HCM software solutions platform, which allows direct client access to HR, payroll, and benefits information in a streamlined and integrated approach to workplace management. In fiscal 2020, we continued to focus on enhancing the value to clients, including new offerings and enhancements to Paychex Flex as follows:

- Paychex Integrations enabling users to connect Paychex Flex with some of the world's leading HR, accounting, point-of-sale, and productivity
 applications on the market;
- Smartwatch Solution, which enables users to track time worked via their smartwatch;
- Pay-on-Demand, which provides participating customer employees the option to request access to a portion of earned pay before the scheduled pay date:
- · Real-Time Payments, which provides employers an efficient way to instantly pay their employees for time worked;
- Help Center, which provides users access to training resources and how-to tutorials in written, video, and tour-like deliverables;
- Enhancements to Flex Assistant, that provides a user with an in-app learning journey that aligns with their preferences as a verbal, visual, or physical learner and offers written how-to documents, tutorial-style video vignettes, or a guided interactive tour from in-app step-by-step messaging;
- Document Management was enhanced to add electronic signature capabilities and the ability for customers to run on-demand reports that show the
 entire process, from initial log-in through signature event;
- HR Conversations, a new tool that enables managers, employees, and HR staff to collaborate and capture day-to-day interactions; and
- · Other enhancements including, grid entry view capabilities and the ability for employees and administrative users to create a custom dashboard.

We continue to strengthen our position in the industry by serving as a source of education and information to clients, businesses of all sizes, and other interested parties. We provide free webinars, white papers, and other information on our website to aid existing and prospective clients with the impact of regulatory changes. The Paychex Insurance Agency, Inc. website, www.paychex.com/group-health-insurance, helps small-business owners navigate the area of insurance coverage. Both this website and www.paychex.com/worxhave sections dedicated to the topic of health care reform.

COVID-19 Response

In March 2020, the World Health Organization declared the outbreak of COVID-19 as a pandemic. The COVID-19 pandemic began affecting our operations and employees, our customers' businesses, and the markets we serve in the three months ended May 31, 2020 (the "fourth quarter"). The health and safety of our employees remains our top priority. We were expedient with the implementation of our business continuity plan, which included moving 95% of our workforce to work remotely and restricting unnecessary travel. Results of operations for the fourth quarter were adversely impacted by the COVID-19 pandemic as businesses suspended operations. Management Solutions revenue was impacted by a decline in check volumes, partially offset by increased penetration of retirement services and time and attendance services. The decline in check volumes was due to a reduction in the number of clients processing payrolls as well as the number of employees paid due to state and regional shutdowns. PEO and Insurance Solutions revenue was impacted by a decline in the number of worksite employees serviced by our existing clients. Insurance Solutions revenue was impacted by a decrease in the number of health and benefit applicants and a decline in workers' compensation premiums. Since the end of April, we have seen sequential improvement in our key business metrics across our lines of business.

As our clients continue to manage through the COVID-19 pandemic, our priority remains helping them keep their businesses open and return to more normal operations. Our blend of technology and service provides valuable tools and resources to assist our clients and their employees during this critical time. The technology investments we made to our Paychex Flex payroll and human resources suite of products positioned us to service our clients and support them in managing a remote workforce.

We created a COVID-19 Help Center on our website to assist our clients and provide them with the support and resources they need, including:

- Webinars and white papers with information on the Coronavirus Aid, Relief, and Economic Security Act, including the historic PPP, and Families First Coronavirus Response Act;
- Guidance on the Small Business Administration ("SBA") loan and debt relief process,
- · Interactive PPP loan estimation tool for businesses who are considering or have received funding through the SBA program; and
- State-by-state resources to help our clients understand specific directives that may impact their business.

The COVID-19 Help Center also provides resources to our key business partners, including accountants, financial institutions, financial advisors, and national associations. The COVID-19 Help Center has been translated into Spanish to serve our Spanish-speaking clients.

Our strong balance sheet and operational flexibility allowed us to successfully manage through the initial impact of COVID-19 while protecting our cash flow and liquidity. We will continue to evaluate the nature and extent of future changes to market and economic conditions related to COVID-19 and will assess the potential impact to our business and financial position. We expect to take a cautious approach to modifying our office and travel restrictions and will wait until we have a clearer vision on how the pandemic unfolds and utilizing guidance provided by the federal, state, and local governments.

For further information on the risks posed to our business from the COVID-19 pandemic, refer to Item 1A of this Form 10-K.

Results of Operations

Summary of Results of Operations for Fiscal Years:

In millions, except per share amounts	 2020	020 Change ⁽¹⁾ 2019		2019	Change ⁽¹⁾		2018
Revenue:							
Management Solutions	\$ 2,963.0	3 %	\$	2,877.7	4 %	\$	2,758.4
PEO and Insurance Solutions	990.6	22 %		814.2	46 %		555.8
Total service revenue	3,953.6	7 %		3,691.9	11 %		3,314.2
Interest on funds held for clients	 86.9	8 %		80.6	27 %		63.5
Total revenue	4,040.5	7 %		3,772.5	12 %		3,377.7
Total expenses	 2,580.0	7 %		2,401.2	15 %		2,086.2
Operating income	1,460.5	7 %		1,371.3	6 %		1,291.5
Other (expense)/income, net	(23.4)	n/m		(3.3)	n/m		8.6
Income before income taxes	1,437.1	5 %		1,368.0	5 %		1,300.1
Income taxes	 339.0	2 %		333.6	9 %		306.0
Effective income tax rate	23.6 %			24.4 %			23.5 %
Net income	\$ 1,098.1	6 %	\$	1,034.4	4 %	\$	994.1
Diluted earnings per share	\$ 3.04	6 %	\$	2.86	4 %	\$	2.75

(1) Percentage changes are calculated based on unrounded numbers.

n/m-not meaningful

We invest in highly liquid, investment-grade fixed income securities and do not utilize derivative instruments to manage interest rate risk. As of May 31, 2020, we had no exposure to high-risk or non-liquid investments. Details regarding our combined funds held for clients and corporate cash equivalents and investment portfolios are as follows:

§ in millions		2020		2019	 2018
Average investment balances:					
Funds held for clients	\$	3,931.3	\$	3,969.7	\$ 4,040.8
Corporate cash equivalents and investments		870.7		848.4	915.1
Total	\$	4,802.0	\$	4,818.1	\$ 4,955.9
Average interest rates earned (exclusive of net realized gains):					
Funds held for clients		1.9 %		2.0 %	1.6 %
Corporate cash equivalents and investments		1.4 %		1.6 %	1.3 %
Combined funds held for clients and corporate cash equivalents and investments	1.8 %			1.9 %	1.5 %
Total net realized gains	\$	11.3	\$	_	\$ 0.1
\$ in millions					
As of May 31,		2020		2019	 2018
Net unrealized gains/(losses) on available-for-sale securities ⁽¹⁾	\$	100.0	\$	19.7	\$ (38.3)
Federal Funds rate ⁽²⁾		0.25 %		2.50 %	1.75 %
Total fair value of available-for-sale securities	\$	2,757.2	\$	3,620.8	\$ 3,104.8
Weighted-average duration of available-for-sale securities in years (3)		2.9		2.9	3.1
Weighted-average yield-to-maturity of available-for-sale securities (3)		2.1 %		2.1 %	1.9 %

- (1) The net unrealized gain on our investment portfolios was approximately \$112.4 million as of July 15, 2020.
- (2) The Federal Funds rate was in the range of 0.0% to 0.25% as of May 31, 2020, in the range of 2.25% to 2.50% as of May 31, 2019, and in the range of 1.50% to 1.75% as of May 31, 2018.
- (3) These items exclude the impact of variable rate demand notes ("VRDNs"), as they are tied to short-term interest rates.

Management Solutions revenue: Management Solutions revenue was \$3.0 billion for fiscal 2020 and \$2.9 billion for fiscal 2019, reflecting growth of 3% and 4%, respectively, compared to the prior fiscal year periods. Both fiscal 2020 and fiscal 2019 benefited from increases in our client base and growth in revenue per client, which improved as a result of higher price realization and increased penetration of our suite of solutions, particularly HR outsourcing, retirement services, and time and attendance. Retirement services revenue growth for both fiscal 2020 and fiscal 2019 benefited from an increase in the number of retirement services plans, along with an increase in revenue earned on the asset value of participants' 401(k) funds.

PEO and Insurance Solutions revenue: PEO and Insurance Solutions revenue was \$990.6 million for fiscal 2020 and \$814.2 million for fiscal 2019, reflecting growth of 22% and 46%, respectively, compared to the prior fiscal year periods. In addition to the acquisition of Oasis, PEO and Insurance Solutions revenue growth in fiscal 2020 and fiscal 2019 was driven by growth in clients across our PEO business. In addition, for fiscal 2019, PEO and Insurance Solutions revenue growth was driven by growth in client worksite employees across our PEO business.

Insurance Solutions revenue for both fiscal 2020 and fiscal 2019 benefited from an increase in the number of health and benefit clients, offset by declining rates in the workers' compensation market. In addition, for fiscal 2019, Insurance Solutions revenue was impacted by an increase in the number of health and benefit applicants.

Interest on funds held for clients: Interest on funds held for clients increased 8% for fiscal 2020 and 27% for fiscal 2019 to \$86.9 million and \$80.6 million, respectively. For fiscal 2020 the increase was due to higher realized gains, offset by lower average investment balances and average interest rates. The realized gains primarily resulted from the strategic repositioning of our client fund portfolio to enhance liquidity in response to the uncertainty caused by COVID-19. For fiscal 2019, the increase was primarily due to higher average interest rates earned.

Average investment balances for funds held for clients decreased approximately 1% and 2% for fiscal 2020 and fiscal 2019, respectively. For fiscal 2020, funds held for clients average investment balances were impacted by lower client fund collections due to COVID-19 and changes in client base mix, offset by wage inflation and timing of collections and remittances. For fiscal 2019, the decrease in average investment balances for funds held for clients was primarily driven by the impact of lower client withholdings as a result of the Tax Cuts and Jobs Act of 2017 (the "Tax Act"), and changes in client base mix, partially offset by the impact of wage inflation

Refer to the "Market Risk Factors" section contained in Item 7A of this Form 10-K for more information on changing interest rates.

Total expenses: Total expenses increased 7% and 15% for fiscal 2020 and fiscal 2019, respectively, compared to the prior fiscal year periods. The following table summarizes total combined cost of service revenue and selling, general and administrative expenses for fiscal years:

In millions	2020		Change ⁽¹⁾	2019	Change ⁽¹⁾	2018
Compensation-related expenses	\$	1,480.8	6 %	\$ 1,396.8	13 %	\$ 1,235.2
Depreciation and amortization		209.7	16 %	181.5	32 %	138.0
PEO insurance costs		334.7	17 %	286.7	40 %	205.2
Other expenses		554.8	3 %	536.2	6 %	507.8
Total expenses	\$	2,580.0	7 %	\$ 2,401.2	15 %	\$ 2,086.2

(1) Percentage changes are calculated based on unrounded numbers.

Compensation-related expenses increased 6% for fiscal 2020 and 13% for fiscal 2019. For fiscal 2020, the increases in compensation-related expenses were driven by the acquisition of Oasis, increased headcount, and higher wages, offset by a decrease in performance-based pay. For fiscal 2019, the increases in compensation-related expenses were driven by the acquisition of Oasis, increased headcount, higher wages, and an increase in performance-based pay. As of May 31, 2020, we had approximately 15,800 employees compared with 15,600 employees as of May 31, 2019.

Depreciation expense is primarily related to buildings, furniture and fixtures, data processing equipment, and both purchased and internally developed software. Amortization of intangible assets is primarily related to client list acquisitions. The growth in depreciation and amortization for both fiscal 2020 and fiscal 2019, were primarily driven by the amortization of acquired Oasis intangible assets.

PEO insurance costs include workers' compensation, minimum premium medical insurance plan arrangements, and self-insured dental and vision plans where we retain risk. The acquisition of Oasis, along with the growth in our PEO business, contributed to the increase in PEO insurance costs for both fiscal 2020 and fiscal 2019. In addition, the acquisition of HR Outsourcing Holdings, Inc. ("HROi") contributed to the increase in PEO insurance costs for fiscal 2019.

Other expenses include items such as non-capital equipment, delivery, forms and supplies, communications, travel and entertainment, professional services, and other costs incurred to support our business. Other expense growth for fiscal 2020 was impacted by the acquisition of Oasis and by continued investment in product development and supporting technology, tempered by the impact of COVID-19 in the fourth quarter which drove decreases in other selling, general and administrative expenses, including travel and entertainment. The increase in other expenses for fiscal 2019 was impacted by the acquisitions of Oasis and HROi and continued investment in product development and supporting technology. Other expenses for fiscal 2018 included a one-time expense of \$32.6 million related to the termination of certain license agreements.

Operating income: Operating income increased 7% to \$1.5 billion for fiscal 2020 and 6% to \$1.4 billion for fiscal 2019. Operating margin (operating income, as a percentage of total revenue), was 36.1%, 36.3%, and 38.2% for fiscal years 2020, 2019, and 2018, respectively. Adjusted operating income⁽¹⁾ increased 7% to \$1.5 billion for fiscal 2020 and 4% to \$1.4 billion for fiscal 2019. Earnings before interest, taxes, depreciation, and amortization ("EBITDA")⁽¹⁾ increased 8% to \$1.7 billion for fiscal 2020 and 9% to \$1.6 billion for fiscal 2019. EBITDA margin⁽¹⁾ was 41.4%, 41.2%, and 42.3% for fiscal years 2020, 2019, and 2018, respectively.

(1) Adjusted operating income, EBITDA and EBITDA margin are not U.S. GAAP measures. Refer to the "Non-GAAP Financial Measures" section within the "Results of Operations" section of this Item 7 for a discussion of these non-GAAP measures and a reconciliation to the most comparable U.S. GAAP measures of operating income and net income.

Other (expense)/income, net: Other (expense)/income, net, primarily represents interest expense incurred on our debt instruments, netted against earnings from our corporate cash and cash equivalents and investments in available-for-sale securities. We recognized \$23.4 million and \$3.3 million of other expense, net in fiscal 2020 and fiscal 2019, respectively, which was driven by interest expense related to our long-term borrowings. Other expense, net included \$33.3 million and \$13.7 million of interest expense related to our long-term borrowings in fiscal 2020 and fiscal 2019, respectively.

Income taxes: Our effective income tax rate was 23.6% for fiscal 2020, 24.4% for fiscal 2019, and 23.5% for fiscal 2018. The effective income tax rates in all periods were impacted by recognition of net discrete tax benefits related to employee stock-based compensation payments. In fiscal 2019, the effective income tax rate included discrete tax expense for changes in tax reserves and the revaluation of deferred tax balances for legislative updates. In fiscal 2018, as a result of the Tax Act, we recorded a non-recurring net tax benefit for the revaluation of our net deferred tax liabilities. This amount impacted diluted earnings per share by approximately \$0.23 per diluted share for fiscal 2018. Additional discrete tax items recognized during each respective period are insignificant. Refer to Note L of the Notes to Consolidated Financial Statements contained in Item 8 of this Form 10-K for additional disclosures on income taxes.

Net income and diluted earnings per share: Net income increased 6% to \$1.1 billion for fiscal 2020 and 4% to \$1.0 billion for fiscal 2019. Diluted earnings per share increased 6% to \$3.04 per diluted share for fiscal 2020 and 4% to \$2.86 per diluted share for fiscal 2019. Adjusted net income increased 5% to \$1.1 billion for fiscal 2020 and increased 11% to \$1.0 billion for fiscal 2019. Adjusted diluted earnings per share was \$3.00 per diluted share for fiscal 2020 and \$2.84 per diluted share for fiscal 2019, reflecting increases of 6% and 11%, respectively. Refer to the "Non-GAAP Financial Measures" section that follows for a discussion of these non-GAAP measures.

Non-GAAP Financial Measures: Adjusted operating income, adjusted net income, adjusted diluted earnings per share and EBITDA are summarized as follows:

\$ in millions

		2020	Change		2019	Change		2018
Operating income	\$	1,460.5	7 %	\$	1,371.3	6 %	\$	1,291.5
Non-GAAP adjustments:								
Termination of license agreements ⁽¹⁾		<u> </u>			<u> </u>			32.6
Total non-GAAP adjustments		_						32.6
Adjusted operating income	\$	1,460.5	7 %	\$	1,371.3	4 %	\$	1,324.1
Net income	\$	1.098.1	6 %	\$	1,034.4	4 %	\$	994.1
Non-GAAP adjustments:	•	,		•	,			
Excess tax benefit related to employee stock-based								
compensation payments ⁽²⁾		(14.9)			(8.3)			(12.9)
Revaluation of net deferred tax liabilities ⁽³⁾		` _´			1.7			(83.5)
Termination of license agreements ⁽¹⁾		_			_			24.7
Total non-GAAP adjustments		(14.9)			(6.6)			(71.7)
Adjusted net income	\$	1,083.2	5 %	\$	1,027.8	11 %	\$	922.4
Diluted earnings per share	\$	3.04	6 %	\$	2.86	4 %	\$	2.75
Non-GAAP adjustments:	Ψ	5.04	0 70	Ψ	2.00	7 70	Ψ	2.73
Excess tax benefit related to employee stock-based								
compensation payments ⁽²⁾		(0.04)			(0.02)			(0.04)
Revaluation of net deferred tax liabilities (3)		_			_			(0.23)
Termination of license agreements ⁽¹⁾		_			_			0.07
Total non-GAAP adjustments		(0.04)			(0.02)			(0.20)
Adjusted diluted earnings per share	\$	3.00	6 %	\$	2.84	11 %	\$	2.55
Net income	S	1,098.1	6 %	\$	1,034.4	4 %	\$	994.1
Non-GAAP adjustments:	Ψ	1,000.1	0 70	Ψ	1,054.4	7 70	Ψ))-I.1
Interest expense/(income), net		26.5			4.3			(8.0)
Income taxes		339.0			333.6			306.0
Depreciation and amortization expense		209.7			181.5			138.0
Total non-GAAP adjustments		575.2			519.4			436.0
Earnings before interest, taxes, depreciation and amortization ("EBITDA")	<u>\$</u>	1,673.3	8 %	\$	1,553.8	9 %	\$	1,430.1
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- (1) Additional expense and corresponding tax benefit recognized as a result of the termination of certain license agreements. This event is not expected to recur.
- (2) Net tax windfall benefits related to employee stock-based compensation payments recognized in income taxes. This item is subject to volatility and will vary based on employee decisions on exercising employee stock options and fluctuations in our stock price, neither of which is within the control of management.
- (3) For fiscal 2019, this line item represents a one-time tax charge that was recognized during the three months ended August 31, 2018 as a result of updated guidance on Internal Revenue Code Section 162(m). This event is not expected to recur. For fiscal 2018, this line item represents non-recurring tax benefits recognized as a result of the Tax Act related to the revaluation of net deferred tax liabilities.

In addition to reporting operating income, net income, and diluted earnings per share, which are U.S. GAAP measures, we present adjusted operating income, adjusted net income, adjusted diluted earnings per share, EBITDA, and EBITDA margin (EBITDA as a percentage of total revenue), which are non-GAAP measures. We believe these additional measures are indicators of our core business operations' performance period over period. Adjusted operating income, adjusted net income, adjusted diluted earnings per share, EBITDA and EBITDA margin are not calculated through the application of U.S. GAAP and are not required forms of disclosure by the SEC. As such, they should not be considered as a substitute for the U.S. GAAP measures of operating income, and diluted earnings per share, and, therefore, should not be used in isolation, but in conjunction with the U.S. GAAP measures. The use of any non-GAAP measure may produce results that vary from the U.S. GAAP measure and may not be comparable to a similarly defined non-GAAP measure used by other companies.

Liquidity and Capital Resources

Our financial position as of May 31, 2020 remained strong with cash, restricted cash, and total corporate investments of \$1.0 billion. Total short-term and longterm borrowings, net of debt issuance costs were \$801.9 million as of May 31, 2020. Our primary source of cash is generated by our ongoing operations. Cash flows from operations were \$1.4 billion for fiscal 2020. Our positive cash flows for fiscal 2020 allowed us to support our business and pay substantial dividends. We currently anticipate that cash, restricted cash, and total corporate investments as of May 31, 2020, along with projected operating cash flows and available short-term financing, will support our business operations, capital purchases, share repurchases, and dividend payments for the foreseeable future.

We believe that our investments in an unrealized loss position as of May 31, 2020 were not other-than-temporarily impaired, nor has any event occurred subsequent to that date to indicate any other-than-temporary impairment.

Financing

Short-term financing: We maintain committed and unsecured credit facilities and irrevocable letters of credit as part of our normal and recurring business operations. The purpose of these credit facilities is to meet short-term funding requirements, finance working capital needs, and for general corporate purposes. We typically borrow on an overnight or short-term basis on our credit facilities. Refer to Note N of the Notes to Consolidated Financial Statements contained in Item 8 of this Form 10-K for further discussion on our credit facilities.

Details of our credit facilities are as follows:

		Maximum			May 31, 2020			
\$ in millions	Expiration Date		Amount Available	Outstanding Amount			Available Amount	
Credit facilities:								
JP Morgan Chase Bank, N.A. ("JPM")	July 31, 2024	\$	1,000.0	\$	-	\$	1,000.0	
JPM	August 17, 2022	\$	500.0		-		500.0	
PNC Bank, National Association ("PNC")	February 6, 2023	\$	250.0		5.1		244.9	
Total Lines of Credit Outstanding and Available	• /			\$	5.1	\$	1,744.9	

Year ended May 31, 2020

Details of borrowings under each credit facility during the fiscal years ended 2020, 2019, and 2018 were as follows:

				I Cui Cii	ucu may 51, 20			
				Cr	edit Facility			
		9	81 Billion	\$500 Million JPM		\$2	250 Million	
\$ in millions			JPM				PNC	
Number of days borrowed			17		29		362	
Maximum amount borrowed		\$	694.0	\$	450.0	\$	246.0	
Weighted-average amount borrowed		\$	343.2	\$	307.8	\$	54.2	
Weighted-average interest rate			5.06 %		3.30 %		2.50 %	
				Year en	ded May 31, 20	19		
				Cr	edit Facility			
		9	81 Billion	\$5	500 Million	\$1	150 Million	
\$ in millions			JPM		JPM		PNC	
Number of days borrowed			95		92		359	
Maximum amount borrowed		\$	483.0	\$	400.0	\$	58.9	
Weighted-average amount borrowed		\$	387.7	\$	375.6	\$	56.1	
Weighted-average interest rate			3.64 %		3.55 %		2.81 %	
	26							

		Year ended May 31, 2018							
		Credit Facility							
	\$1 Billion \$500 Million			\$1	\$150 Million				
§ in millions		JPM JPM				PNC			
Number of days borrowed		22		42		358			
Maximum amount borrowed	\$	700.0	\$	400.0	\$	59.9			
Weighted-average amount borrowed	\$	319.1	\$	144.8	\$	57.2			
Weighted-average interest rate		4.27 %		2.80 %		1.94 %			

Short-term borrowings are primarily used for the settlement of client fund obligations, rather than liquidating previously-collected client funds that have been invested in available-for-sale securities allocated to our long-term portfolio.

Subsequent to May 31, 2020, we borrowed twice on an overnight basis, \$89.5 million on a weighted-average basis under our PNC credit facility.

We expect to have access to the amounts available under our current credit facilities as needed to meet our ongoing financial needs. However, if we experience reductions in our operating cash flows due to any of the risk factors outlined in, but not limited to, Item 1A in this Form 10-K and other SEC filings, including any impacts related to COVID-19, we may need to adjust our capital, operating and other discretionary spending to realign our working capital requirements with the capital resources available to us. Additionally, if we determined the need for additional short-term liquidity, there is no assurance that such financing, if pursued and obtained, would be adequate or on terms acceptable to us.

Letters of credit: As of May 31, 2020, we had irrevocable standby letters of credit available totaling \$147.9 million, required to secure commitments for certain insurance policies. The letters of credit expire at various dates between June 2020 and January 2022. No amounts were outstanding on these letters of credit during fiscal 2020 or as of May 31, 2020. Subsequent to May 31, 2020, letters of credit expiring in June and July 2020 were renewed through June and July 2021, respectively.

Long-term financing: On March 13, 2019, we borrowed \$800.0 million through the issuance of long-term private placement debt. Certain information related to the Senior Notes are as follows:

Certain information related to the Senior Notes are as follows:

	Senior Notes	Senior Notes
	Series A	Series B
Stated interest rate	4.07%	4.25%
Effective interest rate	4.16%	4.32%
Interest rate type	Fixed	Fixed
Interest payment dates	Semi-annual, in arrears	Semi-annual, in arrears
Principal payment dates	March 13, 2026	March 13, 2029
Note type	Unsecured	Unsecured

Refer to Note O of the Notes to Consolidated Financial Statements contained in Item 8 of this Form 10-K for further discussion on our long-term financing.

Other commitments: The following table summarizes our significant contractual obligations as of May 31, 2020:

	Payments due by period											
In millions		Total		Less than 1 year		1-3 years		4-5 years		More than 5 years		
Operating leases ⁽¹⁾	\$	140.9	\$	39.4	\$	55.3	\$	32.4	\$	13.8		
Purchase obligations ⁽²⁾		132.4		74.3		51.0		7.1		_		
Workers' compensation estimated obligations		174.2		72.2		48.4		16.7		36.9		
Debt service obligations ⁽³⁾		1,050.8		33.3		66.6		66.6		884.3		
Total	\$	1,498.3	\$	219.2	\$	221.3	\$	122.8	\$	935.0		

Operating leases are primarily for office space and equipment used in our service, fulfillment, and sales operations.

2) Purchase obligations include our estimate of the minimum outstanding commitments under purchase orders to buy goods and services and legally binding contractual arrangements with future payment obligations. Included in the total purchase obligations is \$5.0 million of commitments to purchase capital assets. Amounts actually paid under certain of these arrangements may be different due to variable components of these agreements.

(3) Includes principal and interest payments on our Senior Notes. Refer to Note O of the Notes to Consolidated Financial Statements contained in Item 8 of this Form 10-K for more information.

The liability for uncertain tax positions, including interest and net of federal benefits, was approximately \$26.5 million as of May 31, 2020. Refer to Note L of the Notes to Consolidated Financial Statements contained in Item 8 of this Form 10-K for more information on income taxes. We are not able to reasonably estimate the timing of future cash flows related to this liability and have excluded it from the table above.

We are involved in two limited partnership agreements to contribute a maximum amount of \$20.0 million to venture capital funds in the financial technology sector. As of May 31, 2020, we have contributed approximately \$8.4 million of the total funding commitment. The timing of future contributions to be made to these venture capital funds cannot be specifically or reasonably determined and thus have been excluded from the table above.

In the normal course of business, we make representations and warranties that guarantee the performance of services under service arrangements with clients. Historically, there have been no material losses related to such guarantees. We have also entered into indemnification agreements with our officers and directors, which require us to defend and, if necessary, indemnify these individuals for certain pending or future legal claims as they relate to their services provided to us.

We currently self-insure the deductible portion of various insured exposures under certain corporate and PEO employee benefit plans. Our estimated loss exposure under these insurance arrangements is recorded in other current liabilities on our Consolidated Balance Sheets. Historically, the amounts accrued have not been material and are not material as of May 31, 2020. We also maintain corporate insurance coverage in addition to our purchased primary insurance policies for gap coverage for employment practices liability, errors and omissions, warranty liability, theft and embezzlement, cyber threats, and acts of terrorism; and capacity for deductibles and self-insured retentions through our captive insurance company.

Off-Balance Sheet Arrangements

As part of our ongoing business, we do not participate in transactions with unconsolidated entities which would have been established for facilitating off-balance sheet arrangements or other limited purposes. We do maintain investments as a limited partner in both low-income housing projects and venture capital funds focused on the financial technology sector. These are not considered part of our ongoing operations. These investments are accounted for under the equity method of accounting and represented less than one percent of our total assets as of May 31, 2020.

Operating, Investing, and Financing Cash Flow Activities

	 Year ended May 31,								
In millions	2020		2019		2018				
Net cash provided by operating activities	\$ 1,440.9	\$	1,271.5	\$	1,276.4				
Net cash provided by/(used in) investing activities	771.9		(1,628.3)		998.5				
Net cash used in financing activities	 (1,488.2)		(1,008.5)		(423.8)				
Net change in cash, restricted cash, and equivalents	\$ 724.6	\$	(1,365.3)	\$	1,851.1				
	 		,						
Cash dividends per common share	\$ 2.48	\$	2.30	\$	2.06				

Operating Cash Flow Activities

The changes in our operating cash flows for both fiscal 2020 and fiscal 2019 compared to the prior fiscal year periods were due to higher net income, higher non-cash adjustments, and fluctuations in our operating assets and liabilities.

The increase in non-cash adjustments for both fiscal 2020 and fiscal 2019 were primarily driven by larger adjustments for the amortization of intangible assets.

In fiscal 2020, the smaller outflow related to changes in operating assets and liabilities compared to the prior fiscal year period was due to changes in accounts receivable and PEO unbilled receivables, which were adversely impacted by COVID-19. We experienced an increase in the number of non-processing clients and a reduction in the number of employees and worksite employees paid as businesses suspended operations due to the pandemic. In addition, accounts payable and other current liabilities were impacted by a decrease in accrued compensation related to worksite employees and timing of accruals and cash settlement. In fiscal 2019, the larger outflow was due to higher accounts receivable balances related to growth in our payroll funding business for temporary staffing agency clients.

Investing Cash Flow Activities

The changes in our investing cash flows for both fiscal 2020 and fiscal 2019 compared to prior year periods were primarily attributable to fluctuations in the net purchases and sales/maturities of available-for-sale securities, changes in net cash outflows related to acquisitions of businesses, and purchases of other assets.

Fluctuations in the net change in purchases and sales/maturities of available-for-sale securities are largely due to timing within the client funds portfolio. The amount will vary based upon the timing of collection from clients, and the related remittance to applicable tax or regulatory agencies for payroll tax administration services and to employees of clients utilizing employee payment services. Specific timing impacting cash flows for fiscal years 2020, 2019, and 2018 are discussed further in the financing cash flows discussion of net changes in client fund obligations. In addition to timing fluctuations, the net change in purchases and sales/maturities of available-for-sale securities for both fiscal 2020 and fiscal 2019 compared to prior year periods were due to changes in investment mix.

The changes in net cash outflows related to acquisition of businesses reflect our acquisitions of Oasis in December 2018, Lessor Group ("Lessor") in February 2018, and HROi in August 2017. We paid cash for the Oasis and Lessor acquisitions, while we paid a combination of cash and common stock for the HROi acquisition.

The net cash outflow for purchases of other assets during fiscal 2018 was impacted by the resolution of a contractual dispute with certain licensees and the acquisition of rights to certain client lists for approximately \$30.0 million.

Discussion of interest rates and related risks is included in the "Market Risk Factors" section contained in Item 7A of this Form 10-K.

Financing Cash Flow Activities

The changes in our financing cash flows for both fiscal 2020 and fiscal 2019 compared to prior fiscal year periods were impacted by net proceeds from long-term borrowings, the net change in client fund obligations, repurchases of common shares, and dividends paid.

In fiscal 2019, we borrowed \$800.0 million under our JPM credit facilities to fund the acquisition of Oasis which was replaced by the issuance of long-term private placement debt in March 2019. Refer to Note O of the Notes to Consolidated Financial Statements contained in Item 8 of this Form 10-K for additional disclosures on our long-term financing.

The client fund obligations liability will vary based on the timing of collecting client funds and the related required remittance of funds to applicable tax or regulatory agencies for payroll tax administration services and to employees of clients utilizing employee payment services. Collections from clients are typically remitted from one to 30 days after receipt, with some items extending to 90 days. May 31, 2020 fell on a Sunday and May 31, 2019 fell on a Friday, which is a significant disbursement day for direct pay funds, and as such only created minor timing differences in this liability when comparing fiscal 2020 with fiscal 2019. However, May 31, 2020 balances were impacted by lower client fund collections due to COVID-19. In contrast, May 31, 2018 fell on a Thursday, which is a significant collection day for direct pay funds. These funds were then paid out on Friday June 1, 2018.

The increase in dividend payments for fiscal 2020 and fiscal 2019 compared to the corresponding prior year periods is primarily due to an 11% and 12% increase in our dividend rate beginning in May 2019 and April 2018, respectively. The payment of future dividends is dependent on our future earnings and cash flow and is subject to the discretion of our Board.

During fiscal 2020, fiscal 2019, and fiscal 2018, we repurchased 2.0 million shares, 0.7 million shares, and 2.5 million shares, respectively. As of May 31, 2020, \$228.1 million remains available under the common stock repurchase program. Refer to Note C of the Notes to Consolidated Financial Statements contained in Item 8 of this Form 10-K for further discussion on our common stock repurchase program.

Other

Recently issued accounting pronouncements: Refer to Note A of the Notes to Consolidated Financial Statements contained in Item 8 of this Form 10-K for a discussion of recently issued accounting pronouncements.

Critical Accounting Policies

Note A of the Notes to Consolidated Financial Statements contained in Item 8 of this Form 10-K discusses the significant accounting policies of Paychex Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates, judgments, and assumptions that affect reported amounts of assets, liabilities, revenue, and expenses. On an ongoing basis, we evaluate the accounting policies and estimates used to prepare the consolidated financial statements. We base our estimates on historical experience, future expectations, and assumptions believed to be reasonable under current facts and circumstances. Actual amounts and results could differ from these estimates. Certain accounting policies that are deemed critical to our results of operations or financial position are discussed below.

Revenue recognition: Service revenue is recognized in the period services are rendered and earned under service arrangements with clients where service fees are fixed or determinable and collectability is reasonably assured. Our service revenue is largely attributable to processing services where the fee is based on a fixed amount per processing period or a fixed amount per processing period or a fixed amount per processing period or a fixed amount per processing period plus a fee per employee or transaction processed. Fees earned for funding of temporary staffing clients' payrolls via purchase of accounts receivable are based on a percentage of funding amounts as specified in the client contract. The revenue earned from delivery service for the distribution of certain client payroll checks and reports is included in service revenue, and the costs for delivery are included in cost of service revenue on the Consolidated Statements of Income and Comprehensive Income.

We receive advance payments for set-up fees on some of our service offerings from our clients. Advance payments received for certain of our service offerings are considered a material right. We defer the revenue associated with these advance payments, recognizing the revenue and related expenses over the expected period to which the right exists.

PEO Solutions revenue is reported net of certain direct pass-through costs billed and incurred, which include payroll wages, payroll taxes, including federal and state unemployment insurance, and certain health insurance benefit premiums, primarily costs related to our guaranteed cost benefit plans. Direct costs related to workers' compensation and certain benefit plans where we retain risk are recognized as cost of service revenue rather than as a reduction in service revenue.

Interest on funds held for clients is earned primarily on funds that are collected from clients before due dates for payroll tax administration services and for employee payment services, and invested until remittance to the applicable tax or regulatory agencies or client employees. These collections from clients are typically remitted from one to 30 days after receipt, with some items extending to 90 days. The interest earned on these funds is included in total revenue on the Consolidated Statements of Income and Comprehensive Income because the collecting, holding, and remitting of these funds are components of providing these services.

Assets Recognized from the Costs to Obtain and Fulfill Contracts: We recognize an asset for the incremental costs of obtaining a contract with a client if it is expected that the economic benefit and amortization period will be longer than one year. Incremental costs of obtaining a contract include only those costs that are directly related to the acquisition of new contracts and that would not have been incurred if the contract had not been obtained. We do not incur incremental costs to obtain a contract renewal. The Company determined that certain sales commissions and bonuses, including related fringe benefits, meet the capitalization criteria under Accounting Standards Codification ("ASC") Subtopic 340-40, "Other Assets and Deferred Costs: Contracts with Customers" ("ASC 340-40"). We also recognize an asset for the costs to fulfill a contract with a client if the costs are specifically identifiable, generate or enhance resources used to satisfy future performance obligations, and are expected to be recovered. We determined that substantially all costs related to implementation activities are administrative in nature and meet the capitalization criteria under ASC 340-40. These capitalized costs to fulfill a contract principally relate to upfront direct costs that are expected to be recovered and enhance our ability to satisfy future performance obligations.

The assets related to both costs to obtain and costs to fulfill contracts with clients are capitalized and amortized using an accelerated method over an eight-year life to closely align with the pattern of client attrition over the estimated life of the client relationship. We regularly review our deferred costs for potential impairment and did not recognize an impairment loss during the fiscal years ended May 31, 2020 or May 31, 2019.

PEO insurance reserves: As part of the PEO solution, we offer workers' compensation insurance and health insurance to clients for the benefit of client employees. Workers' compensation insurance is primarily provided under fully insured high deductible workers' compensation insurance policies. Workers' compensation insurance reserves are established to provide for the estimated costs of paying claims up to per occurrence liability limits. These reserves include estimates of certain expenses associated with processing and settling these claims. In establishing the PEO workers' compensation insurance reserves, we use an independent actuarial estimate of undiscounted future cash payments that would be made to settle claims. The evaluation, review and determination of estimated ultimate losses by our appointed actuary are based on actuarial methods and assumptions. The estimated ultimate losses are primarily based upon estimated loss development factors, and other factors such as the nature of employees' job responsibilities, the historical frequency and severity of workers' compensation claims, and an estimate of future cost trends. Each reporting period, changes in actuarial assumptions resulting from changes in actual claims experience and other trends are incorporated into our workers' compensation claims cost estimates.

With respect to our PEO health insurance, we offer various health insurance plans that take the form of either fully insured guaranteed cost plans with various national insurance carriers or a fully insured minimum premium insurance arrangement with coverage provided through a single national carrier. In addition, we also provide self-insured dental and vision plans to certain PEO clients. Under the minimum medical premium insurance arrangement and self-insured dental and vision plans, our health benefits insurance reserves are established to provide for the payment of claims in accordance with our service contract with the carrier. The claims liability includes estimates for reported losses, plus amounts for those claims incurred but not reported, and estimates of certain expenses associated with processing and settling the claims.

Estimating the ultimate cost of future claims is an uncertain and complex process based upon historical loss experience and independent actuarial loss projections, and is subject to change due to multiple factors, including economic trends, changes in legal liability law, and damage awards, all of which could materially impact the reserves as reported in the consolidated financial statements. Accordingly, final claim settlements may vary from the present estimates, particularly with workers' compensation insurance where those payments may not occur until well into the future. We regularly review the adequacy of our estimated insurance reserves. Adjustments to previously established reserves are reflected in the results of operations for the period in which the adjustment is identified. Such adjustments could possibly be significant, reflecting any combination of new and adverse or favorable trends. Adjustments to previously established reserves were not material for the fiscal years 2020, 2019, or 2018.

Goodwill and other intangible assets: Goodwill is not amortized, but instead is tested for impairment on an annual basis and between annual tests if an event occurs or circumstances change in a way to indicate that there has been a potential decline in the fair value of the reporting unit. We perform our annual impairment testing in our fiscal fourth quarter. A qualitative analysis was performed for all reporting units in fiscal years 2020, 2019 and 2018, to determine if it is more-likely-thannot that the fair value of the reporting units had declined below its carrying value. The qualitative assessment considered various financial, macroeconomic, industry, and reporting unit specific qualitative factors. Based on the results of our testing, no impairment loss was recognized in the results of operations for fiscal 2020, 2019, or 2018. Subsequent to the latest review, there have been no events or circumstances that indicate any potential impairment of the Company's goodwill balance.

We also test intangible assets with indefinite useful lives for potential impairment on an annual basis and between annual tests if events or changes in circumstances change in a way that indicate that the carrying value may not be recoverable. We have determined that there is no impairment of intangible assets with indefinite useful lives for fiscal 2020, 2019, or 2018.

Impairment of Long-Lived Assets: Long-lived assets, including intangible assets with finite lives and operating lease right-of-use assets, are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized for the amount by which the carrying amount of the asset exceeds the estimated fair value of the asset. We have determined that there is no impairment of long-lived assets for fiscal 2020, 2019, or 2018.

Stock-based compensation costs: All stock-based awards to employees are recognized as compensation costs in our consolidated financial statements based on their fair values measured as of the date of grant. We estimate the fair value of stock option grants using a Black-Scholes option pricing model. This model requires various assumptions as inputs including expected volatility of the Paychex stock price and expected option life. Volatility is estimated based on a combination of historical volatility using stock prices over a period equal to the expected option life and implied market volatility. Expected option life is estimated based on historical exercise behavior. We periodically reassess our assumptions as well as our choice of valuation model. We will reconsider use of this model if additional information becomes available in the future indicating that another model would provide a more accurate estimate of fair value, or if characteristics of future grants would warrant such a change.

The fair value of stock awards is determined based on the stock price at the date of grant. For grants that do not accrue dividends or dividend equivalents, the fair value is the stock price reduced by the present value of estimated dividends over the vesting period or performance period.

We estimate forfeitures and only record compensation costs for those awards that are expected to vest. Our assumptions for forfeitures were determined based on type of award and historical experience. Forfeiture assumptions are adjusted at the point in time a significant change is identified, with any adjustment recorded in the period of change, and the final adjustment at the end of the requisite service period to equal actual forfeitures.

The assumptions of volatility, expected option life, and forfeitures all require significant judgment and are subject to change in the future due to factors such as employee exercise behavior, stock price trends, and changes to type or provisions of stock-based awards. Any material change in one or more of these assumptions could have a material impact on the estimated fair value of a future award.

Refer to Note F of the Notes to Consolidated Financial Statements contained in Item 8 of this Form 10-K for further discussion of our stock-based compensation plans.

Income taxes: We account for deferred taxes by recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the consolidated financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the fiscal year in which the differences are expected to reverse. We record a deferred tax asset related to the stock-based compensation costs recognized for certain stock-based awards. At the time of the exercise of non-qualified stock options or vesting of stock awards, we recognize any excess tax benefit within income taxes in the Consolidated Statements of Income and Comprehensive Income.

We maintain a reserve for uncertain tax positions. We evaluate tax positions taken or expected to be taken in a tax return for recognition in our consolidated financial statements. Prior to recording the related tax benefit in our consolidated financial statements, we must conclude that tax positions will be more-likely-than-not to be sustained, assuming those positions will be examined by taxing authorities with full knowledge of all relevant information. The benefit recognized in our consolidated financial statements is the amount we expect to realize after examination by taxing authorities. If a tax position drops below the more-likely-than-not standard, the benefit can no longer be recognized. Assumptions, judgment, and the use of estimates are required in determining if the more-likely-than-not standard been met when developing the provision for income taxes and in determining the expected benefit. A change in the assessment of the more-likely-than-not standard could materially impact our results of operations or financial position. Refer to Note L of the Notes to Consolidated Financial Statements contained in Item 8 of this Form 10-K for further discussion of our reserve for uncertain tax positions.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Market Risk Factors

Changes in interest rates and interest rate risk: Funds held for clients are primarily comprised of short-term funds and available-for-sale securities. Corporate investments are primarily comprised of available-for-sale securities. As a result of our investing activities, we are exposed to changes in interest rates that may materially affect our results of operations and financial position. Changes in interest rates will impact the earnings potential of future investments and will cause fluctuations in the fair value of our longer-term available-for-sale securities. We follow an investment strategy of protecting principal and optimizing liquidity. A substantial portion of our portfolios is invested in high credit quality securities with ratings of AA or higher, and A-1/P-1 ratings on short-term securities. We invest predominately in municipal bonds — including general obligation bonds and revenue bonds; U.S. government agency and treasury securities; and corporate bonds. We limit the amounts that can be invested in any single issuer and invest primarily in short-to intermediate-term instruments whose fair value is less sensitive to interest rate changes. We manage the available-for-sale securities to a benchmark duration of two and one-half to three and three-quarters years.

During fiscal 2020, our primary short-term investment vehicles were U.S. government agency and treasury securities, VRDNs, and bank demand deposit accounts. We have no exposure to high-risk or non-liquid investments. We have insignificant exposure to European investments. We have not and do not utilize derivative financial instruments to manage our interest rate risk.

During fiscal 2020, the average interest rate earned on our combined funds held for clients and corporate investment portfolios was 1.8%, compared to 1.9% and 1.5% for fiscal 2019 and fiscal 2018, respectively. When interest rates are falling, the full impact of lower interest rates will not immediately be reflected in net income due to the interaction of short- and long-term interest rate changes. During a falling interest rate environment, earnings decrease from our short-term investments, and over time earnings will decrease from our longer-term available-for-sale securities. Earnings from the available-for-sale securities, which as of May 31, 2020 had an average duration of 2.9 years, would not reflect decreases in interest rates until the investments are sold or mature and the proceeds are reinvested at lower rates.

The amortized cost and fair value of available-for-sale securities that had stated maturities as of May 31, 2020 are shown below by contractual maturity. Expected maturities can differ from contractual maturities because borrowers may have the right to prepay obligations without prepayment penalties.

	May 31, 2020				
	Am	ortized		Fair	
In millions	cost			value	
Maturity date:					
Due in one year or less	\$	353.4	\$	355.7	
Due after one year through three years		700.9		723.5	
Due after three years through five years		812.0		850.0	
Due after five years		790.9		828.0	
Total	\$	2,657.2	\$	2,757.2	

VRDNs are primarily categorized as due after five years in the table above as the contractual maturities on these securities are typically 20 to 30 years. Although these securities are issued as long-term securities, they are priced and traded as short-term instruments because of the liquidity provided through the tender feature.

The Federal Reserve reduced the Federal Funds rate by 25 basis points three times in the first nine months of fiscal 2020 after periodically raising the rate from December 2015 through May 2019. Then in response to the COVID-19 pandemic, the Federal Reserve reduced the Federal Funds rate a total of 150 basis points. As of May 31, 2020, the Federal Funds rate was in the range of 0.0% to 0.25% as compared to a range of 2.25% to 2.50% as of May 31, 2019, and in the range of 1.50% to 1.75% as of May 31, 2018. There continues to be uncertainty in the changing market and economic conditions, including the possibility of additional measures that could be taken by the Federal Reserve and other government agencies, related to the COVID-19 pandemic. We will continue to monitor market conditions.

Calculating the future effects of changing interest rates involves many factors. These factors include, but are not limited to:

- governmental action resulting from the COVID-19 pandemic;
- · daily interest rate changes;

- seasonal variations in investment balances;
- actual duration of short-term and available-for-sale securities:
- the proportion of taxable and tax-exempt investments;
- changes in tax-exempt municipal rates versus taxable investment rates, which are not synchronized or simultaneous; and
- financial market volatility and the resulting effect on benchmark and other indexing interest rates.

Subject to these factors and under normal financial market conditions, a 25-basis-point change in taxable interest rates generally affects our tax-exempt interest rates by approximately 17 basis points. Under normal financial market conditions, the impact to earnings from a 25-basis-point change in short-term interest rates would be approximately \$3.0 million to \$4.0 million, after taxes, for a twelve-month period. Such a basis point change may or may not be tied to changes in the Federal Funds rate

Our total investment portfolio (funds held for clients and corporate cash equivalents and investments) averaged approximately \$4.8 billion for fiscal 2020. Our anticipated allocation is approximately 40% invested in short-term securities and VRDNs with an average duration of less than 30 days, and 60% invested in available-for-sale securities with an average duration of two and one-half to three and three-quarters years.

The combined funds held for clients and corporate available-for-sale securities reflected net unrealized gains of \$100.0 million and \$19.7 million as of May 31, 2020 and May 31, 2019, respectively. Refer to Note H of the Notes to Consolidated Financial Statements contained in Item 8 of this Form 10-K for additional disclosures on fair value measurements.

During fiscal 2020, the net unrealized gain or loss on our investment portfolios ranged from an unrealized gain of \$106.3 million to an unrealized loss of \$27.0 million. During fiscal 2019, the net unrealized gain or loss on our investment portfolios ranged from an unrealized gain of \$19.7 million to an unrealized loss of \$60.7 million. The net unrealized gain on our investment portfolios was approximately \$112.4 million as of July 15, 2020.

As of May 31, 2020 and 2019, we had \$2.8 billion and \$3.6 billion, respectively, invested in available-for-sale securities at fair value. The weighted-average yield-to-maturity was 2.1% as of May 31, 2020 and May 31, 2019. The weighted-average yield-to-maturity excludes available-for-sale securities tied to short-term interest rates, such as the VRDNs. Assuming a hypothetical increase in longer-term interest rates of 25 basis points, the resulting potential decrease in fair value for our portfolio of available-for-sale securities as of May 31, 2020, would be in the range of \$20.0 million. Conversely, a corresponding decrease in interest rates would result in a comparable increase in fair value. This hypothetical increase or decrease in the fair value of the portfolio would be recorded as an adjustment to the portfolio's recorded value, with an offsetting amount recorded in stockholders' equity. These fluctuations in fair value would have no related or immediate impact on the results of operations, unless any declines in fair value were considered to be other-than-temporary and an impairment loss recognized.

Credit risk: We are exposed to credit risk in connection with these investments through the possible inability of the borrowers to meet the terms of their bonds. We regularly review our investment portfolios to determine if any investment is other-than-temporarily impaired due to changes in credit risk or other potential valuation concerns. We believe that the investments we held as of May 31, 2020 were not other-than-temporarily impaired. While \$66.8 million of our available-forsale securities had fair values that were below amortized cost, we believe that it is probable that the principal and interest will be collected in accordance with the contractual terms, and that unrealized losses of \$1.7 million were due to changes in interest rates and were not due to increased credit risk or other valuation concerns. Most of the securities in an unrealized loss position as of May 31, 2020 and 2019 held an AA rating or better. We do not intend to sell these investments until the recovery of their amortized cost basis or maturity, and further believe that it is not more-likely-than-not that we will be required to sell these investments prior to that time. Our assessment that an investment is not other-than-temporarily impaired could change in the future due to new developments or changes in our strategies or assumptions related to any particular investment.

We have some credit risk exposure relating to the purchase of accounts receivable as a means of providing payroll funding to clients in the temporary staffing industry. This credit risk exposure is diversified amongst multiple client arrangements and all such arrangements are regularly reviewed for potential write-off. No single client is material in respect to total accounts receivable, service revenue, or results of operations.

Item 8. Financial Statements and Supplementary Data

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REPORT ON MANAGEMENT'S ASSESSMENT OF INTERNAL CONTROL OVER FINANCIAL REPORTING

Management of Paychex, Inc. (the "Company") is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended. The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements for external purposes in accordance with generally accepted accounting principles.

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.

Management assessed the effectiveness of the Company's internal control over financial reporting as of May 31, 2020. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in "Internal Control — Integrated Framework" (2013). Based on our assessment, management determined that the Company maintained effective internal control over financial reporting as of May 31, 2020.

The Company's independent registered public accounting firm, PricewaterhouseCoopers LLP, is appointed by the Company's Audit Committee. PricewaterhouseCoopers LLP has audited the Consolidated Financial Statements included in this Annual Report on Form 10-K and the effectiveness of the Company's internal control over financial reporting as of May 31, 2020, and as a part of their integrated audit, has issued their report, included herein, on the effectiveness of the Company's internal control over financial reporting.

/s/ Martin Mucci
Martin Mucci
President and Chief Executive Officer

<u>/s/ Efrain Rivera</u>
Efrain Rivera
Senior Vice President, Chief Financial Officer, and Treasurer

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Paychex, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Paychex, Inc. and its subsidiaries (the "Company") as of May 31, 2020 and 2019, and the related consolidated statements of income and comprehensive income, of stockholders' equity, and of cash flows for each of the three years in the period ended May 31, 2020, including the related notes and financial statement schedule listed in the accompanying index (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of May 31, 2020, 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of May 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended May 31, 2020 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of May 31, 2020, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note A to the consolidated financial statements, the Company changed the manner in which it accounts for leases on June 1, 2019.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report on Management's Assessment of Internal Control Over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated 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.

Professional Employer Organization (PEO) Insurance Reserves - Workers' Compensation Insurance Reserves

As described in Note A to the consolidated financial statements, the Company offers workers' compensation insurance to clients for the benefit of client employees. Workers' compensation insurance is primarily provided under fully insured high deductible workers' compensation insurance policies. Workers' compensation insurance reserves are established to provide for the estimated costs of paying claims up to per occurrence liability limits. As of May 31, 2020, the total liability for workers' compensation insurance reserves, management uses an independent actuarial estimate of undiscounted future cash payments that would be made to settle the claims. The evaluation, review and determination of estimated ultimate losses by the Company's appointed actuary are based on actuarial methods and assumptions. The estimated ultimate losses are primarily based upon estimated loss development factors, and other factors such as the nature of employees' job responsibilities, the historical frequency and severity of workers' compensation claims, and an estimate of future cost trends.

The principal considerations for our determination that performing procedures relating to PEO insurance reserves - workers' compensation insurance reserves is a critical audit matter are (i) the significant judgment by management in determining the workers' compensation insurance reserves, which in turn led to a high degree of auditor judgment, subjectivity and effort in performing our procedures and evaluating management's assumptions and actuarial estimates related to the estimated loss development factors and other factors such as the historical frequency and severity of workers' compensation claims and an estimate of future cost trends, and (ii) the audit effort included the involvement of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the Company's workers' compensation insurance reserves, including controls over the development of management's assumptions and actuarial estimates related to the estimated loss development factors. These procedures also included, among others (i) the involvement of professionals with specialized skill and knowledge to assist in developing an independent estimate of the workers' compensation insurance reserves and (ii) comparison of this independent estimate to management's estimate to evaluate the reasonableness of management's estimate. Developing an independent estimate involved (i) testing the completeness and accuracy of data provided by management and (ii) evaluating management's assumptions and actuarial estimates related to the estimated loss development factors and other factors such as the historical frequency and severity of workers' compensation claims and an estimate of future cost trends.

/s/ PricewaterhouseCoopers LLP Rochester, New York July 17, 2020

We have served as the Company's auditor since 2013.

PAYCHEX, INC.

CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME In millions, except per share amounts

Year ended May 31,	2020	2019		2018
Revenue:				
Management Solutions	\$ 2,963.0	\$ 2,877.7	\$	2,758.4
PEO and Insurance Solutions	 990.6	 814.2		555.8
Total service revenue	3,953.6	3,691.9		3,314.2
Interest on funds held for clients	86.9	80.6		63.5
Total revenue	4,040.5	3,772.5		3,377.7
Expenses:				
Cost of service revenue	1,280.8	1,177.8		1,018.2
Selling, general and administrative expenses	1,299.2	1,223.4		1,068.0
Total expenses	2,580.0	2,401.2		2,086.2
Operating income	 1,460.5	1,371.3		1,291.5
Other (expense)/income, net	(23.4)	(3.3)		8.6
Income before income taxes	 1,437.1	1,368.0		1,300.1
Income taxes	339.0	333.6		306.0
Net income	\$ 1,098.1	\$ 1,034.4	\$	994.1
Other comprehensive income/(loss), net of tax	56.4	36.3		(56.2)
Comprehensive income	\$ 1,154.5	\$ 1,070.7	\$	937.9
·			-	
Basic earnings per share	\$ 3.06	\$ 2.88	\$	2.77
Diluted earnings per share	\$ 3.04	\$ 2.86	\$	2.75
Weighted-average common shares outstanding	358.5	359.2		359.0
Weighted-average common shares outstanding, assuming dilution	361.0	361.8		361.5

PAYCHEX, INC.

CONSOLIDATED BALANCE SHEETS
In millions, except per share amounts

As of May 31,		2020		2019		
Assets						
Cash and cash equivalents	\$	905.2	\$	673.6		
Restricted cash		49.8		50.6		
Corporate investments		27.2		39.0		
Interest receivable		26.2		27.4		
Accounts receivable, net of allowance for doubtful accounts		384.1		420.5		
PEO unbilled receivables, net of advance collections		380.0		406.3		
Prepaid income taxes		16.8		22.6		
Prepaid expenses and other current assets		244.8		233.9		
Current assets before funds held for clients		,034.1		1,873.9		
Funds held for clients		3,430.5		3,803.8		
Total current assets	5	,464.6		5,677.7		
Long-term restricted cash		21.3		6.5		
Long-term corporate investments		10.2		10.2		
Property and equipment, net of accumulated depreciation		407.4		408.7		
Operating lease right-of-use assets, net of accumulated amortization		114.8		_		
Intangible assets, net of accumulated amortization		330.6		399.1		
Goodwill		1,791.1		1,782.6		
Long-term deferred costs		372.5		366.3		
Other long-term assets		38.2		24.9		
Total assets	\$ 8	3,550.7	\$	8,676.0		
Liabilities	<u>~</u>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u> </u>	0,07010		
Accounts payable	\$	79.4	\$	75.9		
Accrued corporate compensation and related items	\$	131.7	Ψ	146.4		
Accrued worksite employee compensation and related items		512.4		578.6		
Short-term borrowings		5.1		376.6		
Accrued income taxes		50.5				
Deferred revenue		39.2		40.3		
Other current liabilities		277.6		219.5		
Current liabilities before client fund obligations		.095.9		1.060.7		
Client fund obligations		3,331.0		3,784.3		
<u> </u>						
Total current liabilities		,426.9		4,845.0		
Accrued income taxes		33.5		27.3		
Deferred income taxes		240.8		223.1		
Long-term borrowings, net of debt issuance costs		796.8		796.4		
Operating lease liabilities		96.9		13.0		
Other long-term liabilities		174.4		151.7		
Total liabilities		5,769.3		6,056.5		
Commitments and contingencies — Note R	<u></u> `	,,707.5	_	0,050.5		
Stockholders' equity						
Common stock, \$0.01 par value; Authorized: 600.0 shares;						
Issued and outstanding: 358.8 shares as of May 31, 2020						
and 359.3 shares as of May 31, 2019, respectively.		3.6		3.6		
Additional paid-in capital		1.289.9		1.206.3		
Retained earnings		1,289.9		1,206.3		
Accumulated other comprehensive income		56.5		0.1		
Total stockholders' equity		2,781.4	Φ.	2,619.5		
Total liabilities and stockholders' equity	\$ 8	<u>3,550.7</u>	\$	8,676.0		

PAYCHEX, INC. CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY In millions

	Comn	non	stock	Additional paid-in	Retained	Accumulated other comprehensive		
	Shares		Amount	capital	earnings	income/(loss)		Total
Balance as of May 31, 2017	359.4	\$	3.6	\$ 1,030.0	\$ 1,173.6	\$ 20.0	\$	2,227.2
Net income					994.1			994.1
Unrealized losses on securities, net of tax						(47.6))	(47.6)
Cash dividends declared (\$2.06 per share)					(739.7)			(739.7)
Repurchases of common shares	(2.5)			(4.5)	(138.6)			(143.1)
Acquisition of businesses	0.6			33.2				33.2
Stock-based compensation				44.6				44.6
Foreign currency translation adjustment						(8.6)	(8.6)
Activity related to equity-based								
plans	1.5			23.5	(26.8)			(3.3)
Balance as of May 31, 2018	359.0		3.6	1,126.8	1,262.6	(36.2))	2,356.8
Net income					1,034.4			1,034.4
Unrealized gains on securities, net of tax						44.0		44.0
Cash dividends declared (\$2.30 per share)					(826.8)			(826.8)
Repurchases of common shares	(0.7)			(1.4)	(55.5)			(56.9)
Stock-based compensation				46.2				46.2
Foreign currency translation adjustment						(7.7)	1	(7.7)
Activity related to equity-based								
plans	1.0	_		 34.7	(5.2)			29.5
Balance as of May 31, 2019	359.3		3.6	1,206.3	1,409.5	0.1		2,619.5
Net income					1,098.1			1,098.1
Unrealized gains on securities, net of reclassification adjustments and tax						60.4		60.4
Cash dividends declared (\$2.48 per share)					(889.4)	00.1		(889.4)
Repurchases of common shares	(2.0)			(3.7)	(168.2)			(171.9)
Stock-based compensation	(2.0)			47.4	(100.2)			47.4
Foreign currency translation adjustment				77.7		(4.0		(4.0)
Activity related to equity-based						(4.0	,	(4.0)
plans	1.5			39.9	(18.6)			21.3
Balance as of May 31, 2020	358.8	\$	3.6	\$ 1,289.9	\$ 1,431.4	\$ 56.5	\$	2,781.4

PAYCHEX, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS In millions

Year ended May 31,	2020	2019	2	018
Operating activities				0044
Net income	\$ 1,098.	1 \$ 1,034	.4 \$	994.1
Adjustments to reconcile net income to net cash provided by operating activities:	200	101	_	120.0
Depreciation and amortization	209.			138.0
Amortization of premiums and discounts on available-for-sale securities, net	40.3			65.4
Amortization of deferred contract costs	186.		-	174.7
Stock-based compensation costs	47.4			44.6
(Benefit)/provision for deferred income taxes	(4.1		.7	(37.2)
Provision for allowance for doubtful accounts	7.1		1.3	3.6
Net realized gains on sales of available-for-sale securities	(11.:	-	_	(0.1)
Changes in operating assets and liabilities:		_		2.5
Interest receivable	1.3		.8	3.7
Accounts receivable and PEO unbilled receivables, net	55.			16.2
Prepaid expenses and other current assets	(1.0		.0	18.0
Accounts payable and other current liabilities	(4.9			42.9
Deferred costs	(196.0			(181.8)
Net change in other long-term assets and liabilities	12.		5.4)	(5.7)
Net change in operating lease right-of-use assets and liabilities	0.4		<u></u>	
Net cash provided by operating activities	1,440.9	9 1,271	<u>.5</u>	1,276.4
Investing activities				
Purchases of available-for-sale securities	(25,218.			(50,220.2)
Proceeds from sales and maturities of available-for-sale securities	26,132.9			51,592.9
Purchases of property and equipment	(127.0			(154.0)
Acquisition of businesses, net of cash acquired	(6.			(180.4)
Purchases of other assets	(9.8		5.3)	(39.8)
Net cash provided by/(used in) investing activities	771.9	9 (1,628	.3)	998.5
Financing activities				
Net change in client fund obligations	(453).6)	462.4
Net proceeds from short-term borrowings	5.		_	_
Proceeds from borrowings to fund acquisition	_	- 796		
Dividends paid	(889.4	4) (826	5.8)	(739.7)
Repurchases of common shares	(171.9	9) (56	.9)	(143.1)
Activity related to equity-based plans	21			(3.4)
Net cash used in financing activities	(1,488.2			(423.8)
Net change in cash, restricted cash, and equivalents	724.			1,851.1
Cash, restricted cash, and equivalents, beginning of fiscal year	935.2			449.4
Cash, restricted cash, and equivalents, end of fiscal year	\$ 1.659.3			2,300.5
Cash, restricted cash, and equivalents, end of fiscal year	9 1,037.	<u> </u>	<u>.2</u> \$	2,300.3
Reconciliation of cash, restricted cash, and equivalents				
Cash and cash equivalents	\$ 905.2			358.2
Restricted cash	71.	1 57	'.1	_
Restricted cash and restricted cash equivalents included in funds held for clients	683.:	5 204	.5	1,942.3
Total cash, restricted cash, and equivalents	\$ 1,659.	8 \$ 935	.2 \$	2,300.5

PAYCHEX, INC. NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note A — Description of Business, Basis of Presentation, and Significant Accounting Policies

Description of business: Paychex, Inc. and its wholly owned subsidiaries (collectively, the "Company" or "Paychex") is a leading provider of integrated human capital management ("HCM") solutions for human resources ("HR"), payroll, benefits, and insurance services for small- to medium-sized businesses in the United States ("U.S."). The Company also has operations in parts of Europe.

Paychex, a Delaware corporation formed in 1979, reports as one segment. Substantially all of the Company's revenue is generated within the U.S. The Company also generates revenue within parts of Europe, which represented one percent of the Company's total revenue for each of the fiscal years ended May 31, 2020 ("fiscal 2020") and May 31, 2019 ("fiscal 2019"), and less than one percent for the fiscal year ended May 31, 2018 ("fiscal 2018"). Long-lived assets in Europe were approximately five percent of total long-lived assets of the Company as of both May 31, 2020 and May 31, 2019, respectively.

Within Paychex's HCM solutions, Paychex offers a comprehensive portfolio of services and products that allow its clients to meet their diverse HR and payroll needs. Clients can select services on an á la carte basis or as part of various product bundles. Paychex's offerings often leverage the information gathered in its base payroll processing service, allowing the Company to provide comprehensive outsourcing services covering the HCM spectrum.

Paychex supports its small business clients utilizing its proprietary, robust, software-as-a-service ("SaaS") Paychex Flex® platform and the Company's SurePayroll® SaaS-based products. Both products allow users to process payroll when they want, how they want, and on any device (desktop, tablet, and mobile phone). Paychex's mid-market clients generally have more complex payroll and employee benefit needs. However, in the current environment of increasing regulations, the Company believes the needs for HR outsourcing solutions have been moving down-market. Any of the Company's clients on Paychex Flex can opt for the integrated suite of HCM solutions, which allows clients to choose the services and software that will meet the needs of their business.

Total revenue is comprised of service revenue and interest on funds held for clients. Service revenue is comprised primarily of the fees earned on the portfolio of HCM services, which include payroll processing, complementary HR management and administration services, PEO ("Professional Employer Organization") solutions, and insurance agency commissions. Refer to Note B of this Item 8 for further discussion of the Company's service revenue.

Basis of presentation: The consolidated financial statements include the accounts of Paychex, Inc. and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation. Certain disclosures are reported as zero balances due to rounding.

Effective June 1, 2019, the Company adopted the requirements of ASU No. 2016-02, "Leases (Topic 842)" ("ASU No. 2016-02") as discussed in the "Recently adopted accounting pronouncements" section of this Item 8. All amounts and disclosures set forth in this Annual Report on Form 10-K (the "Form 10-K") have been updated to comply with the new standard.

Reclassifications: Certain prior year amounts have been reclassified to conform to the current period presentation. These reclassifications had no effect on reported consolidated earnings.

Subsequent Events: On July 9, 2020, Paychex announced that its Board of Directors (the "Board") declared a regular quarterly dividend of \$0.62 per share payable August 27, 2020 to stockholders of record as of August 3, 2020.

Cash and cash equivalents: Cash and cash equivalents consist of available cash, money market securities, and other investments with a maturity of 90 days or less at acquisition. Cash and cash equivalents include funds collected from the Company's PEO clients for the payment of worksite employee payrolls and associated payroll taxes. Funds of \$136.4 million and \$178.8 million collected from PEO clients are included in cash and cash equivalents on the Company's Consolidated Balance Sheets as of May 31, 2020 and May 31, 2019, respectively.

Restricted cash and restricted cash equivalents: Restricted cash and restricted cash equivalents are recorded at fair value, and consist of cash and cash equivalents, primarily money market securities, included in funds held for clients and cash that is restricted in use for certain payment of workers' compensation policies.

Accounts receivable, net of allowance for doubtful accounts: Accounts receivable balances are shown on the Consolidated Balance Sheets net of the allowance for doubtful accounts of \$12.5 million and \$7.5 million as of May 31, 2020 and May 31, 2019, respectively. These balances include: trade receivables for services provided to clients and purchased receivables related to payroll funding arrangements with clients in the temporary staffing industry. Trade receivables were \$84.7 million and \$94.5 million as of May 31, 2020 and May 31, 2019, respectively. Purchased receivables were \$311.9 million and \$33.5 million as of May 31, 2020 and May 31, 2019, respectively. Accounts receivable are written off and charged against the allowance for doubtful accounts when the Company has exhausted all collection efforts without success. No single client had a material impact on total accounts receivable, service revenue, or results of operations.

PEO unbilled receivables, net of advance collections: The Company recognizes a liability for worksite employee gross wages and related payroll tax liabilities at the end of the period in which the worksite employee performs work, and where it assumes, under state regulations, the obligation for the payment of payroll and payroll tax liabilities. The estimated payroll and payroll tax liabilities are recorded in accrued worksite employee compensation and related items on the Company's Consolidated Balance Sheets. The associated unbilled receivables, including estimated revenues, offset by advance collections from clients, are recorded as PEO unbilled receivables, net of advance collections on the Company's Consolidated Balance Sheets. As of May 31, 2020 and May 31, 2019, advance collections included in PEO unbilled receivables, net of advance collections were \$6.1 million and \$4.2 million, respectively.

Funds held for clients and corporate investments: Marketable securities included in funds held for clients and corporate investments consist primarily of securities classified as available-for-sale and are recorded at fair value obtained from an independent pricing service. The funds held for clients portfolio also includes cash and cash equivalents such as money market securities. Unrealized gains and losses, net of applicable income taxes, are reported as other comprehensive income in the Consolidated Statements of Income and Comprehensive Income. Realized gains and losses on the sale of available-for-sale securities are determined by specific identification of the cost basis of each security. On the Consolidated Statements of Income and Comprehensive Income, realized gains and losses from the funds held for clients portfolio and corporate investments portfolio are included in interest on funds held for clients and other (expense)/income, net, respectively.

Concentrations: Substantially all of the Company's deposited cash is maintained at large well-capitalized (as defined by their regulators) financial institutions. These deposits may exceed the amount of any insurance provided. All of the Company's deliverable securities, primarily municipal bond securities, are held in custody with certain of the aforementioned financial institutions, for which that institution bears the risk of custodial loss. Non-deliverable securities are primarily time deposits and money market funds.

Property and equipment, net of accumulated depreciation: Property and equipment is stated at cost, less accumulated depreciation. Depreciation is based on the estimated useful lives of property and equipment using the straight-line method. The estimated useful lives of depreciable assets are generally as follows:

Category	Depreciable life
Buildings and improvements	10 to 35 years or the remaining life, whichever is shorter
Data processing equipment	Three to four years
Furniture, fixtures, and equipment	Two to seven years
Leasehold improvements	10 years or the life of the lease, whichever is shorter

Normal and recurring repairs and maintenance costs are charged to expense as incurred. The Company reviews the carrying value of property and equipment for impairment when events or changes in circumstances indicate that the carrying value of such assets may not be recoverable.

Software development and enhancements: Expenditures for software purchases and software developed for internal use are capitalized and depreciated on a straight-line basis over the estimated useful lives, which are generally three to five years. Software developed as part of the Company's main processing platform is depreciated over 12 years. For software developed for internal use, certain costs are capitalized, including external direct costs of materials and services associated with developing or obtaining the software, and payroll-related costs for employees who are directly associated with internal-use software projects. Capitalization of these costs ceases no later than the point at which the project is substantially complete and ready for its intended use. Costs associated with preliminary project stage activities, training, maintenance, and other post-implementation stage activities are expensed as incurred. The carrying value of software and development costs is reviewed for impairment when events or changes in circumstances indicate that the carrying value of such assets may not be recoverable.

Goodwill and other intangible assets, net of accumulated amortization: The Company had \$1.8 billion of goodwill as of both May 31, 2020 and May 31, 2019, respectively. Goodwill is not amortized, but instead is tested for impairment on an annual basis and between annual tests if an event occurs or circumstances change in a way to indicate that there has been a potential decline in the fair value of a reporting unit. The Company performs its annual impairment testing in its fiscal fourth quarter. A qualitative analysis was performed for all reporting units in the fiscal years 2020, 2019, and 2018 to determine if it is more-likely-than-not that the fair value of the reporting units had declined below their carrying value. The qualitative assessment considered various financial, macroeconomic, industry, and reporting unit specific qualitative factors. Based on the results of the Company's testing, no impairment loss was recognized in the results of operations for the fiscal years 2020, 2019, or 2018. Subsequent to the latest review, there have been no events or circumstances that indicate any potential impairment of the Company's goodwill balance.

Intangible assets are comprised primarily of client list acquisitions and are reported net of accumulated amortization on the Consolidated Balance Sheets. Intangible assets are amortized over periods generally ranging from three to 12 years. Certain client lists use an accelerated method, while other intangible assets use the straight-line method of amortization. In addition, the Company has intangible assets with indefinite useful lives, which are tested for impairment on an annual basis and between annual tests if an event occurs or circumstances change in a way to indicate that the carrying value may not be recoverable. The Company has determined there is no impairment of intangible assets with indefinite useful lives for fiscal 2020, 2019, or 2018.

Impairment of Long-Lived Assets: Long-lived assets, including intangible assets with finite lives and operating lease right-of-use assets, are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized for the amount by which the carrying amount of the asset exceeds the estimated fair value of the asset. The Company has determined that there was no impairment of long-lived assets for the fiscal years 2020, 2019, or 2018.

Foreign Currency: The financial statements of the Company's foreign subsidiaries have been translated into U.S. dollars. Assets and liabilities are translated into U.S. dollars at period-end exchange rates. Income and expenses are translated at the average exchange rate for the reporting period. The resulting non-cash foreign currency translation adjustments, representing unrealized gains or losses, are included in Consolidated Statements of Stockholders' Equity as a component of accumulated other comprehensive income/(loss), net of tax. The Company did not have any material realized gains or losses resulting from foreign exchange transactions during the fiscal years 2020, 2019, or 2018.

Revenue recognition: Revenues are primarily attributable to fees for providing services as well as investment income earned on funds held for clients. Fees associated with services are recognized in the period services are rendered and earned under service arrangements with clients where service fees are fixed or determinable and collectability is reasonably assured. The Company's service revenue is largely attributable to processing services where the fee is based on a fixed amount per processing period or a fixed amount per processing period plus a fee per employee or transaction processed. Insurance Solutions revenues are recognized when commissions are earned on premiums billed and collected. Fees earned for funding of payrolls for temporary staffing agency clients via the purchase of accounts receivable are based on a percentage of funding amounts as specified in the client contract. These fees are then recognized over the average collection period of 35 to 45 days. The revenue earned from delivery service for the distribution of certain client payroll checks and reports is included in service revenue, and the costs for the delivery are included in cost of service revenue on the Consolidated Statements of Income and Comprehensive Income.

The Company receives advance payments for set-up fees from its clients. Advance payments received for certain of the Company's service offerings for set-up fees are considered a material right. Therefore, the Company defers the revenue associated with these advance payments, recognizing the revenue and related expenses over the expected period to which the material right exists.

PEO Solutions revenue is included in service revenue and is reported net of certain pass-through costs billed and incurred, which include payroll wages, payroll taxes, including federal and state unemployment insurance, and certain health insurance benefit premiums, primarily costs related to the Company's guaranteed cost benefit plans. Direct costs related to workers' compensation and certain benefit plans where the Company retains risk are recognized as cost of service revenue rather than as a reduction in service revenue. Refer to Note B of this Item 8 for further discussion of the PEO pass-through costs.

Interest on funds held for clients is earned primarily on funds that are collected from clients before due dates for payroll taxadministration services and for employee payment services and invested until remittance to the applicable tax or regulatory agencies or client employees. The interest earned on these funds is included in total revenue on the Consolidated Statements of Income and Comprehensive Income because the collecting, holding, and remitting of these funds are components of providing these services.

Assets Recognized from the Costs to Obtain and Fulfill Contracts: The Company recognizes an asset for the incremental costs of obtaining a contract with a client if it is expected that the economic benefit and amortization period will be longer than one year. Incremental costs of obtaining a contract include only those costs that are directly related to the acquisition of new contracts and that would not have been incurred if the contract had not been obtained. The Company does not incur incremental costs to obtain a contract renewal. The Company determined that certain sales commissions and bonuses, including related fringe benefits, meet the capitalization criteria under Accounting Standards Codification ("ASC") Subtopic 340-40, "Other Assets and Deferred Costs: Contracts with Customers" ("ASC 340-40"). The Company also recognizes an asset for the costs to fulfill a contract with a client if the costs are specifically identifiable, generate or enhance resources used to satisfy future performance obligations, and are expected to be recovered. The Company determined that substantially all costs related to implementation activities are administrative in nature and meet the capitalization criteria under ASC 340-40. These capitalized costs to fulfill a contract principally relate to upfront direct costs that are expected to be recovered and enhance the Company's ability to satisfy future performance obligations.

The assets related to both costs to obtain and costs to fulfill contracts with clients are capitalized and amortized using an accelerated method over an eight-year life to closely align with the pattern of client attrition over the estimated life of the client relationship. The Company regularly reviews its deferred costs for potential impairment and did not recognize an impairment loss during the fiscal years ended May 31, 2020 or May 31, 2019.

Cost of service revenue: The Company's costs and expenses applicable to total service revenue represent direct costs associated with providing HR, payroll, benefits, and insurance services. This includes labor-related costs, direct costs related to certain PEO offerings, postage and delivery costs, facility costs, professional services, and depreciation and amortization of property and equipment, including internally developed software.

Selling, general and administrative expenses: The Company's selling, general and administrative expenses represent labor-related costs, including amortization of deferred sales commissions and bonuses, corporate asset depreciation and amortization, marketing, and other general and administrative expenses incurred by the Company.

PEO insurance reserves: As part of the PEO solution, the Company offers workers' compensation insurance and health insurance to clients for the benefit of client employees. Workers' compensation insurance is primarily provided under fully insured high deductible workers' compensation insurance policies. Workers' compensation insurance reserves are established to provide for the estimated costs of paying claims up to per occurrence liability limits. These reserves include estimates of certain expenses associated with processing and settling these claims. In establishing the PEO workers' compensation insurance reserves, the Company uses an independent actuarial estimate of undiscounted future cash payments that would be made to settle claims. The evaluation, review and determination of estimated ultimate losses by the Company's appointed actuary are based on actuarial methods and assumptions. The estimated ultimate losses are primarily based upon estimated loss development factors, and other factors such as the nature of employees' job responsibilities, the historical frequency and severity of workers' compensation claims, and an estimate of future cost trends. Each reporting period, changes in actuarial assumptions resulting from changes in actual claims experience and other trends are incorporated into our workers' compensation claims cost estimates.

The Company's maximum individual claims liability under its PEO workers' compensation insurance policies was \$1.0 million for fiscal 2020. For fiscal 2019, the Company's maximum individual claims liability ranged from \$0.5 million to \$1.0 million under its PEO workers' compensation insurance policies. As of May 31, 2020 and May 31, 2019, the Company had recorded current liabilities of \$72.3 million and \$71.1 million, respectively, and long-term liabilities of \$101.3 million and \$99.2 million, respectively, on its Consolidated Balance Sheets for workers' compensation insurance reserves.

With respect to PEO health insurance, the Company offers various health insurance plans that take the form of either fully insured guaranteed cost plans with various national insurance carriers or a fully insured minimum premium insurance arrangement with coverage provided through a single national carrier. In addition, the Company also provides self-insured dental and vision plans to certain of its PEO clients. Under the minimum medical premium insurance arrangement and self-insured dental and vision plans, the Company's health benefits insurance reserves are established to provide for the payment of claims in accordance with its service contract with the carrier. The claims liability includes estimates for reported losses, plus amounts for those claims incurred but not reported, and estimates of certain expenses associated with processing and settling the claims. The Company's maximum individual claims liability was \$0.3 million under its policies during both fiscal 2020 and fiscal 2019. Amounts accrued related to the health insurance and dental and vision plan reserves were \$36.7 million and \$25.4 million as of May 31, 2020 and May 31, 2019, respectively. These amounts are included in current liabilities on the Consolidated Balance Sheets.

Estimating the ultimate cost of future claims is an uncertain and complex process based upon historical loss experience and independent actuarial loss projections, and is subject to change due to multiple factors, including economic trends, changes in legal liability law, and damage awards, all of which could materially impact the reserves as reported in the consolidated financial statements. Accordingly, final claim settlements may vary from the present estimates, particularly with workers' compensation insurance where those payments may not occur until well into the future. The Company regularly reviews the adequacy of its estimated insurance reserves. Adjustments to previously established reserves are reflected in the results of operations for the period in which the adjustment is identified. Such adjustments could be significant, reflecting any combination of new and adverse or favorable trends. Adjustments to previously established reserves were not material for the fiscal years 2020, 2019, or 2018.

Leases: At contract inception, the Company determines if the new contractual arrangement is a lease or contains a leasing arrangement. If a contract contains a lease, the Company evaluates whether it should be classified as an operating or a finance lease. Currently, all of the Company's leases have been classified as operating leases. Upon modification of the contract, the Company will reassess to determine if a contract is or contains a leasing arrangement.

The Company records lease liabilities based on the future estimated cash payments discounted over the lease term, defined as the non-cancellable time period of the lease, together with all the following:

- periods covered by an option to extend the lease if the Company is reasonably certain to exercise the extension option; and
- periods covered by an option to terminate the lease if the Company is reasonably certain not to exercise the termination option.

Leases may also include options to terminate the arrangement or options to purchase the underlying lease property. The Company does not separate lease and non-lease components of contracts. Lease components provide the Company with the right to use an identified asset, which consist of the Company's real estate properties and office equipment. Non-lease components consist primarily of maintenance services.

As an implicit discount rate is not readily determinable in the Company's lease agreements, the Company uses its estimated secured incremental borrowing rate based on the information available at the lease commencement date in determining the present value of future lease payments. The incremental borrowing rate is determined using a portfolio approach utilizing publicly available information related to our unsecured borrowing rates. For certain leases with original terms of 12 months or less, the Company recognizes lease expense as incurred and does not recognize any lease liabilities. Short-term and long-term portions of operating lease liabilities are classified as other current liabilities and operating lease liabilities, respectively, in the Company's Consolidated Balance Sheets.

A right-of-use ("ROU") asset is measured as the amount of the lease liability with adjustments, if applicable, for lease incentives, initial direct costs incurred by the Company, and lease prepayments made prior to or at lease commencement. ROU assets are classified as operating lease right-of-use assets, net of accumulated amortization, on the Company's Consolidated Balance Sheets. The Company evaluates the carrying value of ROU assets if there are indicators of potential impairment, and performs the analysis concurrent with the review of the recoverability of the related asset group. If the carrying value of the asset group is determined to not be fully recoverable and is in excess of its estimated fair value, the Company will record an impairment loss in its Consolidated Statements of Income and Comprehensive Income. The Company did not recognize an impairment loss during fiscal 2020.

Fixed lease expense payments are recognized on a straight-line basis over the lease term. Variable lease payments vary because of changes in facts or circumstances occurring after the commencement date, other than the passage of time, and are often due to changes in an external market rate or the value of an index (e.g. Consumer Price Index). Variable lease payments are expensed as incurred in the Company's Consolidated Statements of Income and Comprehensive Income.

Stock-based compensation costs: All stock-based awards to employees are recognized as compensation costs in the consolidated financial statements based on their fair values measured as of the date of grant. The Company estimates the fair value of stock option grants using a Black-Scholes option pricing model. This model requires various assumptions as inputs including expected volatility of the Paychex stock price and expected option life. Volatility is estimated based on a combination of historical volatility, using stock prices over a period equal to the expected option life, and implied market volatility. Expected option life is estimated based on historical exercise behavior. The Company periodically reassesses its assumptions as well as its choice of valuation model. The Company will reconsider use of this model if additional information becomes available in the future indicating that another model would provide a more accurate estimate of fair value, or if characteristics of future grants would warrant such a change.

The fair value of stock awards is determined based on the stock price at the date of grant. For grants that do not accrue dividends or dividend equivalents, the fair value is the stock price reduced by the present value of estimated dividends over the vesting period or performance period.

The Company's policy is to estimate forfeitures and only record compensation costs for those awards that are expected to vest. The assumptions for forfeitures are determined based on type of award and historical experience. Forfeiture assumptions are adjusted at the point in time a significant change is identified, with any adjustment recorded in the period of change, and the final adjustment at the end of the requisite service period to equal actual forfeitures.

The assumptions of volatility, expected option life, and forfeitures all require significant judgment and are subject to change in the future due to factors such as employee exercise behavior, stock price trends, and changes to type or provisions of stock-based awards. Any material change in one or more of these assumptions could have an impact on the estimated fair value of a future award.

Refer to Note F of this Item 8 for further discussion of the Company's stock-based compensation plans.

Income taxes: The Company accounts for deferred taxes by recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the consolidated financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities, using enacted tax rates in effect for the fiscal year in which the differences are expected to reverse.

The Company also maintains a reserve for uncertain tax positions. The Company evaluates tax positions taken or expected to be taken in a tax return for recognition in its consolidated financial statements. Prior to recording the related tax benefit in the consolidated financial statements, the Company must conclude that tax positions will be more-likely-than-not to be sustained, assuming those positions will be examined by taxing authorities with full knowledge of all relevant information. The benefit recognized in the consolidated financial statements is the amount the Company expects to realize after examination by taxing authorities. If a tax position drops below the more-likely-than-not standard, the benefit can no longer be recognized. Assumptions, judgment, and the use of estimates are required in determining if the more-likely-than-not standard has been met when developing the provision for income taxes and in determining the expected benefit. A change in the assessment of the more-likely-than-not standard could materially impact the Company's results of operations or financial position. The Company's reserve for uncertain tax positions, including interest and net of federal benefits, was \$26.5 million as of May 31, 2020 and \$21.6 million as of May 31, 2019. Refer to Note L of this Item 8 for further discussion of the Company's reserve for uncertain tax positions.

Use of estimates: The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates, judgments, and assumptions that affect reported amounts of assets, liabilities, revenue, and expenses during the reporting period. Actual amounts and results could differ from these estimates.

Recently adopted accounting pronouncements: In February 2016, the Financial Accounting Standards Board ("FASB") issued ASU No. 2016-02. This guidance, as amended by subsequent ASUs on the topic, improves transparency and comparability among companies by recognizing lease assets and lease liabilities on the balance sheet and by disclosing key information about leasing arrangements. The Company adopted the requirements of ASU No. 2016-02 on June 1, 2019, utilizing the alternative transition method provided by the FASB in ASU No. 2018-11, "Leases (Topic 842): Targeted Improvements," and did not restate comparative periods as permitted under the standard.

The adoption of ASU No. 2016-02 increased ROU lease-related assets and liabilities by \$116.4 million and resulted in ROU asset and lease liability balances of \$116.4 million and \$135.3 million, respectively, on the Company's Consolidated Balance Sheets as of June 1, 2019. The difference between the ROU assets and lease liabilities relates to \$18.9 million of unamortized landlord allowances and lease incentives. The Company has updated its control framework for new internal controls and made changes to existing internal controls related to the new standard. The adoption of this standard did not have an impact on the financial covenants set forth in the Company's credit facilities and long-term borrowing agreement. Refer to Note I of this Item 8 for additional information on the new standard.

As part of the adoption of ASU No. 2016-02, the Company elected the following practical expedients: 1) lease vs. non-lease components relating to the real estate asset class; 2) the short-term lease exemption; and 3) the package of practical expedients, which permits the Company to not reassess prior conclusions about lease identification, lease classification, and initial direct costs under the new standard. In addition, the Company elected not to adopt the practical expedient related to hindsight.

In June 2019, the Company also adopted the following ASUs, none of which had a material impact on its consolidated financial statements:

- ASU No. 2018-07, "Compensation Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting;"
- ASU No. 2018-02, "Income Statement Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income;" and
- ASU No. 2017-08, "Receivables Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities."

Recently issued accounting pronouncements: In March 2020, the FASB issued ASU No. 2020-04, "Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting." ASU No. 2020-04 provides guidance on optional expedients for a limited time to ease the operational burden in accounting for (or recognizing the effects of) reference rate reform (LIBOR) on financial reporting. This guidance is effective upon the ASUs issuance on March 12, 2020 and companies may elect to apply the amendments prospectively through December 31, 2022. The Company's credit facilities already contain comparable alternative reference rates that would automatically take effect upon the LIBOR phase out, and it is also reviewing its commercial contracts that may utilize LIBOR as a reference rate. The Company is currently evaluating the potential effects of this guidance on its consolidated financial statements.

In December 2019, the FASB issued ASU No. 2019-12 "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes." ASU No. 2019-12 is intended to simplify various aspects related to accounting for income taxes, eliminates certain exceptions to the general principles in ASC Topic 740 related to intra-period tax allocation, simplifies when companies recognize deferred taxes in an interim period, and clarifies certain aspects of the current guidance to promote consistent application. This guidance is effective for public business entities for fiscal years beginning after December 15, 2020, and for interimperiods within those fiscal years, with early adoption permitted. This guidance is applicable to the Company's fiscal year beginning June 1, 2021. The Company is currently evaluating the potential effects of this guidance on its consolidated financial statements.

In November 2019, the FASB issued ASU No. 2019-08 "Compensation – Stock Compensation (Topic 718) and Revenue from Contracts with Customers (Topic 606): Codification Improvements – Share-Based Consideration Payable to a Customer." ASU No. 2019-08 amends and clarifies ASU No. 2018-07, which was adopted by the Company on June 1, 2019, to require that an entity measure and classify share-based payment awards granted to a customer by applying the guidance in Topic 718. For entities that have already adopted the amendments in ASU No. 2018-07, the amendments in this ASU are effective for fiscal years beginning after December 15, 2019, and for interim periods within those fiscal years, with early adoption permitted. This guidance is applicable to the Company's fiscal year beginning June 1, 2020. The adoption of this guidance will not have a material impact on its consolidated financial statements.

In April 2019, the FASB issued ASU No. 2019-04 "Codification Improvements to Topic 326, Financial Instruments – Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments." ASU No. 2019-04 was issued as part of the FASB's ongoing project to improve upon its ASC, and to clarify and improve areas of guidance related to recently issued standards on credit losses, hedging, and recognition and measurement. This guidance contains several effective dates but is applicable to the Company's fiscal year beginning June 1, 2020. The adoption of this guidance will not have a material impact on its consolidated financial statements.

In November 2018, the FASB issued ASU No. 2018-18, "Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606." ASU No. 2018-18 was issued to resolve the diversity in practice concerning the manner in which entities account for transactions based on their assessment of the economics of a collaborative arrangement. This guidance is effective for public business entities for fiscal years beginning after December 15, 2019, and for interim periods within those fiscal years, with early adoption permitted. This guidance is applicable to the Company's fiscal year beginning June 1, 2020. The adoption of this guidance will not have a material impact on its consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-15, "Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (a consensus of the FASB Emerging Issues Task Force)." ASU No. 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). This guidance is effective for public business entities for fiscal years beginning after December 15, 2019, and for interimperiods within those fiscal years, with early adoption permitted. This guidance is applicable to the Company's fiscal year beginning June 1, 2020. The adoption of this guidance will not have a material impact on its consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-13, "Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement." ASU No. 2018-13 modifies the disclosure requirements in Topic 820, "Fair Value Measurement," based on the FASB Concepts Statement, "Conceptual Framework for Financial Reporting – Chapter 8: Notes to Financial Statements," including consideration of costs and benefits. This guidance is effective for all entities for fiscal years beginning after December 15, 2019, and for interim periods within those fiscal years, with early adoption permitted. This guidance is applicable to the Company's fiscal year beginning June 1, 2020. The adoption of this guidance will not have a material impact on its consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, "Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairments." ASU No. 2017-04 establishes a one-step process for testing goodwill for a decrease in value, requiring a goodwill impairment loss to be measured as the excess of the reporting unit's carrying amount over its fair value. The guidance eliminates the second step of the current two-step process that requires the impairment to be measured as the difference between the implied value of a reporting unit's goodwill with the goodwill's carrying amount. This guidance is effective for public business entities that are U.S. Securities and Exchange Commission ("SEC") filers for its annual or interim goodwill impairment tests in fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual impairment tests after January 1, 2017. This guidance is applicable to the Company's fiscal year beginning June 1, 2020. The Company has completed its assessment of the adoption of this guidance, including changes to internal controls, and it will not have a material impact on its consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, "Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments." ASU No. 2016-13, as amended by subsequent ASUs on the topic and commonly referred to as the current expected credit loss ("CECL") model, requires an organization to measure all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported financial assets. It also requires credit losses related to available-for-sale debt securities to be recorded through an allowance for credit losses. This guidance is effective for public business entities that are U.S. SEC filers for annual periods beginning after December 15, 2019, and for interimperiods within those fiscal years, with early adoption permitted. This guidance is applicable to the Company's fiscal year beginning June 1, 2020 and will be adopted using the modified retrospective approach through a cumulative-effect adjustment to retained earnings.

The Company's CECL implementation group has completed its evaluation, testing, and validation of the necessary CECL model changes to business processes, systems and controls to support the adoption of the new guidance and record expected credit losses to its accounts receivable, PEO unbilled receivables, and available-for-sale ("AFS") debt securities as of June 1, 2020. The ultimate effect of CECL on our credit losses will depend on the size, composition and credit quality of the Company's accounts receivable and investment portfolios, economic conditions at and subsequent to the date of adoption, as well as any refinements to our model, methodology and other key assumptions. The adoption of this guidance will not have a material impact on its consolidated financial statements.

Other recent authoritative guidance issued by the FASB (including technical corrections to the FASB ASC), the American Institute of Certified Public Accountants, and the SEC did not, or are not expected to have a material impact on the Company's consolidated financial statements.

Note B - Service Revenue

Service revenue is primarily attributable to fees for providing services to the Company's clients and is recognized when control of the promised services is transferred to its clients, in an amount that reflects the consideration it expects to receive in exchange for such services. The Company's service revenue is largely attributable to processing services where the fee is based on a fixed amount per processing period or a fixed amount per processing period plus a fee per employee or transaction processed. Insurance Solutions revenue is recognized when commissions are earned on premiums billed and collected. The Company's contracts generally do not contain specified contract periods and may be terminated by either party with 30-days' notice of termination. Sales and other applicable non-payroll related taxes are excluded from service revenue.

Based upon similar operational and economic characteristics, the Company's service revenue is disaggregated by Management Solutions and PEO and Insurance Solutions as reported in the Company's Consolidated Statements of Income and Comprehensive Income. The Company believes these revenue categories depict how the nature, amount, timing, and uncertainty of its revenue and cash flows are affected by economic factors.

Management Solutions Revenue

Management Solutions revenue is primarily derived from the Company's payroll processing, payroll-related ancillary services, and HR outsourcing solutions. Clients can select services on an á la carte basis or as part of various product bundles. The Company's offerings often leverage the information gathered in its base payroll processing service, allowing it to provide comprehensive outsourcing services covering the HCM spectrum. Management Solutions revenue is generally recognized over time as services are performed and the customer simultaneously receives and controls the benefits from these services.

Revenue earned from delivery service for the distribution of certain client payroll checks and reports is also included in Management Solutions revenue in the Company's Consolidated Statements of Income and Comprehensive Income. Delivery service revenue is recognized at a point in time following the delivery of payroll checks, reports, quarter-end packages, and tax returns to the Company's clients.

PEO and Insurance Solutions Revenue

PEO solutions are sold through the Company's registered and licensed subsidiaries, Paychex Business Solutions, LLC, Oasis Outsourcing Group Holdings, L.P. ("Oasis"), and HR Outsourcing Holdings, Inc. ("HROi"), and offer businesses a combined package of services that includes payroll, employer compliance, HR and employee benefits administration, risk management outsourcing, and the on-site availability of a professionally trained HR representative, among other services. The Company serves as a co-employer of its clients' employees, offers health insurance coverage to client employees, and assumes the risks and rewards of workers' compensation insurance and certain health insurance benefit offerings. PEO Solutions revenue is recognized over time as the services are performed and the customer simultaneously receives and controls the benefits from these services. PEO Solutions revenue is reported net of certain pass-through costs billed and incurred, which include payroll wages, payroll taxes, including federal and state unemployment insurance, and certain health insurance benefit premiums, primarily costs related to the Company's guaranteed cost benefit plans. For guaranteed cost benefit plans where the Company does not retain risk, revenues are recorded net of the premiums paid to the insurance carrier. For workers' compensation and certain benefit plans where the Company retains risk, revenues and costs are recorded on a gross basis.

PEO pass-through costs netted within the PEO and Insurance Solutions revenue are as follows:

r	Year ended May 31,							
In billions		2020		2019		2018		
Payroll wages and payroll taxes	\$	20.5	\$	14.5	\$	7.7		
In millions								
State unemployment insurance (included in payroll wages and								
payroll taxes)	\$	85.7	\$	82.3	\$	47.5		
Guaranteed cost benefit plans	\$	647.0	\$	451.8	\$	274.2		

Insurance solutions are sold through the Company's licensed insurance agency, Paychex Insurance Agency, Inc., which provides insurance through a variety of carriers, allowing companies to expand their employee benefit offerings at an affordable cost. Insurance offerings include property and casualty coverage such as workers' compensation, business-owner policies, and commercial auto, and health and benefits coverage, including health, dental, vision, and life. Insurance Solutions revenue reflects commissions earned on insurance services premiums billed and is recognized over time as services are performed and the customer simultaneously receives and controls the benefits from these services.

Contract Balances

The timing of revenue recognition for Management Solutions and PEO and Insurance Solutions is consistent with the invoicing of clients as they both occur during the respective client payroll period for which the services are provided. Therefore, the Company does not recognize a contract asset or liability resulting from the timing of revenue recognition and invoicing.

Payments received for certain of the Company's service offerings for set-up fees are considered a material right. Therefore, the Company defers revenue associated with these performance obligations, which exceed one year, and subsequently recognizes these as future services are provided, over approximately three years to four years.

Changes in deferred revenue related to a material right that exceed one year were as follows:

	Year	ended	Year ended
In millions	May 3	1, 2020	May 31, 2019
Balance, beginning of period	\$	45.7 \$	46.4
Deferral of revenue		24.7	27.6
Recognition of unearned revenue		(27.8)	(28.3)
Balance, end of period	\$	42.6	45.7

Deferred revenue related to a material right is reported in the deferred revenue and other long-term liabilities line items on the Company's Consolidated Balance Sheets. The Company expects to recognize \$21.6 million of deferred revenue related to a material right during its fiscal year ending May 31, 2021 and \$21.0 million of such deferred revenue thereafter.

Assets Recognized from the Costs to Obtain and Fulfill Contracts

The Company recognizes an asset for the incremental costs of obtaining a contract with a client if it is expected that the economic benefit and amortization period will be longer than one year. The Company also recognizes an asset for the costs to fulfill a contract with a client if the costs are specifically identifiable, generate or enhance resources used to satisfy future performance obligations, and are expected to be recovered. Deferred costs to obtain and fulfill contracts are reported in the prepaid expenses and other current assets and long-term deferred costs line items on the Company's Consolidated Balance Sheets. Amortization expense related to costs to obtain and fulfill a contract are included in cost of service revenue and selling, general and administrative expenses in the Company's Consolidated Statements of Income and Comprehensive Income. Refer to the Note A of this Item 8 for additional disclosures on our policies for assets recognized from the costs to obtain and fulfill contracts.

The Company regularly reviews its deferred costs for potential impairment and did not recognize an impairment loss during the fiscal years ended May 31, 2020 or May 31, 2019.

Changes in deferred costs to obtain and fulfill contracts were as follows:

	Year ended May 31, 2020								
		Beginning		Capitalization			Ending		
In millions		balance		of costs		Amortization		balance	
Costs to obtain a contract	\$	464.3	\$	171.7	\$	(162.4)	\$	473.6	
Costs to fulfill a contract	\$	66.1	\$	24.9	\$	(23.7)	\$	67.3	

	Year ended May 31, 2019							
	 Beginning	Capitalizat	ion		Ending			
In millions	balance	of costs		Amortization	balance			
Costs to obtain a contract	\$ 455.0	\$	166.5	\$ (157.2)	\$ 464.3			
Costs to fulfill a contract	\$ 65.4	\$	23.7	\$ (23.0)	\$ 66.1			

Note C — Basic and Diluted Earnings Per Share

Basic and diluted earnings per share were calculated as follows:

	Year ended May 31,					
In millions, except per share amounts		2020		2019		2018
Basic earnings per share:						
Net income	\$	1,098.1	\$	1,034.4	\$	994.1
Weighted-average common shares outstanding		358.5		359.2		359.0
Basic earnings per share	\$	3.06	\$	2.88	\$	2.77
Diluted earnings per share:						
Net income	\$	1,098.1	\$	1,034.4	\$	994.1
Weighted-average common shares outstanding		358.5		359.2		359.0
Dilutive effect of common share equivalents		2.5		2.6		2.5
Weighted-average common shares outstanding, assuming dilution		361.0		361.8		361.5
Diluted earnings per share	\$	3.04	\$	2.86	\$	2.75
Weighted-average anti-dilutive common share equivalents		0.7		0.4		0.7

Weighted-average common share equivalents that had an anti-dilutive impact are excluded from the computation of diluted earnings per share.

In May 2019, the Company announced that its Board approved a program to repurchase up to \$400.0 million of its common stock, with authorization expiring on May 31, 2022. During fiscal 2020, the Company repurchased 2.0 million shares for \$171.9 million under this repurchase program. During fiscal 2019 and fiscal 2018, the Company repurchased 0.7 million shares for \$56.9 million shares for \$143.1 million, respectively, under a previously authorized repurchase program. The purpose of these programs is to manage common stock dilution. All shares of common stock repurchased were retired.

Note D — Business Combinations

Effective December 20, 2018, the Company acquired Oasis. Upon closing, Oasis became a wholly owned subsidiary of the Company. Oasis is an industry leader in providing HR outsourcing services. The purchase price was \$992.2 million, net of \$262.3 million in cash acquired, including \$132.1 million of restricted cash. The acquisition was financed through a combination of cash on hand and the issuance of long-term private placement debt totaling \$800.0 million.

The results of operations for Oasis have been included in the Company's Consolidated Statements of Income and Comprehensive Income since the date of acquisition. During fiscal 2019, Oasis contributed \$163.7 million of total revenues and \$5.1 million of operating income, including the impact of certain one-time charges related to the acquisition and integration of the Oasis business, in the Company's consolidated results of operations. The Company incurred \$5.3 million of acquisition and integration costs associated with Oasis during fiscal 2019, which was included within selling, general and administrative expenses in the Company's Consolidated Statements of Income and Comprehensive Income.

The Company accounted for the acquisition as a business combination using the acquisition method of accounting in accordance with the FASB ASC Topic 805, "Business Combinations." The acquired assets and liabilities of Oasis were recorded at their acquisition-date fair values and were consolidated with those of the Company as of the acquisition date. The purchase accounting was finalized during fiscal 2020.

The following acquisition-date fair values were assigned to the acquired net assets (amounts in millions):

Cash and cash equivalents	\$ 130.2
Restricted cash	66.6
Corporate investments	8.6
Accounts receivable, net of allowance for doubtful accounts	10.7
PEO unbilled receivables, net of advance collections	209.8
Prepaid income taxes	4.8
Prepaid expenses and other current assets	6.0
Long-term restricted cash	65.5
Property and equipment	15.4
Intangible assets	310.9
Goodwill	976.6
Other long-term assets	 1.8
Total Assets	 1,806.9
Accounts payable	45.0
Accrued corporate compensation and related items	11.6
Accrued worksite employee compensation and related items	311.1
Other current liabilities	49.8
Deferred income taxes	55.6
Other long-term liabilities	 79.3
Net Assets	\$ 1,254.5

The Company assigned \$310.9 million to amortizable intangible assets, including customer lists, trade names and trademarks, and non-compete agreements, with a weighted-average amortization period of approximately 10 years. Goodwill in the amount of \$976.6 million was recorded as a result of the acquisition, which is not tax-deductible. Goodwill is attributable to the future economic benefits the Company expects to achieve and expected synergies to be realized when combining the operations of this acquisition into our existing operations.

Pro Forma Financial Results (Unaudited): The following table summarizes the Company's unaudited pro forma operating results for fiscal 2019 and fiscal 2018 as if the acquisition of Oasis had been consummated as of June 1, 2017. The following pro forma information does not include the impact of any costs incurred to integrate Oasis' operations:

	 Year ended May 31,						
	 2019		2018				
Revenues	\$ 3,958.0	\$	3,680.5				
Net income	\$ 1,021.7	\$	984.2				

The unaudited pro forma operating results have been calculated after applying the Company's accounting policies and include the acquisition of Oasis adjusted, net of tax, for depreciation and amortization expense resulting from the determination of fair values of the acquired property and equipment and amortizable intangible assets, the inclusion of interest expense related to borrowings used to fund the acquisition, the amortization of debt issuance costs related to the permanent financing of debt, the elimination of interest income related to available cash used for the acquisition, and the elimination of Oasis' interest expense related to debt not assumed in the acquisition. In addition, the net income above for the fiscal year ended May 31, 2018 includes a non-recurring one-time net tax benefit for the revaluation of net deferred tax liabilities as a result of the Tax Cuts and Jobs Act (the "Tax Act"). Since the pro forma financial results assume the acquisition was consummated on June 1, 2017, the unaudited pro forma operating results for fiscal 2019 excluded \$2.7 million (\$2.0 million, net of tax) of costs incurred by the Company related to the acquisition of Oasis. The unaudited pro forma operating results for fiscal 2018 included \$2.7 million (\$1.7 million, net of tax) of costs incurred by the Company related to the acquisition of Oasis.

Oasis' fiscal year end was the Sunday closest to the calendar year end. Since Oasis and the Company had different fiscal year end dates, the unaudited proforma operating results were prepared based on comparable periods.

The pro forma financial information does not purport to be indicative of the results that would have been obtained had the transactions been completed as of June 1, 2017 for the periods presented and are not intended to be a projection of future results or trends.

Effective February 28, 2018, the Company acquired Lessor Group ("Lessor"). Upon closing, Lessor became a wholly owned subsidiary of the Company. Lessor is a market-leading provider of payroll and HCM software solutions headquartered in Denmark and serving clients in Northern Europe. The purchase price was \$162.5 million, net of \$13.4 million in cash acquired. Goodwill in the amount of \$112.3 million was recorded as a result of the acquisition, which is not tax-deductible.

Effective August 18, 2017, the Company acquired HROi and all of its operating subsidiaries. HROi is a national PEO that provides HR solutions to small- and medium-sized businesses in more than 35 states. The acquisition expands the Company's presence in the PEO industry. The purchase price was \$75.4 million and was comprised of \$42.2 million of cash plus \$33.2 million issued in the form of Paychex common stock. Goodwill in the amount of \$51.1 million was recorded as a result of the acquisition, which is not tax-deductible.

The financial results of Lessor and HROi are included in the Company's consolidated financial statements from the respective dates of acquisition. Subsequent adjustments made to preliminary opening balance sheet amounts before finalization for these acquisitions were immaterial. The Company concluded that these acquisitions were not material to its results of operations and financial position. Therefore, pro forma financial information has been excluded.

Note E - Other (Expense)/Income, Net

Other (expense)/income, net, consisted of the following items:

	Year ended May 31,							
In millions	203	20		2019		2018		
Interest income on corporate investments	\$	12.3	\$	13.3	\$	11.9		
Interest expense		(38.8)		(17.6)		(3.9)		
Other		3.1		1.0		0.6		
Other (expense)/income, net	\$	(23.4)	\$	(3.3)	\$	8.6		

Note F - Stock-Based Compensation Plans

The Paychex, Inc. 2002 Stock Incentive Plan, as amended and restated effective on October 14, 2015 (the "2002 Plan"), authorizes grants of up to 44.1 million shares of the Company's common stock. As of May 31, 2020, there were 17.3 million shares available for future grants under the 2002 Plan.

All stock-based awards to employees are recognized as compensation costs in the consolidated financial statements based on their fair values measured as of the date of grant. These costs are recognized as an expense in the Consolidated Statements of Income and Comprehensive Income on a straight-line basis over the requisite service period and an increase in additional paid-in capital.

Stock-based compensation expense was \$47.4 million, \$46.2 million, and \$44.6 million for fiscal years 2020, 2019, and 2018, respectively. Additional stock-based compensation expense was recognized in fiscal 2018 when the Company decided to maximize its tax benefit by accelerating the vesting of restricted stock units ("RSUs") into fiscal 2018 that would have otherwise vested in August 2018. Related income tax benefits recognized were \$9.0 million, \$8.9 million, and \$14.5 million for the respective fiscal years.

As of May 31, 2020, the total unrecognized compensation cost related to all unvested stock-based awards was \$65.0 million and is expected to be recognized over a weighted-average period of 2.8 years.

Black-Scholes fair value assumptions: The fair value of stock option grants and performance-based stock option grants was estimated at the date of grant using a Black-Scholes option pricing model. The weighted-average assumptions used for valuation under the Black-Scholes option pricing model are as follows:

	rear ended May 51,							
	2020	2020 2019			2018			
Risk-free interest rate	2.0 %		2.9 %		2.1 %			
Dividend yield	3.3 %		3.5 %		3.4 %			
Volatility factor	0.18		0.18		0.17			
Expected option life in years	6.2		6.1		6.1			
Weighted-average grant-date								
fair value of stock options granted (per share)	\$ 9.86	\$	8.87	\$	6.47			

	 Year ended May 31,					
	 2019	2018				
	 Performance-based stock options					
Risk-free interest rate	2.9 %		2.4 %			
Dividend yield	3.5 %		3.3 %			
Volatility factor	0.18		0.18			
Expected option life in years	6.5		6.5			
Weighted-average grant-date						
fair value of stock options granted (per share)	\$ 9.02	\$	7.45			

No performance-based stock options were granted during fiscal 2020.

Risk-free interest rates are yields for zero coupon U.S. Treasury notes maturing approximately at the end of the expected option life. The estimated volatility factor is based on a combination of historical volatility, using stock prices over a period equal to the expected option life, and implied market volatility. The expected option life is based on historical exercise behavior.

Stock options: Stock options entitle the holder to purchase, at the end of the vesting term, a specified number of shares of Paychex common stock at an exercise price per share equal to the closing market price of the common stock on the date of grant. All stock options have a contractual life of ten years from the date of the grant and a vesting schedule as established by the Board. The Company issues new shares of common stock to satisfy stock option exercises. Stock option grants to executives and outside directors are typically approved by the Board in July. Grants of stock options to executives vest one-third per annum. Grants to members of the Board vest after one year. Vesting is generally achieved on these dates with active employment or participation as a member of the Board on the date of vesting.

The following table summarizes stock option activity for fiscal 2020:

	Shares subject	Weighted- average exercise price	Weighted- average remaining contractual	Aggregate intrinsic
In millions, except per share amounts	to options	per share	term (years)	value ⁽¹⁾
Outstanding as of May 31, 2019	4.3	\$ 49.23		
Granted	0.6	\$ 85.22		
Exercised	(0.5)	\$ 44.24		
Forfeited	`—	\$ 72.17		
Expired		\$ 33.34		
Outstanding as of May 31, 2020	4.4	\$ 55.02	5.6	\$ 83.7
Exercisable as of May 31, 2020	3.1	\$ 46.73	4.5	\$ 78.1

(1) Total shares valued at the market price of the underlying stock as of May 31, 2020 less the exercise price.

Other information pertaining to stock option grants is as follows:

		ended May 31	 		
In millions		2020		2019	2018
Total intrinsic value of stock options exercised	\$	22.0	\$	25.7	\$ 9.1
Total grant-date fair value of stock options vested	\$	5.0	\$	4.3	\$ 4.0

RSUs: The Board grants RSUs to certain executive and non-executive employees. An RSU is an agreement to issue shares at the time of vesting with no associated exercise cost for the employee. For each unit granted, the holder will receive one share of Paychex common stock at the time of vesting. If the recipient does not vest in the shares due to leaving Paychex, all shares or units of RSUs, and any dividends accrued thereon, when applicable, will be forfeited and returned to the Company. The Company made a decision in fiscal 2018 to accelerate the vesting of the August 2018 tranche into fiscal 2018.

<u>Time-based RSUs:</u> Time-based RSUs granted to non-executives vest one-fifth per annum over five years, while those granted to executives vest one-third per annum over three years. Vesting is generally achieved on these dates with active employment. The fair value of time-based RSUs is equal to the closing market price of the underlying common stock as of the date of grant, adjusted for the present value of expected dividends over the vesting period. Time-based RSUs may, or may not, earn dividend equivalents depending on the terms of the specific grant.

<u>Performance-based RSUs:</u> Performance-based RSUs primarily have a two-year performance period, after which the number of underlying RSUs earned will be determined based on achievement against pre-established performance targets. The RSUs earned are then subject to a one-year service period. Performance-based RSUs do not earn dividend equivalents during the performance period. The fair value of the RSUs is equal to the closing market price of the underlying common stock as of the date of grant, adjusted for the present value of expected dividends over the performance period.

The following table summarizes RSU activity for fiscal 2020:

In millions, except per share amounts	Time- Based RSUs	Weighted- average grant-date fair value per share	Performance- based RSUs	Weighted- average grant-date fair value per share
Nonvested as of May 31, 2019	1.5	\$ 53.45	_	\$ _
Granted (1)	0.5	\$ 73.28	0.1	\$ 80.59
Vested	(0.5)	\$ 49.49	_	\$ _
Forfeited	(0.1)	\$ 60.26		\$ _
Nonvested as of May 31, 2020	1.4	\$ 61.60	0.1	\$ 80.59

For performance-based RSUs, granted number assumes achievement of performance goals at target. Actual number of shares to be earned may differ from this
amount.

Other information pertaining to RSUs is as follows:

	Year ended May 31,							
In millions, except per share amounts		2020		2019		2018		
Time-based RSUs:								
Weighted-average grant-date fair value per share of RSUs granted	\$	73.28	\$	62.20	\$	51.15		
Weighted-average remaining vesting period (years)		2.9		2.9		3.2		
Total intrinsic value of RSUs vested	\$	40.0	\$	1.2	\$	60.9		
Aggregate intrinsic value of nonvested RSUs (1)	\$	99.9	\$	127.0	\$	69.2		
Total grant-date fair value of RSUs vested	\$	23.6	\$	0.8	\$	42.4		
Performance-based RSUs ⁽²⁾ :								
Weighted-average grant-date fair value per share of RSUs granted	\$	80.59	\$	_	\$	_		
Weighted-average remaining vesting period (years)		2.1		_		_		
Total intrinsic value of RSUs vested	\$	_	\$	_	\$	_		
Aggregate intrinsic value of nonvested RSUs (1)	\$	4.4	\$	_	\$	_		
Total grant-date fair value of RSUs vested	\$	_	\$	_	\$	_		

- (1) Based on the market price of the underlying common stock as of May 31, 2020, 2019 and 2018.
- (2) No performance-based RSUs were granted during fiscal 2019 and fiscal 2018.

Restricted stock awards: The Board approves grants of restricted stock awards to the Company's executives and outside directors. All shares underlying awards of restricted stock are restricted in that they are not transferable until they vest. Recipients of the restricted stock earn dividends, which are paid to the recipient at the time the awards vest. If the recipient does not vest in the shares due to leaving Paychex, all shares of restricted stock, and the dividends accrued thereon, when applicable, will be forfeited and returned to the Company.

<u>Time-based restricted stock awards:</u> Time-based restricted stock awards granted to executives vest one-third per annum. Time-based restricted stock awards granted to outside directors vest on the one-year anniversary of the grant date. Vesting is generally achieved on these dates with active employment or participation as a member of the Board on the date of vesting. The fair value of time-based restricted stock awards is equal to the closing market price of the underlying common stock as of the date of grant.

<u>Performance-based restricted stock awards:</u> Performance-based restricted stock awards primarily have a two-year performance period, after which the number of shares earned will be determined based on achievement against pre-established performance targets. The restricted shares earned are then subject to a one-year service period. Performance-based shares do not earn dividend equivalents during the performance period. The fair value of performance-based shares is equal to the closing market price of the underlying common stock as of the date of grant, adjusted for the present value of expected dividends over the performance period.

The following table summarizes time-based and performance-based restricted stock award activity for fiscal 2020:

In millions, except per share amounts	Time-based shares	Weighted- average grant-date fair value per share	Performance- based shares	Weighted- average grant-date fair value per share
Nonvested as of May 31, 2019	0.1	\$ 64.32	0.4	\$ 58.09
Granted (1)	0.1	\$ 84.46	_	\$ 80.59
Vested	(0.1)	\$ 63.63	(0.1)	\$ 56.97
Forfeited		\$ 73.82		\$ 63.07
Nonvested as of May 31, 2020	0.1	\$ 73.20	0.3	\$ 61.97

For performance-based shares, granted number assumes achievement of performance goals at target. Actual number of shares to be earned may differ from this
amount.

Other information pertaining to time-based and performance-based restricted stock awards is as follows:

	Icai chucu May 31,					
In millions, except per share amounts		2020		2019		2018
Weighted-average grant-date fair value per share of time-based shares granted	\$	84.46	\$	69.80	\$	57.50
Total grant-date fair value of time-based restricted stock vested	\$	3.2	\$	3.0	\$	3.0
Weighted-average grant-date fair value per share of performance-based shares granted	\$	80.59	\$	65.17	\$	53.08
Total grant-date fair value of performance-based restricted stock vested	\$	5.8	\$	5.3	\$	6.6

Vear ended May 31

Long-term Incentive Plan ("LTIP"): The Company has two long-term incentive performance-based stock awards under its LTIP. In July 2011, the Board approved a special award of performance-based non-qualified stock options. Subsequent grants of this award were made upon the hire of new executives. Under this award, stock options were granted to executives with vesting dependent on achievement against long-term strategic and financial objectives. Total stock options earned and vested were based on achievement against pre-established targets for the fiscal year ended May 31, 2016 ("fiscal 2016"). The performance period was completed in fiscal 2016. Although the performance period was completed and the stock options were earned and vested, there are still stock options outstanding as of May 31, 2020.

In July 2016, the Board approved an LTIP award comprised of both performance-based non-qualified stock options and performance-based restricted stock. This award was granted to executives down to the vice president level with vesting dependent on achievement against long-term strategic and financial objectives. Total stock options and restricted shares to be earned are based on achievement against pre-established targets for the fiscal year ending May 31, 2020.

The following table summarizes LTIP performance-based stock option activity for fiscal 2020:

	Shares subject	subject exercise price		Weighted- average remaining contractual	Aggregate intrinsic
In millions, except per share amounts	to options		per share	term (years)	value ⁽¹⁾
Outstanding as of May 31, 2019	1.9	\$	51.09		
Granted	_	\$	_		
Exercised	(0.5)	\$	31.35		
Forfeited	(0.1)	\$	63.17		
Expired	<u>`</u>	\$	_		
Outstanding as of May 31, 2020	1.3	\$	56.13	5.3	\$ 21.8
Exercisable as of May 31, 2020	0.2	\$	31.63	1.1	\$ 9.0

(1) Shares valued at the market price of the underlying stock as of May 31, 2020 less the exercise price.

Other information pertaining to LTIP performance-based stock options is as follows:

		Year e	nded May 31	,	
<u>In millions</u>	2020		2019		2018
Total intrinsic value of stock options exercised	\$ 23.0	\$	8.2	\$	7.9

No performance-based stock options vested in fiscal years 2020, 2019, or 2018.

LTIP performance-based restricted stock do not earn dividend equivalents during the performance period. The fair value of LTIP performance-based restricted stock is equal to the closing market price of the underlying common stock as of the date of grant, adjusted for the present value of expected dividends over the performance period. If the recipient leaves Paychex prior to the vesting date for any reason, the shares of performance-based restricted stock will be forfeited and returned to the Company.

The following table summarizes LTIP performance-based restricted stock activity for fiscal 2020:

In millions, except per share amounts	Restricted shares	Weighted- average grant date fair value per share
Nonvested as of May 31, 2019	0.2	\$ 54.31
Granted	_	\$ _
Exercised	_	\$ _
Forfeited	(0.1)	\$ 56.97
Expired	`—`	\$ _
Nonvested as of May 31, 2020	0.1	\$ 53.97

Non-compensatory employee benefit plan: The Company offers a qualified Employee Stock Purchase Plan ("ESPP") to all employees. The Company's common stock can be purchased through a payroll deduction at a discount to the market price. The qualified ESPP allows for a discount of up to 15% based on the sole discretion of the committee established to administer the plan. For offering periods during fiscal years 2020, 2019, and 2018 the discount was set at 5% of the market price. Transactions under the non-qualified ESPP occurred directly through the Company's transfer agent and no brokerage fees were charged to employees. Transactions under the qualified ESPP occur through the Company's third-party stock plan administrator. The plans have been deemed non-compensatory and therefore, no stock-based compensation costs have been recognized for fiscal years 2020, 2019, or 2018 related to the plan.

Note G—Funds Held for Clients and Corporate Investments

Funds held for clients and corporate investments are as follows:

	May 31, 2020								
In millions	Amortized unrea			Gross unrealized	Gross unrealized			Fair value	
Type of issue:		cost	_	gains	_	losses		varue	
Funds held for clients' money market securities and other									
cash equivalents	\$	683.5	\$	_	\$	_	\$	683.5	
Available-for-sale securities:									
Asset-backed securities		68.0		1.7		_		69.7	
Corporate bonds		649.6		34.1		(0.1)		683.6	
Municipal bonds		1,373.8		37.4		(1.6)		1,409.6	
U.S. government agency and treasury securities		565.8		28.5		` <u></u>		594.3	
Total available-for-sale securities		2,657.2		101.7		(1.7)		2,757.2	
Other		25.4		2.2		(0.4)		27.2	
Total funds held for clients and corporate investments	\$	3,366.1	\$	103.9	\$	(2.1)	\$	3,467.9	

	May 31, 2019							
In millions	A	Amortized cost	_	Gross unrealized gains		Gross unrealized losses		Fair value
Type of issue:								
Funds held for clients' money market securities and other								
cash equivalents	\$	204.5	\$	_	\$	_	\$	204.5
Available-for-sale securities:								
Asset-backed securities		5.3		_		_		5.3
Corporate bonds		442.1		5.3		(0.9)		446.5
Municipal bonds		1,411.6		12.4		(0.5)		1,423.5
U.S. government agency and treasury securities		612.5		4.7		(1.3)		615.9
Variable rate demand notes		1,129.6		_		`—		1,129.6
Total available-for-sale securities		3,601.1		22.4		(2.7)		3,620.8
Other		26.3		1.7		(0.3)		27.7
Total funds held for clients and corporate investments	\$	3,831.9	\$	24.1	\$	(3.0)	\$	3,853.0

Included in funds held for clients' money market securities and other cash equivalents as of May 31, 2020 were bank demand deposit accounts and money market funds.

Included in asset-backed securities as of May 31, 2020 were investment-grade securities primarily collateralized by fixed-rate auto loans and credit card receivables and all have credit ratings of AAA. The primary risk associated with these securities is the collection of the underlying receivables. Collateral on these asset-backed securities has performed as expected through May 31, 2020.

Included in corporate bonds as of May 31, 2020 were investment-grade securities covering a wide range of issuers, industries, and sectors and primarily carry credit ratings of A or better and having maturities ranging from June 2020 through September 2026.

Included in municipal bonds as of May 31, 2020 were general obligation bonds and revenue bonds primarily carrying credit ratings of AA or better and have maturities ranging from June 2020 through September 2027.

A substantial portion of our portfolios are invested in high credit quality securities with ratings of AA or higher, and A-1/P-1 ratings on short-term securities.

The classification of funds held for clients and corporate investments on the Consolidated Balance Sheets is as follows:

	 May	31,	
In millions	2020		2019
Funds held for clients	\$ 3,430.5	\$	3,803.8
Corporate investments	27.2		39.0
Long-term corporate investments	10.2		10.2
Total funds held for clients and corporate investments	\$ 3,467.9	\$	3,853.0

Funds held for clients' money market securities and other cash equivalents is collected from clients before due dates for payroll tax administration services and employee payment services and is invested until remitted to the applicable tax or regulatory agencies or client employees. Based upon the Company's intent and its contractual obligation to clients, these funds are considered restricted until they are remitted to fund these client obligations.

The Company's available-for-sale securities reflected net unrealized gains of \$100.0 million and \$19.7 million as of May 31, 2020 and May 31, 2019, respectively. Included in net unrealized gains as of May 31, 2020 and May 31, 2019 were 19 and 269 available-for-sale securities in an unrealized loss position, representing approximately 2% and 28% of the total securities held, respectively. The available-for-sale securities in an unrealized loss position were as follows:

			May 31	1, 2020		
	loss position	Securities in an unrealized loss position for less than twelve months Securities in an unrealized loss position for more than twelve months				al
In millions Type of issue:	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value
Corporate bonds	\$ (0.1)	\$ 6.5	\$ —	\$ —	\$ (0.1)	\$ 6.5
Municipal bonds	(1.6)	60.3			(1.6)	60.3
Total	\$ (1.7)	\$ 66.8	s —	<u>\$</u>	\$ (1.7)	\$ 66.8

		May 31, 2019										
		Securities in ar				Securities in						
		loss position for less than loss position for more than										
		twelve m	ont	hs		twelve	me	onths		Tot	al	
		Gross				Gross				Gross		
		unrealized		Fair		unrealized		Fair		unrealized		Fair
In millions		losses		value		losses		value		losses		value
Type of issue:												
Corporate bonds	\$	_	\$	1.5	5 \$	(0.9)	\$	133.8	\$	(0.9)	\$	135.3
Municipal bonds		_		3.2	2	(0.5))	249.1		(0.5)		252.3
U.S. government agency and treasury securities				4.1	7	(1.3))	175.6		(1.3)		180.3
Total	\$		\$	9.4	\$	(2.7)	\$	558.5	\$	(2.7)	\$	567.9
	_		_						_			

The Company regularly reviews its investment portfolios to determine if any investment is other-than-temporarily impaired due to changes in credit risk or other potential valuation concerns. The Company believes that the investments held as of May 31, 2020 that had gross unrealized losses of \$1.7 million were not other-than-temporarily impaired. The Company believes that it is probable that the principal and interest will be collected in accordance with contractual terms, and that the unrealized losses on these securities were due to changes in interest rates and were not due to increased credit risk or other valuation concerns. Most of the securities in an unrealized loss position as of May 31, 2020 and May 31, 2019 held an AA rating or better. The Company does not intend to sell these investments until the recovery of their amortized cost basis or maturity, and further believes that it is not more-likely-than-not that it will be required to sell these investments prior to that time. The Company's assessment that an investment is not other-than-temporarily impaired could change in the future due to new developments, including developments related to COVID-19, or changes in the Company's strategies or assumptions related to any particular investment.

Realized gains and losses from the sale of available-for-sale securities were as follows:

	Year ended May 31,							
In millions		2020		2019		2018		
Gross realized gains	\$	11.6	\$	0.6	\$	0.3		
Gross realized losses		(0.3)		(0.6)		(0.2)		
Net realized gains	\$	11.3	\$		\$	0.1		

The amortized cost and fair value of available-for-sale securities that had stated maturities as of May 31, 2020 are shown below by contractual maturity. Expected maturities can differ from contractual maturities because borrowers may have the right to prepay obligations without prepayment penalties.

	Ar	mortized		Fair
In millions		cost		value
Maturity date:				
Due in one year or less	\$	353.4	\$	355.7
Due after one year through three years		700.9		723.5
Due after three years through five years		812.0		850.0
Due after five years		790.9		828.0
Total	\$	2,657.2	\$	2,757.2

Variable rate demand notes ("VRDNs") are primarily categorized as due after five years in the table above as the contractual maturities on these securities are typically 20 to 30 years. Although these securities are issued as long-term securities, they are priced and traded as short-term instruments because of the liquidity provided through the tender feature.

Note H - Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the measurement date. The accounting standards related to fair value measurements include a hierarchy for information and valuations used in measuring fair value that is broken down into three levels based on reliability, as follows:

- . Level 1 valuations are based on quoted prices in active markets for identical instruments that the Company can access at the measurement date.
- Level 2 valuations are based on inputs other than quoted prices included in Level 1 that are observable for the instrument, either directly or indirectly, for substantially the full term of the asset or liability including the following:
 - o quoted prices for similar, but not identical, instruments in active markets;
 - o quoted prices for identical or similar instruments in markets that are not active;
 - o inputs other than quoted prices that are observable for the instrument; or
 - o inputs that are derived principally from or corroborated by observable market data by correlation or other means.
- · Level 3 valuations are based on information that is unobservable and significant to the overall fair value measurement.

The carrying values of cash and cash equivalents, restricted cash and restricted cash equivalents, accounts receivable, net of allowance for doubtful accounts, accounts payable and short-term borrowings, when used by the Company, approximate fair value due to the short maturities of these instruments. Marketable securities included in funds held for clients and corporate investments consist primarily of securities classified as available-for-sale and are recorded at fair value on a recurring basis.

The Company's financial assets and liabilities measured at fair value on a recurring basis were as follows:

	May 31, 2020							
In millions	Carrying value (Fair value)			Quoted prices in active markets (Level 1)		Significant other observable inputs (Level 2)		Significant inobservable inputs (Level 3)
Assets:								
Restricted and unrestricted cash equivalents:								
Money market securities	\$	43.5	\$	43.5	\$	<u> </u>	\$	_
Total restricted and unrestricted cash equivalents	\$	43.5	\$	43.5	\$	_	\$	_
Available-for-sale securities:								
Asset-backed securities	\$	69.7	\$	_	\$	69.7	\$	_
Corporate bonds		683.6		_		683.6		
Municipal bonds		1,409.6		_		1,409.6		_
U.S. government agency and treasury securities		594.3		<u> </u>		594.3		_
Total available-for-sale securities	\$	2,757.2	\$	_	\$	2,757.2	\$	_
Other	\$	27.2	\$	27.2	\$	· —	\$	_
Liabilities:								
Other long-term liabilities	\$	26.8	\$	26.8	\$	_	\$	_

	May 31, 2019							
In millions Assets:		arrying value ir value)	_	Quoted prices in active markets (Level 1)		Significant other observable inputs (Level 2)		Significant inobservable inputs (Level 3)
Restricted and unrestricted cash equivalents:								
Commercial paper	\$	10.0	\$	_	\$	10.0	\$	_
Money market securities		29.2		29.2				_
Total restricted and unrestricted cash equivalents	\$	39.2	\$	29.2	\$	10.0	\$	_
Available-for-sale securities:								
Asset-backed securities	\$	5.3	\$	_	\$	5.3	\$	_
Corporate bonds		446.5				446.5		
Municipal bonds		1,423.5		_		1,423.5		_
U.S. government agency and treasury securities		615.9				615.9		
Variable rate demand notes		1,129.6				1,129.6		
Total available-for-sale securities	\$	3,620.8	\$	_	\$	3,620.8	\$	
Other	\$	27.7	\$	27.7	\$	_	\$	_
Liabilities:								
Other long-term liabilities	\$	27.0	\$	27.0	\$	_	\$	_

In determining the fair value of its assets and liabilities, the Company predominately uses the market approach. Money market securities, which are cash equivalents, are considered Level 1 investments as they are valued based on quoted market prices in active markets. Cash equivalents also include commercial paper which is considered a Level 2 investment as it is valued based on similar, but not identical, instruments in active markets. Available-for-sale securities, including asset-backed securities, corporate bonds, municipal bonds, U.S. government agency and treasury securities, and VRDNs, are included in Level 2 and are valued utilizing inputs obtained from an independent pricing service. To determine the fair value of the Company's Level 2 available-for-sale securities, the independent pricing service uses a variety of inputs, including benchmark yields, reported trades, non-binding broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, reference data, new issue data, and monthly payment information. The Company has not adjusted the prices obtained from the independent pricing service because it believes that they are appropriately valued.

Assets included as other are mutual fund investments, consisting of participants' eligible deferral contributions under the Company's non-qualified and unfunded deferred compensation plans. The related liability is reported as other long-term liabilities. The mutual funds are considered Level 1 investments as they are valued based on quoted market prices in active markets.

The Company's long-term borrowings are accounted for under historical cost. As of May 31, 2020 and May 31, 2019, the fair value of long-term borrowings, net of debt issuance costs was \$441.9 million and \$416.6 million for the Senior Notes, Series A, respectively, and \$448.7 million and \$418.3 million for the Senior Notes, Series B, respectively.

The Company's long-term borrowings are not traded in active markets and as a result its fair values were estimated using a market approach employing Level 2 valuation inputs, including borrowing rates the Company believes are currently available based on loans with similar terms and maturities.

The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

Note I: Leases

The Company's lease portfolio consists primarily of operating leases for office space and equipment and has remaining terms from less than one year up to ten years, with contractual terms expiring from 2020 to 2030. Lease contracts may include one or more renewal options that allow the Company to extend the lease term, typically from one year to five years per each renewal option. The exercise of lease options is generally at the discretion of the Company. None of the Company's leases contain residual value guarantees, substantial restrictions, or covenants.

Supplemental balance sheet information related to the Company's leases were as follows:

\$ in millions	As of	May 31, 2020
Operating lease right-of-use assets, net of accumulated amortization	\$	114.8
Operating lease liabilities, current ⁽¹⁾		37.2
Operating lease liabilities, non-current		96.9
Weighted average remaining lease term (in years)		4.6
Weighted average discount rate		2.06%

⁽¹⁾ The current portion of operating lease liabilities is reported in the other current liabilities line item on the Company's Consolidated Balance Sheets.

The components of lease expense were as follows:

In millions		led May 31, 020
Fixed payment operating lease expense	<u> </u>	38.2
Variable payment operating lease expense		8.6
Short-termlease expense		0.2

Fixed payment lease expense was \$38.2 million, \$42.9 million, and \$39.9 million for fiscal years 2020, 2019, and 2018, respectively.

Supplemental cash flow information related to the Company's leases were as follows:

In millions	Ye	ar ended May 31, 2020
Cash paid for amounts included in the measurement of lease liabilities	\$	41.6
Amortization of ROU assets		34.4
ROU assets obtained in exchange for new operating lease liabilities		21.5
Lease incentives received in the form of tenant allowances and free rent		6.1

Lease incentives received in the form of tenant allowances and free rent was \$6.1 million, \$3.5 million, and \$7.7 million for fiscal years 2020, 2019, and 2018, respectively.

Future lease payments are as follows:

	May 31,				
In millions	2020			2019(1)	
2021	\$	39.4	\$	29.9	
2022		31.6		21.3	
2023		23.7		13.8	
2024		18.5		10.5	
2025		13.9		_	
Thereafter		13.8		10.7	
Total future lease payments		140.9	· ·	86.2	
Less: imputed interest		6.8		<u> </u>	
Less: imputed interest Total operating lease liabilities	\$	134.1	\$	_	
Current portion	\$	37.2	\$	_	
Non-current portion	\$	96.9	\$	_	

⁽¹⁾ Presented in accordance with legacy GAAP, ASC Topic 840, Leases.

As of May 31, 2020, the Company has entered into two lease agreements that have not yet commenced for terms up to ten years. These leases will require lease payments over their terms of approximately \$6.8 million.

Note J — Property and Equipment, Net of Accumulated Depreciation

The components of property and equipment, at cost, consisted of the following:

	 May 31,			
In millions	2020		2019	
Land and improvements	\$ 10.8	\$	10.8	
Buildings and improvements	166.5		162.9	
Data processing equipment	222.4		221.6	
Software (1)	690.9		626.6	
Furniture, fixtures, and equipment	116.3		117.2	
Leasehold improvements	110.6		105.4	
Construction in progress (1)	 47.1		30.3	
Total property and equipment, gross	1,364.6		1,274.8	
Less: Accumulated depreciation	957.2		866.1	
Property and equipment, net of accumulated depreciation	\$ 407.4	\$	408.7	

⁽¹⁾ Software includes both purchased software and costs capitalized related to internally developed software placed in service. Capitalized costs related to internally developed software that has not yet been placed in service is included in construction in progress.

Depreciation expense was \$127.8 million, \$125.7 million, and \$116.9 million for fiscal years 2020, 2019, and 2018, respectively.

Note K—Goodwill and Intangible Assets, Net of Accumulated Amortization

Goodwill and changes in goodwill as of and for the years ended May 31, 2020 and May 31, 2019 were as follows:

	May 31,			
In millions		2020		2019
Balance, beginning of fiscal year	\$	1,782.6	\$	814.0
Changes during the period:				
Goodwill acquired		4.1		972.1
Acquisition accounting adjustments		4.5		1.6
Currency translation adjustment		(0.1)		(5.1)
Balance, end of fiscal year	\$	1,791.1	\$	1,782.6

Goodwill acquired in fiscal 2019 related to the December 2018 acquisition of Oasis. Refer to Note D of this Item 8 for further details.

The Company had certain intangible assets on its Consolidated Balance Sheets. The components of intangible assets, at cost, consisted of the following:

	May 31,			
In millions		2020		2019
Client lists	\$	618.4	\$	608.2
Other intangible assets		23.3		23.0
Total intangible assets, gross		641.7		631.2
Less: Accumulated amortization		311.1		232.1
Intangible assets, net of accumulated amortization	\$	330.6	\$	399.1

During fiscal 2020, the Company acquired customer lists with a weighted-average amortization of 7.7 years. Amortization expense relating to intangible assets was \$81.9 million, \$55.8 million, and \$21.1 million for fiscal years 2020, 2019, and 2018, respectively.

The Company did not recognize an impairment loss as it relates to its goodwill or intangible assets during the fiscal years 2020, 2019, or 2018.

The estimated amortization expense for the next five fiscal years relating to intangible asset balances is as follows:

In millions	Estimated an	ortization
Year ending May 31,	exper	nse
2021	\$	65.8
2022		60.6
2023		56.0
2024		53.1
2025		50.8

Note L — Income Taxes

The components of deferred tax assets and liabilities are as follows:

	Ma	y 31,
In millions	2020	2019
Deferred tax assets:		
Compensation and employee benefit liabilities	\$ 37.6	\$ 36.3
Other current liabilities	8.0	8.8
Tax credit carry forward	0.2	0.2
Stock-based compensation	16.8	17.5
Leases	34.2	_
Net operating loss ("NOL") carry forwards	9.7	10.6
Tax benefit of uncertain tax positions	7.0	5.7
Other	0.5	1.2
Gross deferred tax assets	114.0	80.3
Deferred tax liabilities:		
Deferred contract costs	122.8	119.7
Capitalized software	45.7	42.8
Depreciation	11.4	3.0
Goodwill and intangible assets	117.4	127.5
Operating lease right-of-use assets	29.3	_
Revenue not subject to current taxes	3.7	5.2
Unrealized gains on available-for-sale securities	24.5	5.2
Gross deferred tax liabilities	354.8	303.4
Net deferred tax liability	\$ (240.8)	\$ (223.1)

The deferred tax asset related to NOL carry forward is comprised of \$4.4 million of federal NOL carry forwards and \$5.3 million of state NOL carry forwards. The federal NOL carry forwards were acquired through various acquisitions and expire between the fiscal years ending May 31, 2022 and May 31, 2037. The state NOL carry forwards expire between the fiscal years ending May 31, 2021 through May 31, 2039.

The components of the provision for income taxes are as follows:

		Year ended May 31,			
In millions		2020	2019	2018	
Current:					
Federal	\$	265.5	\$ 258.2	\$ 289.1	
State		77.5	70.7	54.1	
Total current		343.0	328.9	343.2	
Deferred:					
Federal		(0.5)	0.7	(38.0)	
State	_	(3.5)	4.0	0.8	
Total deferred		(4.0)	4.7	(37.2)	
Income taxes	<u>\$</u>	339.0	\$ 333.6	\$ 306.0	

A reconciliation of the U.S. federal statutory tax rate to the Company's effective income tax rate is as follows:

	Year ended May 31,				
	2020	2019	2018		
Federal statutory tax rate	21.0 %	21.0 %	29.2 %		
Increase/(decrease) resulting from:					
Statutory tax rate reduction resulting from the Tax Act	<u> </u>	— %	(2.0)%		
State income taxes, net of federal tax benefit	3.9 %	4.3 %	3.0 %		
Section 199 - Qualified production activities	— %	 %	(0.3)%		
Tax-exempt municipal bond interest	(0.4)%	(0.5)%	(1.1)%		
Stock option windfall benefit	(0.8)%	(0.5)%	(0.8)%		
Other items, including adoption of ASC 606	(0.1)%	0.1 %	(4.5)%		
Effective income tax rate	23.6 %	24.4 %	23.5 %		

The effective income tax rates in all periods were impacted by recognition of net discrete tax benefits related to employee stock-based compensation payments. In fiscal 2019, the effective income tax rate included discrete tax expense for changes in tax reserves and the revaluation of deferred tax balances for legislative updates. In fiscal 2018, as a result of the Tax Act, we recorded a non-recurring net tax benefit for the revaluation of our net deferred tax liabilities.

The Tax Act made broad and complex changes to U.S. federal corporate income taxation including, but not limited to: (i) reducing the statutory corporate tax rate from 35% to 21% (a blended statutory tax rate of 29.2% for fiscal 2018); (ii) repeal of the Section 199 qualified production activities deduction; (iii) creating new or furthering limitations to the deductibility of certain officer compensation, interest, meals, entertainment and other expenses; and (iv) changing from a worldwide to a territorial taxation system. As of May 31, 2019, the Company's accounting for the impact of the Tax Act was completed.

As a result of the Tax Act, the Company derived estimated tax benefits of \$160.5 million, including a net tax benefit of \$83.5 million related to the revaluation of the Company's net deferred tax liabilities and a net tax benefit of \$77.0 million related to the reduction in the Company's statutory income tax rate for fiscal 2018 applied to income before taxes. These amounts totaled \$0.23 per diluted share and \$0.21 per diluted share, respectively.

Uncertain income tax positions: The Company is subject to U.S. federal income tax, numerous local and state tax jurisdictions within the U.S., and taxes in Europe. The Company maintains a reserve for uncertain tax positions. As of May 31, 2020 and May 31, 2019, the total reserve for uncertain tax positions, including interest and net of federal benefits, was \$26.5 million and \$21.6 million, respectively, and was included in long-term liabilities on the Consolidated Balance Sheets.

A reconciliation of the beginning and ending amounts of the Company's gross unrecognized tax benefits, not including interest or other potential offsetting effects, is as follows:

	Year ended May 31,					
In millions	202	20		2019		2018
Balance as of beginning of fiscal year	\$	22.1	\$	14.9	\$	43.7
Additions for taxpositions of the current year		4.1		3.8		2.3
Additions for tax positions of prior years		1.2		5.2		0.1
Reductions for tax positions of prior years		(0.6)		_		(1.2)
Settlements with tax authorities		_		(1.2)		(28.6)
Expiration of the statute of limitations		(0.6)		(0.6)		(1.4)
Balance as of end of fiscal year	\$	26.2	\$	22.1	\$	14.9

In May 2018, the Company settled its IRS examination for fiscal 2012 through fiscal 2017. As a result of the settlement, the reserve for uncertain tax positions was decreased by \$27.2 million and income tax expense of \$2.7 million was recorded.

The reserve as of May 31, 2020 substantially relates to the Company's uncertain tax positions for certain state income tax matters. The Company believes the reserve for uncertain tax positions, including interest and net of federal benefits, of \$26.5 million as of May 31, 2020 adequately covers open tax years and uncertain tax positions up to and including fiscal 2020 for major taxing jurisdictions. As of May 31, 2020 and May 31, 2019, the entire \$26.5 million and \$21.6 million, respectively, of unrecognized tax benefits, including interest and net of federal benefit, if recognized, would impact the Company's effective income tax rate.

The Company has concluded all U.S. federal income tax matters through fiscal 2017. With limited exception, state income tax audits by taxing authorities are closed through fiscal 2014, primarily due to expiration of the statute of limitations.

The Company continues to follow its policy of recognizing interest and penalties accrued on tax positions as a component of income taxes on the Consolidated Statements of Income and Comprehensive Income. The amount of accrued interest and penalties associated with the Company's taxpositions is immaterial to the Consolidated Balance Sheets. The amount of interest and penalties recognized for fiscal years 2020, 2019, and 2018 was immaterial to the Company's results of operations.

Note M — Accumulated Other Comprehensive Income/(Loss)

The changes in accumulated other comprehensive income/(loss) on the Company's Consolidated Balance Sheets are as follows:

	Year ended May 31,					
In millions		2020		2019		2018
Beginning balance	\$	0.1	\$	(36.2)	\$	20.0
Other comprehensive income/(loss):						
Unrealized gains/(losses) on securities, net of tax		68.9		44.0		(47.6)
Reclassification adjustment for the net gain on sale of available-for-sale						
securities realized in net income, net of tax		(8.5)		_		_
Foreign currency translation adjustment		(4.0)		(7.7)		(8.6)
Total other comprehensive income/(loss), net of tax		56.4		36.3		(56.2)
Ending balance	\$	56.5	\$	0.1	\$	(36.2)
Total tax expense/(benefit) included in other comprehensive income/(loss)	\$	19.8	\$	14.2	\$	(22.6)

Reclassification adjustments out of accumulated other comprehensive income/(loss) are for realized gains and losses on the sale of available-for-sale securities and are reflected in interest on funds held for clients and other (expense)/income, net on the Consolidated Statements of Income and Comprehensive Income.

Note N - Short-term Financing

The Company maintains committed and unsecured credit facilities and irrevocable letters of credit as part of its normal and recurring business operations. The purpose of these credit facilities is to meet short-term funding requirements, finance working capital needs and for general corporate purposes. The Company typically borrows on an overnight or short-term basis on its credit facilities.

Details of the Company's credit facilities are as follows:

		Maximum Amount			Amount O May	ding																								
§ in millions	Expiration Date	Available		<u>Available</u>		Available		Available		Available		Available		Available		Available		Available		Available		<u>te</u> <u>Available</u>		ion Date Available			2020		2019	
Credit facilities:																														
JP Morgan Chase Bank, N.A. ("JPM") ⁽¹⁾⁽²⁾	July 31, 2024	\$	1,000.0	\$	-	\$		-																						
JPM ⁽¹⁾	August 17, 2022	\$	500.0		-			_																						
PNC Bank, National Association ("PNC") (weighted-average interest rate																														
of 1.28% at May 31, 2020 ⁽³⁾	February 6, 2023	\$	250.0		5.1																									
Outstanding short-term financing (4)				\$	5.1	\$		_																						

JPM acts as the administrative agent for this syndicated credit facility.

JEIN acts as the administrative agent for this syndicated credit facility. This agreement replaced the Company's predecessor five-year unsecured \$1.0 billion credit facility dated August 5, 2015, which was terminated on July 31, 2019. This agreement replaced the Company's predecessor four-year unsecured \$150.0 million credit facility dated March 17, 2016, which was terminated on February 6, 2020. The total amount available under these credit facilities as of May 31, 2020 was approximately \$1.8 billion. Amounts under the PNC credit facility remain outstanding as of the date of this report.

Subsequent to May 31, 2020, the Company borrowed twice on an overnight basis, \$89.5 million on a weighted-average basis under its PNC credit facility.

Upon the expiration date of any credit facility, any borrowings outstanding under that facility will mature and be payable on such date.

Interest rates on each of the Company's credit facilities can be based upon (1) an alternate base rate that is established by the lending institution at the highest of several publicly available interest rates, plus an applicable interest rate margin, or (2) at our election, the adjusted London Interbank Offered Rate ("LIBOR") or an alternate interest rate as determined by the administrative agent, plus an applicable interest rate margin. The Company is also required to pay a commitment fee, ranging from 0.05% to 0.15%, related to the unutilized portion of each credit facility. The commitment fee is determined on a sliding-scale basis based upon the Company's consolidated leverage ratio.

Obligations under the credit facilities are guaranteed by the Company and certain of its subsidiaries. The credit facilities contain financial and operational covenants with which the Company must maintain compliance. The Company's ability to borrow under the credit facilities may be restricted in the event of certain covenant breaches or events of default. In addition, the terms of the credit facilities could restrict the Company's ability to engage in certain business transactions. The Company was in compliance with all of these covenants as of May 31, 2020.

Certain lenders under these credit facilities, and their respective affiliates, have performed, and may in the future perform for the Company, various commercial banking, investment banking, underwriting, and other financial advisory services, for which they have received, and will continue to receive in the future, customary fees and expenses.

Letters of credit: The Company had irrevocable standby letters of credit outstanding \$147.9 million and \$148.9 million as of May 31, 2020 and May 31, 2019, respectively, required to secure commitments for certain insurance policies. The letters of credit expire at various dates between June 2020 and January 2022. No amounts were outstanding on these letters of credit during fiscal 2020 or fiscal 2019, or as of May 31, 2020 and May 31, 2019. Subsequent to May 31, 2020, letters of credit expiring in June and July 2020 were renewed through June and July 2021, respectively.

Note O - Long-term Financing

On March 13, 2019, the Company and its Paychex of New York LLC ("PoNY") subsidiary completed the private placement of Senior Notes, Series A in an aggregate principal amount of \$400.0 million due on March 13, 2026, and Senior Notes, Series B in an aggregate principal amount of \$400.0 million due on March 13, 2029 (collectively the "Notes"), pursuant to its Note Purchase and Guarantee Agreement (the "Agreement") among the Company, PoNY, and the respective purchasers. Proceeds from the Notes were used to pay off \$800.0 million in short-termborrowings under the Company's JPM credit facilities used to temporarily finance the acquisition of Oasis.

Long-term debt, at amortized cost, consisted of the following:

	May	ıy 31,			
In millions	2020			2019	
Senior Notes, Series A	\$	400.0	\$	400.0	
Senior Notes, Series B		400.0		400.0	
Total long-term borrowings		800.0		800.0	
Less: Debt issuance costs, net of accumulated amortization		(3.2)		(3.6)	
Long-term borrowings, net of debt issuance costs	\$	796.8	\$	796.4	

Certain information related to the Senior Notes for fiscal 2020 and fiscal 2019 are as follows:

	Senior Notes Series A	Senior Notes Series B
Stated interest rate	4.07%	4.25%
Effective interest rate	4.16%	4.32%
Interest rate type	Fixed	Fixed
Interest payment dates	Semi-annual, in arrears	Semi-annual, in arrears
Principal payment dates	March 13, 2026	March 13, 2029
Note type	Unsecured	Unsecured

The effective interest rates for each note series includes the interest on the note and amortization of debt issuance costs.

Payment of all amounts due with respect to the Notes and performance under the Agreement is guaranteed by the Company, PoNY and certain other subsidiaries of the Company. The Company may, at its option, prepay at any time all, or any part of, the Notes, subject to certain conditions as described in the Agreement.

The Agreement contains customary representations, warranties, affirmative and negative covenants, including financial covenants that are usual and customary for such arrangements. The Company was in compliance with all of these covenants as of May 31, 2020.

Note P - Supplemental Cash Flow Information

Income taxes paid were \$298.8 million, \$317.9 million, and \$319.1 million for fiscal 2020, 2019, and 2018, respectively.

Interest expense paid was \$38.0 million, \$10.4 million, and \$4.0 million for fiscal 2020, 2019, and 2018, respectively.

\$33.2 million in Paychex common stock was issued in connection with the Company's acquisition of HROi in fiscal 2018.

Note Q — Employee Benefit Plans

401(k) plan: The Company maintains a contributory savings plan that qualifies under section 401(k) of the Internal Revenue Code. The Paychex, Inc. 401(k) Incentive Retirement Plan (the "Plan") allows all employees to immediately participate in the salary deferral portion of the Plan, contributing up to a maximum of 50% of their salary, subject to Internal Revenue Service limitations. Employees who have completed one year of service and a minimum of 1,000 hours worked are eligible to receive a Company matching contribution, when such contribution is in effect. The Company provided a matching contribution of 50% of up to 8% of eligible pay that an employee contributed to the Plan through March 29, 2018. Beginning March 30, 2018, the Company provides a matching contribution of 100% of the first 3% and 50% on the next 2% of eligible pay for a total matching contribution of 4%. Company contributions to the Plan for fiscal years 2020, 2019, and 2018 were \$30.1 million, \$29.3 million, and \$23.6 million, respectively.

The Plan is 100% participant directed. Plan participants can fully diversify their portfolios by choosing from any or all investment fund choices in the Plan. Transfers in and out of investment funds, including the Paychex, Inc. Employee Stock Ownership Plan Stock Fund, are not restricted, with the exception of certain restricted trading periods for individuals designated as insiders as specified in the Company's Insider Trading Policy. The Company match contribution, when in effect, follows the same fund elections as the employee compensation deferrals.

Deferred compensation plans: The Company and certain subsidiaries offer non-qualified and unfunded deferred compensation plans to a select group of key employees, executive officers, and outside directors. Eligible employees are provided with the opportunity to defer up to 50% of their annual base salary and bonus and outside directors may defer 100% of their Board cash compensation. Gains and losses are credited based on the participant's election of a variety of investment choices. The Company does not match any participant deferral or guarantee its return. Distributions are paid at one of the following dates selected by the participant: the participant's termination date, the date the participant retires from any active employment, or a designated specific date. The amounts accrued under these plans were \$26.8 million and \$27.0 million as of May 31, 2020 and May 31, 2019, respectively, and are reflected in other long-term liabilities on the accompanying Consolidated Balance Sheets.

Note R — Commitments and Contingencies

Contingencies: The Company is subject to various claims and legal matters that arise in the normal course of its business. These include disputes or potential disputes related to breach of contract, tort, employment-related claims, tax claims, patent, statutory, and other matters.

The Company's management currently believes that resolution of any outstanding legal matters will not have a material adverse effect on the Company's financial position or results of operations. However, legal matters are subject to inherent uncertainties and there exists the possibility that the ultimate resolution of these matters could have a material adverse impact on the Company's financial position and the results of operations in the period in which any such effect is recorded

Other commitments: As of May 31, 2020, the Company had outstanding commitments under purchase orders, legally binding contractual arrangements, and commitments under existing workers' compensation insurance agreements with minimum future payment obligations of approximately \$306.6 million, including \$5.0 million of commitments to purchase capital assets. These minimum future payment obligations relate to the following fiscal years:

Minimum

	Millimum
In millions	payment
Year ending May 31,	 obligation
2021	\$ 146.5
2022	59.1
2023	40.3
2024	17.1
2025	6.7
Thereafter	36.9

In the normal course of business, the Company makes representations and warranties that guarantee the performance of services under service arrangements with clients. Historically, there have been no material losses related to such guarantees. The Company has also entered into indemnification agreements with its officers and directors, which require the Company to defend and, if necessary, indemnify these individuals for certain pending or future claims as they relate to their services provided to the Company.

The Company currently self-insures the deductible portion of various insured exposures under certain corporate and PEO employee benefit plans. The Company's estimated loss exposure under these insurance arrangements is recorded in other current liabilities on the Consolidated Balance Sheets. Historically, the amounts accrued have not been material and were not material as of May 31, 2020. The Company also maintains insurance coverage in addition to its purchased primary insurance policies for gap coverage for employment practices liability, errors and omissions, warranty liability, theft and embezzlement, cyber threats, and acts of terrorism; and capacity for deductibles and self-insured retentions through its captive insurance company.

Note S — Quarterly Financial Data (Unaudited) In millions, except per share amounts

outstanding, assuming dilution Cash dividends per common share

Total net realized gains/(losses)⁽²⁾

				Three Mo	nths					
Fiscal 2020		August 31		November 30		February 29		May 31		Full Year
Service revenue	\$	971.5	\$	970.8	\$	1,121.5	\$	889.8	\$	3,953.6
Interest on funds held for clients		20.5		19.9		21.2		25.3		86.9
Total revenue	\$	992.0	\$	990.7	\$	1,142.7	\$	915.1	\$	4,040.5
Operating income	\$	349.1	\$	341.7	\$	470.1	\$	299.6	\$	1,460.5
Other expense, net		(4.8)		(4.7)		(5.9)		(8.0)		(23.4)
Income before income taxes		344.3		337.0		464.2		291.6		1,437.1
Income taxes		80.1		78.3		109.7		70.9		339.0
Net income	\$	264.2	\$	258.7	\$	354.5	\$	220.7	\$	1,098.1
Basic earnings per share ⁽¹⁾	\$	0.74	\$	0.72	\$	0.99	\$	0.62	\$	3.06
Diluted earnings per share ⁽¹⁾	\$	0.73	\$	0.72	\$	0.98	\$	0.61	\$	3.04
Weighted-average common shares										
outstanding		358.6		358.1		358.5		358.7		358.5
Weighted-average common shares										
outstanding, assuming dilution		361.5		360.6		361.0		360.7		361.0
Cash dividends per common share	\$	0.62	\$	0.62	\$	0.62	\$	0.62	\$	2.48
Total net realized gains ⁽²⁾	\$	0.9	\$	0.9	\$	0.6	\$	8.9	\$	11.3
	Three Months Ended									
Fiscal 2019		August 31		November 30	iitiis	February 28		May 31		Full Year
Service revenue	\$	845.7	\$	840.6	\$	1,047.4	\$	958.2	\$	3,691.9
Interest on funds held for clients		17.1		18.3		23.0		22.2		80.6
Total revenue	\$	862.8	\$	858.9	\$	1,070.4	\$	980.4	\$	3,772.5
Operating income	\$	320.3	\$	307.2	\$	429.3	\$	314.5	\$	1,371.3
Other income/(expense), net		2.3		2.1		(3.7)		(4.0)		(3.3)
Income before income taxes		322.6		309.3		425.6		310.5		1,368.0
Income taxes		79.0		73.5		101.0		80.1		333.6
Net income	\$	243.6	\$	235.8	\$	324.6	\$	230.4	\$	1,034.4
Basic earnings per share ⁽¹⁾	\$	0.68	\$	0.66	\$	0.90	\$	0.64	\$	2.88
Diluted earnings per share ⁽¹⁾	\$	0.67	\$	0.65	\$	0.90	\$	0.64	\$	2.86
Weighted-average common shares										
outstanding		359.1		359.1		359.2		359.4		359.2
Weighted-average common shares										

⁽¹⁾ Each quarter is a discrete period and the sum of the four quarters' basic and diluted earnings per share amounts may not equal the full year amount.

361.5

0.56 \$

0.1 \$

\$

\$

361.5

0.56 \$

(0.3) \$

361.6

0.56

0.1 \$

362.5

0.62 \$

0.1 \$

361.8

2.30

⁽²⁾ Total net realized gains/(losses) on the combined funds held for clients and corporate investment portfolios.

PAYCHEX, INC.

CONSOLIDATED FINANCIAL STATEMENT SCHEDULE FOR THE YEAR ENDED MAY 31, (In millions)

Description	Balance as of beginning of fiscal year	Additions charged to expenses	Additions to/ (deductions from) other accounts ⁽¹⁾	Costs and deductions ⁽²⁾	Balance as of end of fiscal year
2020					
Allowance for doubtful accounts	\$ 7.5	\$ 7.8	\$ 3.0	\$ 5.8	\$ 12.5
Reserve for client fund losses	\$ 2.7	\$ 5.2	\$ (3.0)	\$ 4.9	\$ _
2019					
Allowance for doubtful accounts	\$ 7.0	\$ 3.3	\$ 0.7	\$ 3.5	\$ 7.5
Reserve for client fund losses	\$ 2.4	\$ 3.7	\$ _	\$ 3.4	\$ 2.7
2018					
Allowance for doubtful accounts	\$ 6.0	\$ 3.6	\$ _	\$ 2.6	\$ 7.0
Reserve for client fund losses	\$ 3.0	\$ 3.1	\$ _	\$ 3.7	\$ 2.4

- (1) Amounts related to business acquisitions in fiscal 2019 and the reclassification of the reserve for client fund losses in fiscal 2020.
- (2) Uncollectible amounts written off, net of recoveries, and other adjustments.

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

None.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures: Disclosure controls and procedures are designed with the objective of ensuring that information required to be disclosed in the Company's reports filed under the Exchange Act, such as this report, is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures are also designed with the objective of ensuring that such information is accumulated and communicated to the Company's management, including the Company's principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures: As of the end of the period covered by this report, the Company carried out an evaluation, under the supervision and with the participation of the Company's principal executive officer and principal financial officer, of the effectiveness of disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Based on such evaluation, the Company's principal executive officer and principal financial officer have concluded that as of May 31, 2020, the end of the period covered by this report, the Company's disclosure controls and procedures were effective.

Changes in Internal Control Over Financial Reporting: The Company also carried out an evaluation of the internal control over financial reporting to determine whether any changes occurred during the fiscal quarter ended May 31, 2020. Based on such evaluation, there have been no changes in the Company's internal control over financial reporting that occurred during the Company's most recently completed fiscal quarter ended May 31, 2020, that materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Internal Control Over Financial Reporting: The Report on Management's Assessment of Internal Control Over Financial Reporting and the Report of Independent Registered Public Accounting Firm are included in Part II, Item 8 of this Form 10-K.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The following table shows the executive officers of the Company as of May 31, 2020, and information regarding their positions and business experience. Such executive officers hold principal policy-making powers at the Company.

Name	Age	Position and business experience
Martin Mucci	60	Mr. Mucci has served as President and Chief Executive Officer of the Company since September 2010. Mr. Mucci joined the Company in 2002 as Senior Vice President, Operations. Prior to joining Paychex, he held senior level positions with Frontier Communications of Rochester, a telecommunications company, including President of Telephone Operations and Chief Executive Officer of Frontier Telephone of Rochester, during his 20-year career. Mr. Mucci was a director of Cbeyond, Inc. until it was purchased by Birch Communications in July 2014. He is a Trustee Emeritus of St. John Fisher College. He also serves as a director of the Company and is chairman of the Executive Committee.
Efrain Rivera	63	Mr. Rivera joined Paychex in June 2011 as Senior Vice President, Chief Financial Officer, and Treasurer. Prior to joining the Company, Mr. Rivera served as Vice President of Finance and Administration for Houghton College from 2009 to 2011. He previously served for over twenty years with Bausch & Lomb Incorporated, a world leader in the development, manufacture, and marketing of eye health products, most recently as Corporate Vice President and Chief Financial Officer from 2007 to 2009.
Mark A. Bottini	59	Mr. Bottini joined Paychex in October 2011 as Senior Vice President of Sales. From 2008 to 2011, Mr. Bottini served as Vice President of Sales for Ricoh, North America, a provider of advanced office technology and innovative document imaging products, services, and software. He assumed his most recent position with Ricoh when Ricoh acquired IKON Office Solutions, Inc. During his nearly 20 years with IKON, Mr. Bottini served in a variety of sales leadership and field management roles.
John B. Gibson	54	Mr. Gibson joined Paychex in May 2013 as Senior Vice President of Service. Prior to joining the Company, Mr. Gibson served as President and Chief Executive Officer for AlphaStaff, a national provider of human resource outsourcing services to small- and medium-sized businesses. Prior to joining AlphaStaff in 2010, Mr. Gibson was President of the HR Management Division of Convergys, a global leader in technology, outsourcing, and business services. From 2004 to 2007, he served as Senior Vice President of Global Operations and Client Services of Convergys.
Michael E. Gioja	62	Mr. Gioja was named Senior Vice President of Information Technology and Product Development in July 2011. Mr. Gioja has been with the Company since November 2008 and previously served as Senior Vice President of Information, Technology, Product Management, and Development and Vice President of Product Management. Previously, he was Chief Information Officer and Executive Vice President of Products and Services for Workstream, Inc., a provider of on-demand enterprise talent management solutions and services.

Name	Age	Position and business experience
Stephanie L. Schaeffer	50	Ms. Schaeffer was named Vice President and Chief Legal Officer in January 2006. In 2011, she was appointed Corporate Secretary. She joined Paychex in 2000 as Corporate Counsel and was promoted to Director of Legal Affairs in 2004. In her current role, she is responsible for overseeing all of the Company's legal functions, including litigation, corporate governance, and regulatory matters.
Robert L. Schrader	48	Mr. Schrader was named Vice President and Controller in July 2019. He joined the Company in December 2014 and previously held roles as Senior Director of Financial Planning and Analysis and Director of Internal Audit. Prior to joining Paychex, he served as a Chief Financial Officer for Unither Manufacturing, LLC, and held various senior management positions during his ten-year career at Bausch & Lomb, including Vice President of Finance and Controller of Global Quality and Operations. Previously in his career, he held leadership roles with a public accounting firm.
Laurie L. Zaucha	55	Ms. Zaucha joined the Company in March 2011 and was named Vice President of Human Resources and Organizational Development. Prior to joining the Company, she served as Senior Vice President of Human Resources for Paetec Holding Corp., a Fortune 1000 telecommunications company, from 2007 to 2011. From 2003 to 2007, she held various executive positions at Bausch & Lomb Incorporated.

The additional information required by this item is set forth in the Company's Definitive Proxy Statement for its 2020 Annual Meeting of Stockholders, anticipated to be held on or about October 15, 2020, in the sections "PROPOSAL 1: ELECTION OF DIRECTORS FOR A ONE-YEAR TERM," "CORPORATE GOVERNANCE," and "CODE OF BUSINESS ETHICS AND CONDUCT" and is incorporated herein by reference.

Item 11. Executive Compensation

The information required by this item is set forth in the Company's Definitive Proxy Statement for its 2020 Annual Meeting of Stockholders, anticipated to be held on or about October 15, 2020, in the sections "COMPENSATION DISCUSSION AND ANALYSIS," "NAMED EXECUTIVE OFFICER COMPENSATION," "DIRECTOR COMPENSATION FOR THE FISCAL YEAR ENDED May 31, 2020," "THE GOVERNANCE AND COMPENSATION COMMITTEE REPORT" and the sub-heading "Governance and Compensation Committee Interlocks and Insider Participation" within the section "CORPORATE GOVERNANCE" and is incorporated herein by reference.

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

The information required by this item is set forth below and in the Company's Definitive Proxy Statement for its 2020 Annual Meeting of Stockholders, anticipated to be held on or about October 15, 2020, under the section "BENEFICIAL OWNERSHIP OF PAYCHEX COMMON STOCK," and is incorporated herein by reference.

The Company maintains equity compensation plans in the form of stock incentive plans. Under the Paychex, Inc. 2002 Stock Incentive Plan, as amended and restated effective October 14, 2015 (the "2002 Plan"), non-qualified or incentive stock options, restricted stock, restricted stock units, performance shares, and performance stock options have been awarded to employees and the Board. The 2002 Plan was adopted on July 9, 2015 by the Board and became effective upon stockholder approval at the Company's Annual Meeting of Stockholders held on October 14, 2015. Refer to Note F of the Notes to Consolidated Financial Statements, contained in Item 8 of this Form 10-K, for more information on the Company's stock incentive plans.

The following table details information on securities authorized for issuance upon the exercise of outstanding options under the Company's equity compensation plans as of May 31, 2020:

In millions, except per share amounts	Number of securities to be issued upon exercise of outstanding options ⁽¹⁾	Weighted-average exercise price of outstanding options	Number of securities remaining available for future issuance under equity compensation plans ⁽²⁾
Fauity compensation plans approved by security holders	5.7	\$ 55.28	17.3

- Amounts include performance stock options granted, assuming achievement of performance goals at target. Actual amount of shares to be earned may differ from the target amount.
- (2) Includes shares available for future issuance through grants of restricted stock units and restricted stock awards under our 2002 Plan. Refer to Note F of the Notes to Consolidated Financial Statements, contained in Item 8 of this Form 10-K, for more information on the Company's stock incentive plans.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is set forth in the Company's Definitive Proxy Statement for its 2020 Annual Meeting of Stockholders, anticipated to be held on or about October 15, 2020, under the sub-headings "Board Meetings and Committees" and "Policy on Transactions with Related Persons" within the section "CORPORATE GOVERNANCE," and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

The information required by this item is set forth in the Company's Definitive Proxy Statement for its 2020 Annual Meeting of Stockholders, anticipated to be held on or about October 15, 2020, under the section "PROPOSAL 4: RATIFICATION OF THE SELECTION OF PRICEWATERHOUSECOOPERS LLP TO SERVE AS THE INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM," and is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

- Financial Statements, Financial Statement Schedules, and Exhibits
- 1. Financial Statements

See Financial Statements and Supplementary Data Table of Contents at page 35. Financial Statement Schedules

Financial statement schedules required to be filed by Item 8 of this Form 10-K include Schedule II — Valuation and Qualifying Accounts. See Financial Statements and Supplementary Data Table of Contents at page 35. All other schedules are omitted as the required matter is not present, the amounts are not significant, or the information is shown in the financial statements or the notes thereto.

3.	Exhibits	
5.	(2.1)	Stock Purchase Agreement by and among Oasis Outsourcing Acquisition Corporation, Oasis Outsourcing Group Holdings, L.P. and
	(2.1)	Paychex North America Inc., incorporated herein by reference from Shibit 2.1 to the Company's Form 10-0 filed with the Commission
		on December 21, 2018.
	(3)(a)	Restated Certificate of Incorporation, incorporated herein by reference from Exhibit 3(a) to the Company's Form 10-K filed with the
	(3)(a)	Commission on July 20, 2004.
	(3.1)	Amended and Restated By-Laws of Paychex, Inc., as of May 1, 2020, incorporated herein by reference from Exhibit 3.1 to the
	(3.1)	Company's Form 8-K filed with the Commission on May 5, 2020.
	(4.1)	Form of 4.07% Senior Notes, Series A, of Paychex of New York LLC, due March 13, 2026, incorporated herein by reference from Exhibit
	(4.1)	4.1 to the Company's Form 8-K filed with the Commission on January 11, 2019.
	(4.2)	
	(4.2)	Form of 4.25% Senior Notes, Series B, of Paychex of New York LLC, due March 13, 2029, incorporated herein by reference from Exhibit
	(4.2)	4.2 to the Company's Form 8-K filed with the Commission on January 11, 2019.
	(4.3)	Description of Registrant's Securities, incorporated herein by reference from Exhibit 4.3 to the Company's Form 10-K filed with the
	(10.1)	Commission on July 24, 2019.
#	(10.1)	Paychex, Inc. 2015 Qualified Employee Stock Purchase Plan, incorporated herein by reference from Exhibit 4.3 to the Company's
,,	(10.0)	Registration Statement on Form S-8, No. 333-207594.
#	(10.2)	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 14, 2015), incorporated herein by reference from
		Exhibit 4.3 to the Company's Registration Statement on Form S-8, No. 333-207592.
#	(10.3)	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 12, 2005) Form of Non-Qualified Stock Option
		Award Agreement, incorporated herein by reference from Exhibit 10.2 to the Company's Form 8-K filed with the Commission on
		<u>July 16, 2008</u> .
#	(10.4)	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 12, 2005) Form of Restricted Stock Unit Award
		Agreement, incorporated herein by reference from Exhibit 10(n) to the Company's Form 10-K filed with the Commission on July 18,
		<u>2008</u> .
#	(10.5)	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 12, 2005) Form of Non-Qualified Stock Option
		Award Agreement for Directors, incorporated herein by reference from Exhibit 10(q) to the Company's Form 10-K filed with the
		Commission on July 18, 2008.
#	(10.6)	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 12, 2005) Form of Restricted Stock Award
		Agreement (Officer), incorporated herein by reference from Exhibit 10.18 to the Company's Form 10-K filed with the Commission on
		<u>July 16, 2010</u> .
#	(10.7)	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 12, 2005) Form of Non-Qualified Stock Option
		Award Agreement (Officer), incorporated herein by reference from Exhibit 10.19 to the Company's Form 10-K filed with the
		Commission on July 16, 2010.
#	(10.8)	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 12, 2005) Form of Officer Performance Incentive
		Award Agreement (Long Term), incorporated herein by reference from Exhibit 10.20 to the Company's Form 10-K filed with the
		Commission on July 16, 2010.
#	(10.9)	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 13, 2010) Form of Non-Qualified Stock Option
	` /	Award Agreement (Board), incorporated herein by reference from Exhibit 10.20 to the Company's Form 10-K filed with the Commission
		on July 15, 2011.
#	(10.10)	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 13, 2010) Form of Restricted Stock Award
	` ′	Agreement (Board), incorporated herein by reference from Exhibit 10.21 to the Company's Form 10-K filed with the Commission on July
		15, 2011.

#	(10.11)	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 13, 2010) Form of Non-Qualified Stock Option Award Agreement (Officer) Long Term Incentive Program ("LTIP"), incorporated herein by reference from Exhibit 10.23 to the
		Company's Form 10-K filed with the Commission on July 15, 2011.
#	(10.12)	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 14, 2015) Form of Non-Qualified Stock Option and Restricted Stock Award Agreement LTIP, incorporated herein by reference from Exhibit 10.14 to the Company's Form 10-K filed with
#	(10.13)	the Commission on July 22, 2016. Paychex, Inc. Change In Control Plan, incorporated herein by reference from Exhibit 10.24 to the Company's Form 10-K filed with the Commission on July 15, 2011.
#	(10.14)	Paychex. Inc. Form of Performance Award Incentive Program, incorporated herein by reference from Exhibit 10.25 to the Company's Form 10-K filed with the Commission on July 15, 2011.
	(10.15)	Form 10-K nied with the Commission on July 15, 2011. Form of Indemnity Agreement for Directors and Officers, incorporated herein by reference from Exhibit 10.1 to the Company's Form 10- O filed with the Commission on March 28, 2012.
#	(10.16)	Paychex Inc. Board Deferred Compensation Plan, incorporated herein by reference from Exhibit 10.29 to the Company's Form 10-K filed with the Commission on July 20, 2009.
#	(10.17)	Paychex Inc. Employee Deferred Compensation Plan, incorporated herein by reference from Exhibit 10.30 to the Company's Form 10-K filed with the Commission on July 20, 2009.
#	(10.18)	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated October 14, 2015) Form of Non-Qualified Stock Option Award Agreement, incorporated herein by reference from Exhibit 10.18 to the Company's Form 10-K filed with the Commission on July 21,
#	(10.19)	2017. Paychex Inc. 2002 Stock Incentive Plan (as amended and restated October 14, 2015) Form of Officer Performance Incentive Award Agreement (Long-Term), incorporated herein by reference from Exhibit 10.19 to the Company's Form 10-K filed with the Commission
#	(10.20)	on July 21, 2017. Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 14, 2015) Performance-Based Restricted Stock Award Agreement, incorporated herein by reference from Exhibit 10.1 to the Company's Form 8-K filed with the Commission on
#	(10.21)	September 8, 2017. Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 14, 2015) Amendment to Award Agreements, incorporated herein by reference from Exhibit 10.2 to the Company's Form 8-K filed with the Commission on September 8, 2017.
	(10.22)	Note Purchase and Guarantee Agreement, dated as of January 9, 2019, by and among the Company, the Parent, and the respective purchasers thereto, incorporated herein by reference from Exhibit 10.1 to the Company's Form 8-K filed with the Commission on
#	(10.23)	January 11, 2019. Paychex Inc. 2002 Stock Incentive Plan (as amended and restated effective October 14, 2015) Amended Form of Restricted Stock Unit Award Agreement, incorporated herein by reference from Exhibit 10.1 to the Company's Form 10-Q filed with the Commission on
#	(10.24)	October 4, 2019. Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 14, 2015) Amended Form of Restricted Stock Unit Award Agreement (Officer), incorporated herein by reference from Exhibit 10.2 to the Company's Form 10-Q filed with the Commission
#	(10.25)	on October 4, 2019. Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 14, 2015) Amended Form of 2019-2021 Performance Incentive Award Agreement, incorporated herein by reference from Exhibit 10.3 to the Company's Form 10-O filed with
#	(10.26)	the Commission on October 4, 2019. Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 14, 2015) Amended Form of Non-Qualified Stock Option Award Agreement, incorporated herein by reference from Exhibit 10.4 to the Company's Form 10-Q filed with the Commission on October 4, 2019.
#	(10.27)	Paychex Inc. 2002 Stock Incentive Plan (as amended and restated effective October 14, 2015) Master Restricted Stock Unit Award Agreement, incorporated herein by reference from Exhibit 10.5 to the Company's Form 10-Q filed with the Commission on October 4,
	(10.28)	2019. Five-Year Credit Agreement, dated as of July 31, 2019, by and among the Company, the Parent, and the lender parties hereto, incorporated herein by reference from Exhibit 10.1 to the Company's Form 8-K filed with the Commission on August 1, 2019.
	(10.29)	Three-Year Credit Agreement, dated as of February 6, 2020, by and among Paychex Advance LLC, Paychex Inc. and the lender party thereto, incorporate herein by reference from Exhibit 10.1 to the Company's Form 8-K filed with the Commission on February 11, 2020.
*	(21.1)	Subsidiaries of the Registrant.
*	(23.1)	Consent of Independent Registered Public Accounting Firm, PricewaterhouseCoopers LLP.
*	(24.1)	Power of Attomey.
*	(31.1)	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
*	(31.2) (32.1)	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
	(32.1)	Certification 1 distrait to 10 C.S.C. Section 1330, as Auopieu ruisuant to Section 300 of the Saturnes-Oxley Act of 2002.

*	(32.2)	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
*	101.INS	XBRL instance document.
*	101.SCH	XBRL taxonomy extension schema document.
*	101.CAL	XBRL taxonomy extension calculation linkbase document.
*	101.LAB	XBRL taxonomy label linkbase document.
*	101.PRE	XBRL taxonomy extension presentation linkbase document.
*	101.DEF	XBRL taxonomy extension definition linkbase document.
*	104	Cover Page Interactive Data File – the cover page interactive data file does not appear in the Interactive Data File because its XBRL
		tags are embedded within the Inline YRRI document

- Exhibit filed with this report.
- Management contract or compensatory plan.

Item 16. Form 10-K Summary

None.

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 July 17, 2020.

PAYCHEX, INC.

By: /s/ Martin Mucci

Martin Mucci

President and 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 July 17, 2020.

/s/ Martin Mucci Martin Mucci, President and Chief Executive Officer, and Director (Principal Executive Officer)

/s/ Efrain Rivera

Efrain Rivera, Senior Vice President, Chief Financial Officer, and Treasurer (Principal Financial Officer)

/s/ Robert L. Schrader

Robert L. Schrader, Vice President and Controller (Principal Accounting Officer)

B. Thomas Golisano*, Chairman of the Board

Thomas F. Bonadio*, Director Joseph G. Doody*, Director David J.S. Flaschen*, Director Pamela A. Joseph*, Director Joseph M. Tucci*, Director Joseph Velli*, Director

Kara Wilson*, Director *By: /s/ Martin Mucci

Martin Mucci, as Attorney-in-Fact

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