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

FORM 10-Q

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

For the Quarterly Period Ended August 31, 2019

OR

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

For the Transition Period From __________to __________

Commission file number 0-11330

PAYCHEX, INC.

911 Panorama Trail South
Rochester, NY 14625-2396
(585) 385-6666
A Delaware Corporation

IRS Employer Identification Number: 16-1124166

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

Title of each class	Trading Symbol(s)	Name of each exchange of which registered
Common Stock, $0.01 par value	PAYX	NASDAQ

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

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

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

Large Accelerated Filer ☒	Accelerated Filer ☐	Non-Accelerated Filer ☐	Smaller Reporting Company ☐ Emerging Growth Company ☐

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

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

As of September 30, 2019, 357,944,189 shares of the registrant’s common stock, $.01 par value, were outstanding.

PAYCHEX, INC.
Table of Contents

Table of Contents

PART I. FINANCIAL INFORMATION
Item 1. Financial Statements

PAYCHEX, INC.
CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME (UNAUDITED)
In millions, except per share amounts

	For the three months ended August 31, 2019	2018
Revenue:		
Management Solutions	$ 724.5	$ 687.7
PEO and Insurance Services	247.0	158.0
Total service revenue	**971.5**	**845.7**
Interest on funds held for clients	20.5	17.1
Total revenue	**992.0**	**862.8**
Expenses:		
Operating expenses	325.4	265.5
Selling, general and administrative expenses	317.5	277.0
Total expenses	**642.9**	**542.5**
Operating income	**349.1**	**320.3**
Other (expense)/income, net	(4.8)	2.3
Income before income taxes	**344.3**	**322.6**
Income taxes	80.1	79.0
Net income	**$ 264.2**	**$ 243.6**
Other comprehensive income, net of tax	26.4	0.4
Comprehensive income	**$ 290.6**	**$ 244.0**
Basic earnings per share	**$ 0.74**	**$ 0.68**
Diluted earnings per share	**$ 0.73**	**$ 0.67**
Weighted-average common shares outstanding	**358.6**	**359.1**
Weighted-average common shares outstanding, assuming dilution	**361.5**	**361.5**

See Notes to Consolidated Financial Statements.

PAYCHEX, INC.
CONSOLIDATED BALANCE SHEETS (UNAUDITED)
In millions, except per share amounts

	August 31, 2019	May 31, 2019
Assets		
Cash and cash equivalents	$ 586.4	$ 673.6
Restricted cash	55.8	50.6
Corporate investments	40.9	39.0
Interest receivable	27.1	27.4
Accounts receivable, net of allowance for doubtful accounts	425.1	420.5
PEO unbilled receivables, net of advance collections	409.2	406.3
Prepaid income taxes	—	22.6
Prepaid expenses and other current assets	242.3	233.9
Current assets before funds held for clients	**1,786.8**	**1,873.9**
Funds held for clients	3,769.1	3,803.8
Total current assets	**5,555.9**	**5,677.7**
Long-term restricted cash	1.9	6.5
Long-term corporate investments	10.3	10.2
Property and equipment, net of accumulated depreciation	403.4	408.7
Operating lease right-of-use assets, net of accumulated amortization	112.8	—
Intangible assets, net of accumulated amortization	379.5	399.1
Goodwill	1,783.1	1,782.6
Long-term deferred costs	362.7	366.3
Other long-term assets	28.6	24.9
Total assets	**$ 8,638.2**	**$ 8,676.0**
Liabilities		
Accounts payable	$ 61.7	$ 75.9
Accrued corporate compensation and related items	84.5	146.4
Accrued worksite employee compensation and related items	544.1	578.6
Accrued income taxes	49.0	—
Short-term borrowings	56.5	—
Deferred revenue	41.3	40.3
Other current liabilities	270.5	219.5
Current liabilities before client fund obligations	**1,107.6**	**1,060.7**
Client fund obligations	3,715.9	3,784.3
Total current liabilities	**4,823.5**	**4,845.0**
Accrued income taxes	29.7	27.3
Deferred income taxes	227.6	223.1
Long-term borrowings, net of debt issuance costs	796.5	796.4
Operating lease liabilities	93.8	13.0
Other long-term liabilities	147.8	151.7
Total liabilities	**6,118.9**	**6,056.5**
Commitments and contingencies — Note N		
Stockholders' equity		
Common stock, $0.01 par value; Authorized: 600.0 shares; Issued and outstanding: 357.9 shares as of August 31, 2019 and 359.3 shares as of May 31, 2019	3.6	3.6
Additional paid-in capital	1,224.0	1,206.3
Retained earnings	1,265.2	1,409.5
Accumulated other comprehensive income	26.5	0.1
Total stockholders' equity	**2,519.3**	**2,619.5**
Total liabilities and stockholders' equity	**$ 8,638.2**	**$ 8,676.0**

See Notes to Consolidated Financial Statements.

PAYCHEX, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (UNAUDITED)
In millions, except per share amounts

	For the three months ended August 31, 2019					
	Common stock		Additional paid-in capital	Retained earnings	Accumulated other comprehensive income/(loss)	Total
	Shares	Amount				
Balance as of May 31, 2019	**359.3**	**$ 3.6**	**$ 1,206.3**	**$ 1,409.5**	**$ 0.1**	**$ 2,619.5**
Net income	—	—	—	264.2	—	264.2
Unrealized gains on securities, net of reclassification adjustment and tax	—	—	—	—	25.4	25.4
Cash dividends declared ($0.62 per share)	—	—	—	(222.0)	—	(222.0)
Repurchases of common shares	(2.0)	—	(3.7)	(168.2)	—	(171.9)
Stock-based compensation costs	—	—	10.5	—	—	10.5
Foreign currency translation adjustment	—	—	—	—	1.0	1.0
Activity related to equity-based plans	0.6	—	10.9	(18.3)	—	(7.4)
Balance as of August 31, 2019	**357.9**	**$ 3.6**	**$ 1,224.0**	**$ 1,265.2**	**$ 26.5**	**$ 2,519.3**

	For the three months ended August 31, 2018					
Balance as of May 31, 2018	**359.0**	**$ 3.6**	**$ 1,126.8**	**$ 1,262.6**	**$ (36.2)**	**$ 2,356.8**
Net income	—	—	—	243.6	—	243.6
Unrealized gains on securities, net of reclassification adjustment and tax	—	—	—	—	2.1	2.1
Cash dividends declared ($0.56 per share)	—	—	—	(201.4)	—	(201.4)
Repurchases of common shares	(0.5)	—	(0.8)	(32.0)	—	(32.8)
Stock-based compensation costs	—	—	10.9	—	—	10.9
Foreign currency translation adjustment	—	—	—	—	(1.7)	(1.7)
Activity related to equity-based plans	0.5	—	14.2	(4.7)	—	9.5
Balance as of August 31, 2018	**359.0**	**$ 3.6**	**$ 1,151.1**	**$ 1,268.1**	**$ (35.8)**	**$ 2,387.0**

See Notes to Consolidated Financial Statements.

PAYCHEX, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)
In millions

	For the three months ended August 31, 2019	2018 (1)
Operating activities		
Net income	$ 264.2	$ 243.6
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization on property and equipment and intangible assets	52.9	35.9
Amortization of premiums and discounts on available-for-sale securities, net	10.0	14.4
Amortization of deferred contract costs	46.0	44.6
Stock-based compensation costs	10.5	10.9
(Benefit)/provision for deferred income taxes	(3.7)	2.6
Provision for allowance for doubtful accounts	2.3	0.3
Net realized (gains)/losses on sales of available-for-sale securities	(0.9)	0.1
Changes in operating assets and liabilities:		
Interest receivable	0.3	3.1
Accounts receivable and PEO unbilled receivables, net	(9.8)	(43.0)
Prepaid expenses and other current assets	13.8	15.2
Accounts payable and other current liabilities	(39.6)	(15.2)
Deferred costs	(41.9)	(38.4)
Net change in other long-term assets and liabilities	(8.4)	(0.4)
Net change in operating lease right-of-use assets and liabilities	(0.9)	—
Net cash provided by operating activities	**294.8**	**273.7**
Investing activities		
Purchases of available-for-sale securities	(8,289.3)	(11,115.8)
Proceeds from sales and maturities of available-for-sale securities	8,862.1	11,297.0
Purchases of property and equipment	(26.4)	(24.4)
Purchases of other assets	(1.7)	(0.8)
Net cash provided by investing activities	**544.7**	**156.0**
Financing activities		
Net change in client fund obligations	(68.4)	(942.5)
Net proceeds from short-term borrowings	56.5	56.7
Dividends paid	(222.0)	(201.4)
Repurchases of common shares	(171.9)	(32.8)
Activity related to equity-based plans	(7.4)	9.7
Net cash used in financing activities	**(413.2)**	**(1,110.3)**
Net change in cash, cash equivalents, restricted cash and restricted cash equivalents	**426.3**	**(680.6)**
Cash, cash equivalents, restricted cash and restricted cash equivalents, beginning of period	935.2	2,300.5
Cash, cash equivalents, restricted cash and restricted cash equivalents, end of period	**$ 1,361.5**	**$ 1,619.9**
Reconciliation of cash, cash equivalents, restricted cash and restricted cash equivalents to the Consolidated Balance Sheets:		
Cash and cash equivalents	$ 586.4	$ 440.1
Restricted cash	57.7	—
Restricted cash and restricted cash equivalents included in funds held for clients	717.4	1,179.8
Total cash, cash equivalents, restricted cash and restricted cash equivalents	**$ 1,361.5**	**$ 1,619.9**

(1) Amounts have been adjusted to reflect adoption of Accounting Standards Update ("ASU") No. 2016-18, "Statement of Cash Flows (Topic 230): Restricted Cash (a consensus of the FASB Emerging Issues Task Force)."

See Notes to Consolidated Financial Statements.

PAYCHEX, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)
August 31, 2019

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 resource (“HR”), payroll, benefits, and insurance services for small- to medium-sized businesses in the United States (“U.S.”). The Company also has operations in 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 Europe, which represented approximately one percent of the Company’s total revenue for both the three months ended August 31, 2019 and August 31, 2018. Long-lived assets in Europe were approximately 5% of total long-lived assets of the Company as of both August 31, 2019 and May 31, 2019.

Basis of presentation: The accompanying consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (“GAAP”) for interim financial information and with the instructions to the Quarterly Report on Form 10-Q (“Form 10-Q”) and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by GAAP for complete financial statement presentation. The consolidated financial statements include the consolidated accounts of the Company with all intercompany transactions eliminated. Certain disclosures are reported as zero balances due to rounding. In the opinion of management, the information furnished herein reflects all adjustments (consisting of items of a normal recurring nature), which are necessary for a fair presentation of the results for the interim period. These consolidated financial statements should be read in conjunction with the Company’s consolidated financial statements and related Notes to Consolidated Financial Statements presented in the Company’s Annual Report on Form 10-K (“Form 10-K”) for the fiscal year ended May 31, 2019 (“fiscal 2019”). Operating results and cash flows for the three months ended August 31, 2019 are not necessarily indicative of the results that may be expected for other interim periods or for the fiscal year ending May 31, 2020 (“fiscal 2020”).

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

Revision of previously reported financial information: During the three months ended February 28, 2019, the Company determined that it should have presented cash equivalents and money market securities included in funds held for clients within cash, cash equivalents, restricted cash, and restricted cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on its Consolidated Statements of Cash Flows in accordance with ASU No. 2016-18, “Statement of Cash Flows (Topic 230): Restricted Cash (a consensus of the FASB Emerging Issues Task Force).” This immaterial correction resulted in a decrease of $762.5 million in net cash provided by investing activities and increases in cash, cash equivalents, restricted cash, and restricted cash equivalents balances as of May 31, 2018 and August 31, 2018 of $1.9 billion and $1.2 billion, respectively. The Consolidated Statement of Cash Flows for the three months ended August 31, 2018 has been revised to reflect the classification of cash equivalents and money market securities included in funds held for clients as restricted cash and restricted cash equivalents.

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 the payment of workers’ compensation claims.

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 $10.6 million and $7.5 million as of August 31, 2019 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 $77.2 million and $94.5 million as of August 31, 2019 and May 31, 2019, respectively. Purchased receivables were $358.5 million and $333.5 million as of August 31, 2019 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.

Professional Employer Organization (“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. When clients’ pay periods cross reporting periods, the Company accrues the portion of the unpaid worksite employee payroll where it assumes, under state regulations, the obligation for the payment of wages and the corresponding payroll tax liabilities associated with the work performed prior to period-end. 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 both August 31, 2019 and May 31, 2019, advance collections included in PEO unbilled receivables, net of advance collections were $4.2 million.

PEO insurance reserves: As part of the PEO service, the Company offers workers' compensation insurance and health insurance for the benefit of client employees. Workers' compensation insurance is 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. 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 the claims.

The Company's maximum individual claims liability, excluding Oasis Outsourcing Group Holdings, L.P. ("Oasis") and HR Outsourcing Holdings, Inc. ("HROi"), was $1.0 million under both its fiscal 2020 and fiscal 2019 workers' compensation insurance policies, respectively. Oasis' and HROi's maximum individual claims liability was $1.0 million under a joint worker's compensation insurance policy for the annual fiscal period ending May 31, 2020. Oasis' maximum individual claims liability was $1.0 million under its workers' compensation insurance policy for the annual fiscal period ended May 31, 2019. HROi's maximum individual claims liability was $0.8 million and $0.5 million under its workers' compensation insurance policies for the annual periods ending September 30, 2019 and ended September 30, 2018, respectively. The Company terminated HROi's policy for the annual period ending September 30, 2019 on May 31, 2019 and replaced it with the joint insurance policy previously discussed.

Under the minimum medical premium insurance arrangement, 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 Company's maximum individual claims liability, excluding Oasis and HROi, was $0.3 million under both its calendar 2019 and 2018 minimum premium insurance plan policies. HROi's maximum individual claims liability was $0.3 million under its minimum premium insurance plan policies for the annual periods ending June 30, 2020 and ended June 30, 2019. Oasis has no minimum premium insurance plan policies in effect. In addition, the Company also provides self-insured dental and vision plans to certain of its PEO clients.

Estimating the ultimate cost of future claims is an uncertain and complex process based upon historical loss experience and 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.

Leases: On June 1, 2019, the Company adopted the requirements of ASU No. 2016-02, "Leases (Topic 842)" ("ASU No. 2016-02"). As a result of this adoption, the following accounting policies were implemented or changed.

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

Leases may also include options to terminate the arrangement or options to purchase the underlying lease property. We do not separate lease and non-lease components of contracts as noted below in our discussion of practical expedient elections. 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. 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 prepayments made prior to or at lease commencement, initial direct costs incurred by the Company to implement the lease and lease incentives. 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 the three months ended August 31, 2019.

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.

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.

Stock-based compensation costs: The Company has issued stock-based awards to employees and directors consisting of stock options, restricted stock awards, restricted stock units, performance shares, performance-based restricted stock, performance-based restricted stock units, and performance-based stock options. The Company accounts for all stock-based awards to employees and directors as compensation costs in the consolidated financial statements based on their fair values measured as of the date of grant. These costs are recognized over the requisite service period. Stock-based compensation costs recognized were $10.5 million for the three months ended August 31, 2019, as compared with $10.9 million for the three months ended August 31, 2018. The methods and assumptions used in the determination of the fair value of stock-based awards are consistent with those described in the Company's fiscal 2019 Form 10-K.

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 H for additional information on the new standard.

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."
- 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 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 Accounting Standards Codification ("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 Company is currently evaluating the potential effects of this guidance 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 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 Company is currently evaluating the potential effects of this guidance 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 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 Company is currently evaluating the potential effects of this guidance on its consolidated financial statements.

In August 2018, the FASB issued ASU 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 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 Company is currently evaluating the potential effects of this guidance 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. ASU No. 2017-04 is effective for public entities for annual or interim periods 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, and is not anticipated to have a material impact on the Company's 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 of the topic, 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. ASU No. 2016-13 is effective for public business entities for annual periods, including interim periods within those annual periods, beginning after December 15, 2019. This guidance is applicable to the Company's fiscal year beginning June 1, 2020. The Company is currently evaluating this guidance to determine the potential impact on its consolidated financial statements.

Other recent authoritative guidance issued by the FASB (including technical corrections to the ASC), the American Institute of Certified Public Accountants, and the Securities and Exchange Commission ("SEC") during the three months ended August 31, 2019 did not, or are not expected to, have a material effect 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 are 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 Services revenue is recognized when commissions are earned on premiums billed and collected. The Company's contracts generally have a term of 30 days as they are cancellable at any time 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 Services 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.

The following table, consistent with the Consolidated Statements of Income and Comprehensive Income, disaggregates service revenue by Management Solutions and PEO and Insurance Services:

	For the three months ended August 31,	
In millions	**2019**	**2018**
Management Solutions	$ 724.5	$ 687.7
PEO and Insurance Services	247.0	158.0
Total service revenue	$ 971.5	$ 845.7

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 Services Revenue
PEO services are sold through the Company's registered and licensed subsidiaries, Paychex Business Solutions, LLC, Oasis, and 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 revenue is recognized over time as the services are performed and the customer simultaneously receives and controls the benefits from these services. PEO 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. Pass-through costs for payroll wages and payroll taxes were $5.1 billion and $2.2 billion for the three months ended August 31, 2019 and August 31, 2018, respectively, which includes costs related to state unemployment insurance of $14.7 million and $8.8 million, respectively. 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 the three months ended August 31, 2019 and August 31, 2018, the pass-through costs related to our guaranteed cost benefit plans were $165.8 million and $74.7 million, respectively. For workers' compensation and certain benefit plans where the Company retains risk, revenues and costs are recorded on a gross basis.

Insurance services 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 services revenue is recognized over time as services are performed and the customer simultaneously receives and controls the benefits from these services and reflects commissions earned on insurance services premiums billed.

Contract Balances
The timing of revenue recognition for Management Solutions and PEO and Insurance Services 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 material right performance obligations were as follows:

	For the three months ended August 31,	
In millions	2019	2018
Balance, beginning of period	$ 45.7	$ 46.4
Deferral of revenue	5.5	6.1
Recognition of unearned revenue	(6.7)	(6.8)
Balance, end of period	$ 44.5	$ 45.7

Deferred revenue related to material right performance obligations 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 $17.5 million of deferred revenue related to material right performance obligations in the remainder of fiscal 2020, $16.3 million of such deferred revenue during its fiscal year ending May 31, 2021, and $10.7 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 amortization period will be longer than one year. The Company determined that certain selling and commission costs meet the capitalization criteria under 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 has 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. 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 operating and selling, general, and administrative expenses in the Company's Consolidated Statements of Income and Comprehensive Income. The Company regularly reviews its deferred costs for potential impairment and did not recognize an impairment loss during the three months ended August 31, 2019 and August 31, 2018.

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

	For the three months ended August 31, 2019			
In millions	Beginning balance	Capitalization of costs	Amortization	Ending balance
Costs to obtain a contract	$ 464.3	$ 35.9	$ (40.2)	$ 460.0
Costs to fulfill a contact	$ 66.1	$ 6.0	$ (5.8)	$ 66.3

	For the three months ended August 31, 2018			
In millions	Beginning balance	Capitalization of costs	Amortization	Ending balance
Costs to obtain a contract	$ 455.0	$ 32.4	$ (38.9)	$ 448.5
Costs to fulfill a contact	$ 65.4	$ 6.0	$ (5.7)	$ 65.7

Note C: Basic and Diluted Earnings Per Share

Basic and diluted earnings per share were calculated as follows:

In millions, except per share amounts	For the three months ended August 31, 2019	2018
Basic earnings per share:		
Net income	$ 264.2	$ 243.6
Weighted-average common shares outstanding	358.6	359.1
Basic earnings per share	**$ 0.74**	**$ 0.68**
Diluted earnings per share:		
Net income	$ 264.2	$ 243.6
Weighted-average common shares outstanding	358.6	359.1
Dilutive effect of common share equivalents	2.9	2.4
Weighted-average common shares outstanding, assuming dilution	361.5	361.5
Diluted earnings per share	**$ 0.73**	**$ 0.67**
Weighted-average anti-dilutive common share equivalents	**0.3**	**0.3**

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

For the three months ended August 31, 2019 and August 31, 2018, 0.6 million and 0.5 million shares, respectively, of the Company's common stock were issued in connection with the exercise or vesting of stock-based awards.

In May 2019, the Company announced that its Board of Directors approved a program to repurchase up to $400.0 million of the Company's common stock, with authorization expiring on May 31, 2022. During the three months ended August 31, 2019, the Company repurchased 2.0 million shares for $171.9 million. During the three months ended August 31, 2018, the Company repurchased 0.5 million shares for $32.8 million under a previously authorized program. The purpose of both 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. Oasis has experienced rapid growth over the last few years through acquisition of several smaller PEOs. 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.

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 preliminary acquisition-date fair values and were consolidated with those of the Company as of the acquisition date. The final determination of these preliminary fair values is subject to completion of an assessment of the acquisition-date fair values of acquired assets and liabilities.

The following preliminary 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		5.8
Prepaid expenses and other current assets		6.0
Long-term restricted cash		65.5
Property and equipment		15.4
Intangible assets		310.9
Goodwill		972.1
Other long-term assets		1.8
Total Assets		1,803.4
Accounts payable		46.0
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		51.1
Other long-term liabilities		79.3
Net Assets	$	1,254.5

The Company assigned $310.9 million to amortizable intangible assets, including customer lists, tradenames and trademarks, and non-compete agreements, with a weighted-average amortization period of approximately 10 years. Goodwill in the amount of $972.1 million was recorded as a result of the acquisition, which is not tax-deductible. Any further adjustments to goodwill (in excess of the existing tax basis) is not expected to be deductible for tax purposes. The goodwill is provisional and subject to change, pending completion of the valuation of assets acquired and liabilities assumed. 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.

Note E: Other (Expense)/Income, Net

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

	For the three months ended August 31,			
In millions		**2019**		**2018**
Interest income on corporate funds	$	4.5	$	3.2
Interest expense		(10.3)		(0.9)
Other		1.0		—
Other (expense)/income, net	**$**	**(4.8)**	**$**	**2.3**

Table of Contents

Note F: Funds Held for Clients and Corporate Investments

Funds held for clients and corporate investments are as follows:

In millions	August 31, 2019 Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Type of issue:				
Funds held for clients' money market securities and other cash equivalents	$ 717.4	$ —	$ —	$ 717.4
Available-for-sale securities:				
Asset-backed securities	26.4	0.2	—	26.6
Corporate bonds	683.8	14.8	(0.1)	698.5
General obligation municipal bonds	775.0	14.1	—	789.1
Pre-refunded municipal bonds[1]	23.3	0.3	—	23.6
Revenue municipal bonds	512.1	9.2	—	521.3
U.S. government agency and treasury securities	963.8	15.3	(0.4)	978.7
Variable rate demand notes	35.0	—	—	35.0
Total available-for-sale securities	3,019.4	53.9	(0.5)	3,072.8
Other	27.7	2.6	(0.2)	30.1
Total funds held for clients and corporate investments	**$ 3,764.5**	**$ 56.5**	**$ (0.7)**	**$ 3,820.3**

In millions	May 31, 2019 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
General obligation municipal bonds	840.6	7.5	(0.3)	847.8
Pre-refunded municipal bonds[1]	25.6	0.2	—	25.8
Revenue municipal bonds	545.4	4.7	(0.2)	549.9
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**

[1] Pre-refunded municipal bonds are secured by an escrow fund of U.S. government obligations.

Included in money market securities and other cash equivalents as of August 31, 2019 and May 31, 2019 were bank demand deposit accounts, commercial paper, and money market funds. In addition, as of August 31, 2019, certain U.S. government agency securities with maturities of 90 days or less at acquisition and time deposit accounts were included in money market securities and other cash equivalents.

Classification of investments on the Consolidated Balance Sheets is as follows:

In millions	August 31, 2019	May 31, 2019
Funds held for clients	$ 3,769.1	$ 3,803.8
Corporate investments	40.9	39.0
Long-term corporate investments	10.3	10.2
Total funds held for clients and corporate investments	**$ 3,820.3**	**$ 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 the client, 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 $53.4 million and $19.7 million as of August 31, 2019 and May 31, 2019, respectively. Included in the net unrealized gain totals as of August 31, 2019 and May 31, 2019 were 74 and 269 available-for-sale securities in an unrealized loss position, respectively. The available-for-sale securities in an unrealized loss position were as follows:

	August 31, 2019					
	Securities in an unrealized loss position for less than twelve months		Securities in an unrealized loss position for more than twelve months		Total	
In millions	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value
Type of issue:						
Corporate bonds	$ —	$ 2.2	$ (0.1)	$ 31.7	$ (0.1)	$ 33.9
General obligation municipal bonds	—	—	—	2.2	—	2.2
Revenue municipal bonds	—	1.8	—	—	—	1.8
U.S. government agency and treasury securities	—	53.5	(0.4)	82.8	(0.4)	136.3
Total	**$ —**	**$ 57.5**	**$ (0.5)**	**$ 116.7**	**$ (0.5)**	**$ 174.2**

	May 31, 2019					
	Securities in an unrealized loss position for less than twelve months		Securities in an unrealized loss position for more than twelve months		Total	
In millions	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Fair value
Type of issue:						
Corporate bonds	$ —	$ 1.5	$ (0.9)	$ 133.8	$ (0.9)	$ 135.3
General obligation municipal bonds	—	3.0	(0.3)	168.3	(0.3)	171.3
Pre-refunded municipal bonds	—	0.1	—	1.6	—	1.7
Revenue municipal bonds	—	0.1	(0.2)	79.2	(0.2)	79.3
U.S. government agency and treasury securities	—	4.7	(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 August 31, 2019 that had gross unrealized losses of $0.5 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. A majority of the securities in an unrealized loss position as of August 31, 2019 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 or changes in the Company's strategies or assumptions related to any particular investment.

Realized gains and losses on the sales of securities are determined by specific identification of the amortized cost basis of each security. On the Consolidated Statements of Income and Comprehensive Income, realized gains and losses from funds held for clients are included in interest on funds held for clients and realized gains and losses from corporate investments are included in other (expense)/income, net. Realized gains were $0.9 million and $0.1 million for the three months ended August 31, 2019 and August 31, 2018, respectively. There were no realized losses for the three months ended August 31, 2019 and August 31, 2018.

The amortized cost and fair value of available-for-sale securities that had stated maturities as of August 31, 2019 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.

	August 31, 2019	
In millions	Amortized cost	Fair value
Maturity date:		
Due in one year or less	$ 254.5	$ 255.6
Due after one year through three years	832.9	843.9
Due after three years through five years	992.1	1,013.2
Due after five years	939.9	960.1
Total	**$ 3,019.4**	**$ 3,072.8**

Variable rate demand notes are primarily categorized as due after five years in the table above as the contractual maturities on these securities are typically 20 years 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 G: 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:
  - quoted prices for similar, but not identical, instruments in active markets;
  - quoted prices for identical or similar instruments in markets that are not active;
  - inputs other than quoted prices that are observable for the instrument; or
  - 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:

In millions	August 31, 2019 Carrying value (Fair value)	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Assets:				
Restricted and unrestricted cash equivalents:				
Commercial paper	$ 258.9	$ —	$ 258.9	$ —
Time deposits	215.5	—	215.5	—
U.S. government agency securities	271.0	—	271.0	—
Money market securities	20.5	20.5	—	—
Total restricted and unrestricted cash equivalents	$ 765.9	$ 20.5	$ 745.4	$ —
Available-for-sale securities:				
Asset-backed securities	$ 26.6	$ —	$ 26.6	$ —
Corporate bonds	698.5	—	698.5	—
General obligation municipal bonds	789.1	—	789.1	—
Pre-refunded municipal bonds	23.6	—	23.6	—
Revenue municipal bonds	521.3	—	521.3	—
U.S. government agency and treasury securities	978.7	—	978.7	—
Variable rate demand notes	35.0	—	35.0	—
Total available-for-sale securities	$ 3,072.8	$ —	$ 3,072.8	$ —
Other	$ 30.1	$ 30.1	$ —	$ —
Liabilities:				
Other long-term liabilities	$ 29.2	$ 29.2	$ —	$ —

In millions	May 31, 2019 Carrying value (Fair value)	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Assets:				
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	—
General obligation municipal bonds	847.8	—	847.8	—
Pre-refunded municipal bonds	25.8	—	25.8	—
Revenue municipal bonds	549.9	—	549.9	—
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, U.S. government agency securities with a maturity of 90 days or less at acquisition, and time deposits, which are considered Level 2 investments as they are valued based on similar, but not identical, instruments in active markets. Available-for-sale securities, including municipal bonds, asset-backed securities, variable rate demand notes, corporate bonds, and U.S. government agency and treasury securities, 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 financial liabilities accounted for under historical cost but for which fair value measurements are periodically determined on a non-recurring basis were as follows:

	August 31, 2019		May 31, 2019	
In millions	**Amortized cost**	**Fair value**	**Amortized cost**	**Fair value**
Long-term borrowings				
Senior Notes, Series A	$ 400.0	$ 432.7	$ 400.0	$ 418.4
Senior Notes, Series B	400.0	441.6	400.0	420.1
Total long-term borrowings	800.0	874.3	800.0	838.5
Less: Debt issuance costs, net of accumulated amortization	(3.5)	(3.5)	(3.6)	(3.6)
Long-term borrowings, net of debt issuance costs	**$ 796.5**	**$ 870.8**	**$ 796.4**	**$ 834.9**

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 H: 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 2019 to 2029. 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 are 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	August 31, 2019
Operating lease right-of-use assets, net of accumulated amortization	$ 112.8
Operating lease liabilities, current[1]	37.0
Operating lease liabilities, non-current	93.8
Weighted average remaining lease term (in years)	4.39
Weighted average discount rate	2.87%

[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	For the three months ended August 31, 2019
Fixed payment operating lease expense	$ 10.1
Variable payment operating lease expense	—
Short-term lease expense	0.1

Fixed payment lease expense was $42.9 million for fiscal 2019.

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

In millions	For the three months ended August 31, 2019
Cash paid for amounts included in the measurement of lease liabilities	$ 10.6
Amortization of ROU assets	9.2
ROU assets obtained in exchange for new operating lease liabilities	5.6

Future lease payments are as follows:

In millions	August 31, 2019	May 31, 2019[1]
2020	$ 30.5	$ 37.7
2021	35.4	29.9
2022	26.0	21.3
2023	18.4	13.8
2024	14.4	10.5
Thereafter	14.7	10.7
Total future lease payments	139.4	123.9
Less: imputed interest	8.6	—
Total operating lease liabilities	$ 130.8	$ —
Current portion	$ 37.0	$ —
Non-current portion	$ 93.8	$ —

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

As of August 31, 2019, the Company has entered into three lease agreements that have not yet commenced for terms of up to nine years. These leases will require lease payments over their terms of approximately $13.7 million.

Note I: Property and Equipment, Net of Accumulated Depreciation

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

In millions	August 31, 2019	May 31, 2019
Land and improvements	$ 10.8	$ 10.8
Buildings and improvements	162.6	162.9
Data processing equipment	223.2	221.6
Software [1]	646.2	626.6
Furniture, fixtures, and equipment	118.0	117.2
Leasehold improvements	104.7	105.4
Construction in progress [1]	29.6	30.3
Total property and equipment, gross	1,295.1	1,274.8
Less: Accumulated depreciation	891.7	866.1
Property and equipment, net of accumulated depreciation	**$ 403.4**	**$ 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 $31.8 million for the three months ended August 31, 2019, compared to $29.4 million for the three months ended August 31, 2018.

Table of Contents

Note J: Goodwill and Intangible Assets, Net of Accumulated Amortization

The change in goodwill for the three months ended August 31, 2019 is as follows:

In millions	August 31, 2019
Balance, beginning of period	$ 1,782.6
Changes during the period:	
Goodwill acquired	-
Acquisition accounting adjustments	-
Currency translation adjustment	0.5
Balance, end of period	$ 1,783.1

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

In millions	August 31, 2019	May 31, 2019
Client lists	$ 609.0	$ 608.2
Other intangible assets	23.4	23.0
Total intangible assets, gross	632.4	631.2
Less: Accumulated amortization	252.9	232.1
Intangible assets, net of accumulated amortization	**$ 379.5**	**$ 399.1**

Amortization expense relating to intangible assets was $21.1 million for the three months ended August 31, 2019, compared to $6.5 million for the three months ended August 31, 2018.

The Company did not recognize an impairment loss as it relates to its goodwill or intangible assets during the three months ended August 31, 2019 or August 31, 2018.

As of August 31, 2019, the estimated amortization expense relating to intangible asset balances for the full year fiscal 2020 and the following four fiscal years is as follows:

In millions Year ending May 31,	Estimated amortization expense
2020	$ 71.7
2021	64.0
2022	57.6
2023	54.3
2024	51.9

Note K: Accumulated Other Comprehensive Income/(Loss)

The change in unrealized gains and losses, net of applicable taxes, related to investments in available-for-sale securities and foreign currency translation adjustments are the primary components reported in accumulated other comprehensive income on the Company's Consolidated Balance Sheets. The changes in accumulated other comprehensive income/(loss) are as follows:

In millions	For the three months ended August 31, 2019	2018
Beginning balance	$ 0.1	$ (36.2)
Other comprehensive income/(loss):		
Unrealized gains on available-for-sale securities, net of tax	26.1	2.2
Reclassification adjustment for the gain on sale of available-for-sale securities realized in net income, net of tax	(0.7)	(0.1)
Foreign currency translation adjustment	1.0	(1.7)
Total other comprehensive income, net of tax	**26.4**	**0.4**
Ending balance	**$ 26.5**	**$ (35.8)**
Total tax expense included in other comprehensive income	**$ 8.3**	**$ 0.5**

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

Note L: Short-term Financing

The Company maintains credit facilities and letters of credit as part of its normal and recurring business operations.

Credit Facilities: The Company maintains three committed, unsecured credit facilities, as follows:

Bank	Borrower (1)	Date Entered	Expiration Date	Maximum Amount Available	Purpose
JP Morgan Chase Bank, N.A. ("JPM") (2)	Paychex of New York, LLC ("PoNY")	July 31, 2019	July 31, 2024	$1 Billion	To meet short-term funding requirements.
JPM (2)	PoNY	August 17, 2017	August 17, 2022	$500 Million	To meet short-term funding requirements.
PNC Bank, National Association ("PNC")	Paychex Advance, LLC	March 17, 2016	March 17, 2020	$150 Million	To finance working capital needs and general corporate purposes.
JPM (2)	PoNY	August 5, 2015	July 31, 2019	$1 Billion	To meet short-term funding requirements.

(1) Borrower is a wholly owned subsidiary of the Company.

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

On July 31, 2019, the Company and its PoNY subsidiary entered into a credit agreement with a group of lenders which established a new $1.0 billion five year unsecured revolving credit facility. This revolving credit facility replaced the Company's $1.0 billion five year unsecured revolving credit facility that was entered into on August 5, 2015 and which was terminated on July 31, 2019. Under this credit facility, the Company may borrow at the alternate base rate provided by JPM or at an adjusted LIBOR-based interest rate provided by JPM.

For all credit facilities, obligations under any facility are guaranteed by the Company and certain of its subsidiaries and will bear interest at competitive rates based on options provided to the borrower. Upon the expiration date, any borrowings outstanding will mature and be payable on such date.

JPM $1 Billion Credit Facility: There were no borrowings outstanding under this credit facility as of August 31, 2019 or May 31, 2019. Details of borrowings under this credit facility and the predecessor credit facility during the three months ended August 31, 2019 and August 31, 2018 are as follows:

	For the three months ended August 31,	
$ in millions	**2019**	**2018**
Number of days borrowed	6	6
Maximum amount borrowed	$ 469.0	$ 394.5
Weighted-average amount borrowed	$ 288.3	$ 216.3
Weighted-average interest rate	5.33 %	4.99 %

The Company typically borrows on an overnight basis and only borrowed on an overnight basis during the three months ended August 31, 2019 and August 31, 2018. Subsequent to August 31, 2019, the Company borrowed four times, on an overnight basis, $444.5 million on a weighted-average basis under this line.

JPM $500 Million Credit Facility: There were no borrowings outstanding under this credit facility as of August 31, 2019 or May 31, 2019. Details of borrowings under this credit facility during the three months ended August 31, 2019 and August 31, 2018 are as follows:

	For the three months ended August 31,	
$ in millions	**2019**	**2018**
Number of days borrowed	10	4
Maximum amount borrowed	$ 450.0	$ 223.0
Weighted-average amount borrowed	$ 395.6	$ 133.4
Weighted-average interest rate	3.27 %	4.99 %

The Company typically borrows on an overnight basis. In addition to overnight borrowings, during the three months ended August 31, 2019, the Company borrowed $450.0 million for 8 days at a weighted-average LIBOR-based interest rate of 3.00%. During the three months ended August 31, 2018, the Company only borrowed on an overnight basis. Subsequent to August 31, 2019, the Company borrowed one time, for a 10 day period, $400.0 million on a weighted-average basis under this line.

PNC $150 Million Credit Facility: As of August 31, 2019, the Company had $56.5 million outstanding under this credit facility, which remains outstanding as of the date of this report. There were no borrowings outstanding under this credit facility as of May 31, 2019. Details of borrowings under this credit facility during the three months ended August 31, 2019 and August 31, 2018 are as follows:

	For the three months ended August 31,	
$ in millions	**2019**	**2018**
Number of days borrowed	88	88
Maximum amount borrowed	$ 56.6	$ 56.8
Weighted-average amount borrowed	$ 54.8	$ 56.0
Weighted-average interest rate	3.07 %	2.53 %

All of the Company's credit facilities contain various financial and operational covenants that are usual and customary for such arrangements. The Company was in compliance with all of these covenants as of August 31, 2019.

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 totaling $147.4 million and $148.9 million as of August 31, 2019 and May 31, 2019, respectively, required to secure commitments for certain insurance policies. The letters of credit expire at various dates between November 30, 2019 and August 24, 2020. No amounts were outstanding on these letters of credit as of, or during the three months ended August 31, 2019 and August 31, 2018, or as of May 31, 2019.

Note M: Long-term Financing

On March 13, 2019, the Company and its 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-term borrowings 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:

In millions	August 31, 2019	May 31, 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	(3.5)	(3.6)
Long-term borrowings, net of debt issuance costs	**$ 796.5**	**$ 796.4**

Certain information related to the Senior Notes are as follows:

	Senior Notes Series A	Senior Notes Series B
Stated interest rate	4.07%	4.25%
Effective interest rate	4.15%	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 August 31, 2019.

Note N: Commitments and Contingencies

Other commitments: The Company enters into various purchase commitments with vendors in the ordinary course of business. The Company had outstanding commitments to purchase approximately $8.2 million and $5.6 million of capital assets as of August 31, 2019 and May 31, 2019, respectively.

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. In addition, the Company has 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 employee benefit plans. The estimated loss exposure under these insurance arrangements is recorded in other current liabilities on the Company's Consolidated Balance Sheets. Historically, the amounts accrued have not been material and were not material as of August 31, 2019. The Company also maintains corporate 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.

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 results of operations in the period in which any such effects are recorded.

Note O: Income Taxes

The Company's effective income tax rate was 23.3% and 24.5% for the three months ended August 31, 2019 and August 31, 2018, respectively. The effective income tax rate in the prior year included discrete tax expense related to the revaluation of deferred tax balances for legislative updates. The effective income tax rates in both periods were impacted by the recognition of net discrete tax benefits related to employee stock-based compensation payments.

Item 2. 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 the three months ended August 31, 2019 (the "first quarter") and August 31, 2018, and our financial condition as of August 31, 2019. The focus of this review is on the underlying business reasons for material changes and trends affecting our revenue, expenses, net income, and financial condition. This review should be read in conjunction with the August 31, 2019 consolidated financial statements and the related Notes to Consolidated Financial Statements (Unaudited) contained in this Quarterly Report on Form 10-Q ("Form 10-Q"). This review should also be read in conjunction with our Annual Report on Form 10-K ("Form 10-K") for the year ended May 31, 2019 ("fiscal 2019"). Forward-looking statements in this review are qualified by the cautionary statement included under the next sub-heading, "Cautionary Note Regarding Forward-Looking Statements Pursuant to the United States Private Securities Litigation Reform Act of 1995."

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 us 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," "overview," "current outlook," "guidance," "we look forward to," "would equate to," "projects," "projections," "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, 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. Therefore, you should not place undue reliance upon any of these 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:

- 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;
- 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 our Form 10-K for fiscal 2019 or other periodic filings with the Securities and Exchange Commission ("SEC"), could cause our actual results to differ materially from our anticipated results. The information provided in this Form 10-Q 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-Q 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-Q with the SEC to reflect events or circumstances after such date, or to reflect the occurrence of unanticipated events.

We have made available our investor presentation regarding the financial results for the first quarter. Please visit Paychex's Investor Relations page on our website at http://www.paychex.com/investors to view the presentation. We intend to make future investor presentations available exclusively through our Investor Relations page.

Business

We are a leading provider of integrated human capital management ("HCM") solutions for human resource ("HR"), payroll, benefits, and insurance services for small- to medium-sized businesses. Our business strategy focuses on personalized, technology-enabled service; industry-leading, integrated technology; providing a comprehensive suite of value-added HCM services; solid sales execution; continued service penetration; and engaging in strategic acquisitions. We believe that success in our mission to be a leading provider of HCM services by being an essential partner with America's businesses will lead to strong, long-term financial performance. We do this through the Power of Simplicity. Our industry-leading technology combines with our personalized, technology-enabled services to make HR administration, payroll, and benefits simple for our clients.

We offer a comprehensive portfolio of HCM 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.

We support small-business companies through our core payroll, utilizing our proprietary, robust, software-as-a-service ("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). Clients with more complex payroll and employee benefit needs are serviced through our Paychex Flex Enterprise solution, which offers an integrated suite of HCM solutions on the Paychex Flex platform, or through our legacy platform. Clients using Paychex Flex Enterprise are offered a SaaS solution that integrates payroll processing with HR management, employee benefits administration, time and labor management, applicant tracking, and onboarding solutions. Paychex Flex Enterprise allows mid-market clients to choose the services and software they need to meet the complexity of their business and all integrated through one HCM solution.

Our portfolio of HCM and employee benefit-related services are as follows:

Service	Description
Management Solutions:	
Payroll processing services	Includes 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	Provides 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.
Employee payment services	Provides 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.
Regulatory compliance services	Includes new-hire reporting and garnishment processing, which enable employers to comply with legal requirements and reduce the risk of penalties. We also offer comprehensive solutions to help clients navigate the Affordable Care Act.
HR Solutions (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 Administrative Services Organization product that provides support to our clients over the phone or online to help manage employee-related topics.
Retirement services administration	Offers a variety of retirement plan options to clients, as well as recordkeeping services, which include plan implementation, ongoing compliance with government regulations, employee and employer reporting, participant and employer online access, electronic funds transfer, and other administrative services.
HR administration services	Offers cloud-based HR administration software products for employee benefits management and administration, time and attendance solutions, recruiting, and onboarding.
Other HR services and products	Includes section 125 plans and state unemployment insurance services.
Business services	Offers various business services to companies. 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.

PEO and Insurance Services:

PEO services	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. 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.
Insurance services	Our licensed insurance agency, Paychex Insurance Agency, Inc., provides insurance through a variety of carriers. Insurance offerings include property and casualty coverage, such as workers' compensation; business-owner policies; commercial auto; and health and benefits coverage, including health, dental, vision, and life.

Overview

Our financial results for the first quarter reflected continued growth across our major HCM product lines. Total revenue and total service revenue each increased 15% for the first quarter. Oasis contributed a little less than 10% to growth in total revenue. Management Solutions revenue and PEO and Insurance Services revenue increased by 5% and 56%, respectively, for the first quarter.

Interest on funds held for clients increased 20% for the first quarter reflecting increased interest rates. Our combined funds held for clients and corporate investment portfolios earned an average rate of return of 2.0% for the first quarter, compared to 1.8% for the same period last year.

We continue to focus on driving growth in the number of clients, revenue per client, and revenue and profits, while providing industry-leading service and technology solutions to our clients and their employees. 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 invest in Paychex Flex, our robust cloud-based HCM platform, making significant enhancements designed to simplify the complexity of HR administration. The latest enhancements to our solutions will streamline payroll processes and support business owners and HR professionals as they work to optimize operations, comply with regulations, and drive productivity. During the first quarter, we introduced Paychex® Solo, a package offering designed to meet the specific needs of sole proprietors. Paychex Solo combines incorporation services, payroll, and a 401(k) plan into one complete solution so owners can improve their income tax situation, pay themselves a predictable wage while meeting tax obligations, and save for the future.

Highlights of the financial results for the first quarter as compared to the same period last year are as follows:

- Total revenue increased 15% to $992.0 million. Oasis contributed a little less than 10% to growth in total revenue.
- Total service revenue increased 15% to $971.5 million.
  - Management Solutions revenue increased 5% to $724.5 million.
  - PEO and Insurance Services revenue increased 56% to $247.0 million.
- Interest on funds held for clients increased 20% to $20.5 million.
- Operating income increased 9% to $349.1 million.
- Net income increased 8% to $264.2 million and adjusted net income[1] increased 6% to $257.6 million.
- Diluted earnings per share increased 9% to $0.73 per share and adjusted diluted earnings per share[1] increased 6% to $0.71 per share.
- Earnings before interest, taxes, depreciation and amortization ("EBITDA")[1] increased 13% to $403.0 million.

[1] Adjusted net income, adjusted diluted earnings per share, and EBITDA are not U.S. generally accepted accounting principles ("GAAP") measures. Refer to the "Non-GAAP Financial Measures" section within the "Results of Operations" section of this Item 2 for a discussion of these non-GAAP measures and a reconciliation to the most comparable GAAP measures of net income and diluted earnings per share.

Financial Position and Liquidity

Our financial position as of August 31, 2019 remained strong with cash, restricted cash, and total corporate investments of $695.3 million. Total short-term and long-term borrowings, net of debt issuance costs were $853.0 million as of August 31, 2019. Our investment strategy continues to focus on protecting principal and optimizing liquidity. We invest predominately in municipal bonds – including general obligation bonds; pre-refunded bonds, which are secured by a U.S. government escrow; and essential services revenue bonds – along with U.S. government agency and treasury securities and corporate bonds. During the first quarter, our primary short-term investment vehicles were U.S. government agency securities, commercial paper, bank time and demand deposit accounts, and money market funds.

A majority of our portfolio is invested in high credit quality securities with ratings of AA or higher, and A-1/P-1 ratings on short-term securities. We limit the amounts that can be invested in any single issuer and invest in short- to intermediate-term instruments whose fair values are less sensitive to interest rate changes. We believe our investments as of August 31, 2019 that were in an unrealized loss position were not other-than-temporarily impaired, nor has any event occurred subsequent to that date that would indicate any other-than-temporary impairment.

Our primary source of cash is generated from our ongoing operations. Cash flows from operations were $294.8 million for the first quarter, an increase of 8% from the same period last year. Our positive cash flows have allowed us to support our business and to pay substantial dividends, targeting approximately 80% of our net income, to our stockholders. It is anticipated that cash, restricted cash, and total corporate investments as of August 31, 2019, along with projected operating cash flows and available short-term financing, will support our normal business operations, capital purchases, share repurchases, and dividend payments for the foreseeable future.

For further analysis of our results of operations for the first quarter, and our financial position as of August 31, 2019, refer to the analysis and discussion in the “Results of Operations” and “Liquidity and Capital Resources” sections of this Item 2.

RESULTS OF OPERATIONS

Summary of Results of Operations:

	For the three months ended August 31,		
In millions, except per share amounts	**2019**	**2018**	**Change**
Revenue:			
Management Solutions	$ 724.5	$ 687.7	5 %
PEO and Insurance Services	247.0	158.0	56 %
Total service revenue	**971.5**	**845.7**	**15 %**
Interest on funds held for clients	20.5	17.1	20 %
Total revenue	**992.0**	**862.8**	**15 %**
Combined operating and SG&A expenses	642.9	542.5	18 %
Operating income	**349.1**	**320.3**	**9 %**
Other (expense)/income, net	(4.8)	2.3	n/m
Income before income taxes	**344.3**	**322.6**	**7 %**
Income taxes	80.1	79.0	1 %
Effective income tax rate	23.3 %	24.5 %	
Net income	**$ 264.2**	**$ 243.6**	**8 %**
Diluted earnings per share	**$ 0.73**	**$ 0.67**	**9 %**

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 August 31, 2019, we had no exposure to high-risk or illiquid investments. Details regarding our combined funds held for clients and corporate cash equivalents and investment portfolios are as follows:

$ in millions	For the three months ended August 31, 2019	For the three months ended August 31, 2018	Change
Average investment balances:			
Funds held for clients	$ 3,744.6	$ 3,694.7	1 %
Corporate cash equivalents and investments	862.0	884.3	(3)%
Total	$ 4,606.6	$ 4,579.0	1 %
Average interest rates earned (exclusive of net realized gains/(losses)):			
Funds held for clients	2.1 %	1.9 %	
Corporate cash equivalents and investments	1.8 %	1.4 %	
Combined funds held for clients and corporate cash equivalents and investments	2.0 %	1.8 %	
Total net realized gains	$ 0.9	$ 0.1	

$ in millions	August 31, 2019	May 31, 2019
Net unrealized gains on available-for-sale securities(1)	$ 53.4	$ 19.7
Federal Funds rate(2)	2.25 %	2.50 %
Total fair value of available-for-sale securities	$ 3,072.8	$ 3,620.8
Weighted-average duration of available-for-sale securities in years(3)	3.1	2.9
Weighted-average yield-to-maturity of available-for-sale securities(3)	2.1 %	2.1 %

(1) The net unrealized gain on our investment portfolio was approximately $41.5 million as of October 1, 2019.

(2) The Federal Funds rate was in the range of 2.00% to 2.25% as of August 31, 2019, compared to a range of 2.25% to 2.50% as of May 31, 2019.

(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 $724.5 million for the first quarter, reflecting an increase of 5% compared to the same period last year. The increase in Management Solutions revenue was primarily driven by increases in our client bases across many of our services and growth in revenue per client, which improved as a result of price increases, net of discounts. Retirement services revenue also benefited from an increase in asset fee revenue earned on the asset value of participants' funds.

PEO and Insurance Services revenue: PEO and Insurance Services revenue was $247.0 million for the first quarter, reflecting an increase of 56% compared to the same period last year. In addition to the acquisition of Oasis, this increase was driven by growth in the number of clients and client worksite employees across our existing PEO business. Insurance Services revenue was moderated by softness in the workers' compensation market as state insurance fund rates declined. This was partially offset by an increase in the number of health and benefit clients and applicants.

Total service revenue: Total service revenue was $971.5 million for the first quarter, reflecting an increase of 15%, compared to the same period last year. The increase was primarily attributable to the items previously discussed.

Interest on funds held for clients: Interest on funds held for clients was $20.5 million for the first quarter, reflecting an increase of 20% compared to the same period last year. The increase resulted primarily from higher average interest rates earned. The funds held for clients average investment balances increased 1% for the first quarter, as the impact of wage inflation and increases within our client base were offset by changes in client base mix and timing of collections and remittances.

Combined operating and SG&A expenses: Total expenses were $642.9 million for the first quarter, reflecting an increase of 18%, compared to the same period last year. The following table summarizes total combined operating and SG&A expenses:

In millions	For the three months ended August 31, 2019	2018	Change
Compensation-related expenses	$ 363.4	$ 327.7	11 %
Depreciation and amortization	52.9	35.9	47 %
PEO insurance costs	90.0	63.7	41 %
Other expenses	136.6	115.2	19 %
Total expenses	$ 642.9	$ 542.5	18 %

Compensation-related expenses increased 11% for the first quarter, compared to the same period last year. The increase in compensation-related expenses was primarily driven by the acquisition of Oasis as well as increased headcount due to investment in technology resources and operations to support the growth in the business. Headcount was approximately 15,600 employees, including Oasis, as of August 31, 2019, compared to approximately 14,500 employees as of August 31, 2018.

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, including intangible assets recorded for the Oasis acquisition, which are amortized using either straight-line or accelerated methods.

PEO insurance costs include workers' compensation and minimum premium health insurance benefit plans and self-insured dental and vision plans where we retain risk. Growth in our combined PEO business, including the acquisition of Oasis, contributed to the growth in PEO insurance costs.

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 the first quarter was primarily impacted by the acquisition of Oasis and by continued investment in product development and supporting technology.

Operating income: Operating income was $349.1 million for the first quarter, reflecting an increase of 9% compared to the same period last year. The changes in operating income were attributable to the factors previously discussed. Operating margin was 35.2% for the first quarter, compared to 37.1% for the respective period last year. EBITDA[(1)] increased 13% to $403.0 million for the first quarter and EBITDA margin[(1)] was 41% for the first quarter, consistent with the same period last year.

[(1)] EBITDA and EBITDA margin are not U.S. GAAP measures.

Other (expense)/income, net: Other (expense)/income, net, primarily represents interest expense incurred on our debt instruments, netted against earnings from our cash and cash equivalents and investments in available-for-sale securities. Investment income does not include interest on funds held for clients, which is included in total revenue. We recognized $4.8 million of other expense, net for the first quarter. Other expense, net in the first quarter included $8.3 million of interest expense related to our long-term borrowings. In addition, the decrease in average corporate investment balances was due to funds used for stock repurchases over the past twelve months, higher dividend payments, and acquisitions. This decrease was partially offset by higher average interest rates earned. For the three months ended August 31, 2018, we recognized other income, net of $2.3 million.

Income taxes: Our effective income tax rate was 23.3% for the first quarter, compared to 24.5% for the respective prior year period. The effective income tax rate in the prior year included discrete tax expense related to the revaluation of deferred tax balances for legislative updates. The effective income tax rates in both periods were impacted by the recognition of net discrete tax benefits related to employee stock-based compensation payments.

Net income and diluted earnings per share: Net income and diluted earnings per share were $264.2 million and $0.73 per share for the first quarter, reflecting increases of 8% and 9%, respectively, compared to the same period last year. These fluctuations were attributable to the factors previously discussed. Adjusted net income and adjusted diluted earnings per share, both non-GAAP measures, were $257.6 million and $0.71 per share for the first quarter, each reflecting an increase of 6% compared to the same period last year. Refer to the "Non-GAAP Financial Measures" section that follows for a discussion of these non-GAAP measures.

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

	For the three months ended August 31,		
$ in millions	**2019**	**2018[1]**	**Change**
Net income	$ 264.2	$ 243.6	8 %
Non-GAAP adjustments:			
Excess tax benefit related to employee stock-based compensation payments [2]	(6.6)	(3.3)	
Revaluation of net deferred tax liabilities [3]	—	1.7	
Total non-GAAP adjustments	(6.6)	(1.6)	
Adjusted net income	$ 257.6	$ 242.0	6 %
Diluted earnings per share	$ 0.73	$ 0.67	9 %
Non-GAAP adjustments:			
Excess tax benefit related to employee stock-based compensation payments [2]	(0.02)	(0.01)	
Revaluation of net deferred tax liabilities [3]	—	—	
Total non-GAAP adjustments	(0.02)	—	
Adjusted diluted earnings per share	$ 0.71	$ 0.67	6 %
Net income	$ 264.2	$ 243.6	8 %
Non-GAAP adjustments:			
Interest expense/(income), net	5.8	(2.3)	
Income taxes	80.1	79.0	
Depreciation and amortization expense	52.9	35.9	
Total non-GAAP adjustments	138.8	112.6	
Earnings before interest, taxes, depreciation and amortization	$ 403.0	$ 356.2	13 %

(1) The calculation of the impact of non-GAAP adjustments on diluted earnings per share is performed on each line independently. The table may not add down by +/- $0.01 due to rounding.

(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) 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.

In addition to reporting net income and diluted earnings per share, which are U.S. GAAP measures, we present adjusted net income, adjusted diluted earnings per share, and EBITDA, which are non-GAAP measures. We believe adjusted net income, adjusted diluted earnings per share, and EBITDA are appropriate additional measures, as they are indicators of the performance of our core business operations period over period. Adjusted net income, adjusted diluted earnings per share, and EBITDA 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 net 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 August 31, 2019 remained strong with cash, restricted cash, and total corporate investments of $695.3 million. Total short-term and long-term borrowings, net of debt issuance costs were $853.0 million as of August 31, 2019. We believe that our investments in an unrealized loss position as of August 31, 2019 were not other-than-temporarily impaired, nor has any event occurred subsequent to that date to indicate any other-than-temporary impairment. We anticipate that cash, restricted cash, and total corporate investments as of August 31, 2019, along with projected operating cash flows and available short-term financing, will support our normal business operations, capital purchases, share repurchases, and dividend payments for the foreseeable future.

Table of Contents

Short-Term Financing

We maintain credit facilities and letters of credit as part of our normal and recurring business operations.

Credit Facilities: We maintain three committed, unsecured credit facilities as follows:

Bank	Borrower (1)	Date Entered	Expiration Date	Maximum Amount Available	Purpose
JP Morgan Chase Bank, N.A. ("JPM") (2)	Paychex of New York, LLC ("PoNY")	July 31, 2019	July 31, 2024	$1 Billion	To meet short-term funding requirements.
JPM (2)	PoNY	August 17, 2017	August 17, 2022	$500 Million	To meet short-term funding requirements.
PNC Bank, National Association ("PNC")	Paychex Advance, LLC	March 17, 2016	March 17, 2020	$150 Million	To finance working capital needs and general corporate purposes.
JPM (2)	PoNY	August 5, 2015	July 31, 2019	$1 Billion	To meet short-term funding requirements.

(1) Borrower is a wholly owned subsidiary of our Company.

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

On July 31, 2019, we entered into a credit agreement with a group of lenders which established a new $1.0 billion five-year unsecured revolving credit facility. This revolving credit facility replaced our $1.0 billion five-year unsecured revolving credit facility that was entered into on August 5, 2015 and which was terminated on July 31, 2019. Refer to our Current Report on Form 8-K filed with the SEC on August 1, 2019 for additional details.

For all credit facilities, obligations under any facility are guaranteed by us and certain of our subsidiaries and will bear interest at competitive rates based on options provided to the borrower. Upon the expiration date, any borrowings outstanding will mature and be payable on such date.

JPM $1 Billion Credit Facility: There were no borrowings under this credit facility as of August 31, 2019. Details of borrowings under this credit facility and the predecessor credit facility during the first quarter and the respective prior year period are as follows:

	For the three months ended August 31,	
$ in millions	**2019**	**2018**
Number of days borrowed	6	6
Maximum amount borrowed	$ 469.0	$ 394.5
Weighted-average amount borrowed	$ 288.3	$ 216.3
Weighted-average interest rate	5.33 %	4.99 %

We typically borrow on an overnight basis and only borrowed on an overnight basis during the first quarter and the respective prior year period. Subsequent to August 31, 2019, we borrowed four times, on an overnight basis, $444.5 million on a weighted-average basis under this line.

JPM $500 Million Credit Facility: There were no borrowings under this credit facility as of August 31, 2019. Details of borrowings under this credit facility during the first quarter and the respective prior year period are as follows:

	For the three months ended August 31,	
$ in millions	**2019**	**2018**
Number of days borrowed	10	4
Maximum amount borrowed	$ 450.0	$ 223.0
Weighted-average amount borrowed	$ 395.6	$ 133.4
Weighted-average interest rate	3.27 %	4.99 %

We typically borrow on an overnight basis. In addition to overnight borrowings, during the first quarter we borrowed $450.0 million for 8 days at a weighted-average LIBOR-based interest rate of 3.00%. We only borrowed on an overnight basis during the respective prior year period. Subsequent to August 31, 2019, we borrowed one time, for a 10 day period, $400.0 million on a weighted-average basis under this line.

PNC $150 Million Credit Facility: As of August 31, 2019, we had $56.5 million outstanding under this credit facility which remains outstanding as of the date of this report. Details of borrowings under this credit facility during the first quarter and the respective prior year periods are as follows:

	For the three months ended August 31,	
$ in millions	**2019**	**2018**
Number of days borrowed	88	88
Maximum amount borrowed	$ 56.6	$ 56.8
Weighted-average amount borrowed	$ 54.8	$ 56.0
Weighted-average interest rate	3.07 %	2.53 %

All of our credit facilities contain various financial and operational covenants that are usual and customary for such arrangements. We were in compliance with all of these covenants as of August 31, 2019.

Certain lenders under these credit facilities, and their respective affiliates, have performed, and may in the future perform for us, 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.

Long-term financing: On March 13, 2019, we borrowed $800.0 million through the issuance of the following long-term private placement debt to replace short-term borrowings under our JPM credit facilities used to fund the acquisition of Oasis as follows:

In millions	**August 31, 2019**
Senior Notes, Series A	$ 400.0
Senior Notes, Series B	400.0
Total long-term borrowings	800.0
Less: Debt issuance costs, net of accumulated amortization	(3.5)
Long-term borrowings, net of debt issuance costs	**$ 796.5**

Certain information related to the Senior Notes are as follows:

	Senior Notes Series A	**Senior Notes Series B**
Stated interest rate	4.07%	4.25%
Effective interest rate	4.15%	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

Letters of credit: As of August 31, 2019, we had irrevocable standby letters of credit outstanding totaling $147.4 million, required to secure commitments for certain insurance policies. The letters of credit expire at various dates between November 2019 and August 2020. No amounts were outstanding on these letters of credit during the first quarter or as of August 31, 2019.

Other commitments: We enter into various purchase commitments with vendors in the ordinary course of business. We had outstanding commitments to purchase approximately $8.2 million of capital assets as of August 31, 2019. In addition, we are involved in two limited partnership agreements to contribute a maximum of $20.0 million to venture capital funds in the financial technology sector. As of August 31, 2019, we have contributed approximately $6.5 million of the total funding commitment.

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. In addition, we have 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 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 were not material as of August 31, 2019. We also maintain 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 the purpose of 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 August 31, 2019.

Operating Cash Flow Activities

	For the three months ended August 31,	
In millions	**2019**	**2018**
Net income	$ 264.2	$ 243.6
Non-cash adjustments to net income	117.1	108.8
Cash used in operating assets and liabilities	(86.5)	(78.7)
Net cash provided by operating activities	$ 294.8	$ 273.7

The increase in our operating cash flows for the first quarter, compared to the same period last year, was primarily the result of higher net income and non-cash adjustments, offset by fluctuations in operating assets and liabilities. The increase in non-cash adjustments was primarily due to higher amortization expense related to intangible assets acquired through the acquisition of Oasis. The fluctuations in our operating assets and liabilities were primarily due to the timing of collections and related tax payments for our combined PEO business.

Investing Cash Flow Activities

	For the three months ended August 31,	
In millions	**2019**	**2018**
Net change in purchases and sales/maturities of available for sale securities	$ 572.8	$ 181.2
Purchases of property and equipment	(26.4)	(24.4)
Purchases of other assets	(1.7)	(0.8)
Net cash provided by investing activities	$ 544.7	$ 156.0

Purchases and sales/maturities of available-for-sale securities**:** Available-for-sale securities include funds held for clients and corporate investments. The portfolio of funds held for clients and corporate investments is detailed in Note F of the Notes to Consolidated Financial Statements (Unaudited) contained in Item 1 of this Form 10-Q.

Fluctuations in the net change in purchases and sales/maturities are largely due to timing within the client funds portfolio. The amount of funds held for clients will vary based upon the timing of collection of client funds, and the related remittance of funds 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 the first quarter and respective prior year period are discussed further in the “Financing Cash Flow Activities” section which follows.

Additional discussion of interest rates and related risks is included in the “Market Risk Factors” section of this Form 10-Q.

Purchases of long-lived assets: To support our continued client and ancillary product growth, we made purchases of data processing equipment and software, and we upgraded various operating facilities.

Table of Contents

Purchases of other assets relates primarily to client list acquisition activity and changes in equity investments.

Financing Cash Flow Activities

In millions, except per share amounts	For the three months ended August 31, 2019	2018
Net change in client fund obligations	$ (68.4)	$ (942.5)
Net proceeds from short-term borrowings	56.5	56.7
Dividends paid	(222.0)	(201.4)
Repurchases of common shares	(171.9)	(32.8)
Activity related to equity-based plans	(7.4)	9.7
Net cash used in financing activities	$ (413.2)	$ (1,110.3)
Cash dividends per common share	$ 0.62	$ 0.56

Net change in client fund obligations: 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.

The first quarter and the respective prior year period both reflected a net cash outflow resulting from the net change in client fund obligations. Client fund obligation balances can be significantly impacted by the timing of the period end and overall trends in client fund balances. August 31, 2019 fell on a Saturday, the day after a significant payment day for direct pay funds and May 31, 2019 fell on a Friday. As a result, timing impacts were not as significant as in the prior year when August 31, 2018 was on a Friday but May 31, 2018 was on a Thursday, a significant collections day. Funds collected on May 31, 2018 were then paid out on Friday, June 1, 2018 impacting the cash outflows reported in the prior year period.

Net proceeds from short-term borrowings: During the first quarter and the respective prior year period, we borrowed funds under our credit facilities. Certain borrowings remained outstanding under the PNC credit facility as of August 31, 2019 and August 31, 2018. Short-term borrowings are typically used to finance working capital needs and general corporate purposes.

Dividends paid: The increase in dividend payments for the first quarter compared to the corresponding period last year is primarily due to an 11% increase in our dividend rate beginning in May 2019, offset slightly by the impact of repurchases of our common stock. The payment of future dividends is dependent on our future earnings and cash flow and is subject to the discretion of our Board of Directors (the “Board”).

Repurchases of common stock: 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. During the first quarter, we repurchased 2.0 million shares for $171.9 million. During the respective prior year period, we repurchased 0.5 million shares for $32.8 million under a previously authorized program. The purpose of both programs is to manage common stock dilution. All shares of common stock repurchased were retired. As of August 31, 2019, approximately $228.1 million remains available under the May 2019 approved common stock repurchase program.

Activity related to equity-based plans: The decrease in cash flows from activity related to equity-based plans for the first quarter compared to the respective prior year period is largely a result of the number of shares withheld to cover taxes on lapses of stock awards exceeding proceeds from stock option. During the fiscal year ended May 31, 2018 (“fiscal 2018”), we made a decision to maximize our tax benefit by accelerating the vesting of certain restricted stock units and related share withholdings for taxes into fiscal 2018 that would have otherwise vested in August 2018. This did not reoccur in fiscal 2019. In addition, 0.2 million fewer options were exercised during the first quarter compared to the respective prior year period, but at higher market prices for our common stock during the first quarter.

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 predominantly in municipal bonds - including general obligation bonds; pre-refunded bonds, which are secured by a U.S. government escrow; and essential services revenue bonds - along with 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 the first quarter, our primary short-term investment vehicles were U.S. government agency securities, commercial paper, bank time and demand deposit accounts, and money market funds. We have no exposure to high-risk or illiquid 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 the first quarter, the average interest rate earned on our combined funds held for clients and corporate investment portfolios was 2.0% compared with 1.8% for the respective prior year period. 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 August 31, 2019 had an average duration of 3.1 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 August 31, 2019 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.

In millions	August 31, 2019 Amortized cost	August 31, 2019 Fair value
Maturity date:		
Due in one year or less	$ 254.5	$ 255.6
Due after one year through three years	832.9	843.9
Due after three years through five years	992.1	1,013.2
Due after five years	939.9	960.1
Total	$ 3,019.4	$ 3,072.8

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.

As of August 31, 2019, the federal funds rate was in the range of 2.00% to 2.25%. On September 19, 2019, the Federal Reserve reduced the federal funds rate 25 basis points to a range of in the range of 1.75% to 2.00% This is the second time the Federal Reserve has reduced the federal funds rate by 25 basis points in fiscal 2020 after periodically raising the rate from December 2015 through May 2019.

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

- 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) is expected to average approximately $5.0 billion for fiscal 2020. Our anticipated allocation is approximately 40% invested in short-term 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 $53.4 million as of August 31, 2019 and $19.7 million as of May 31, 2019. During the three months, the net unrealized gain on our investment portfolios ranged from $19.8 million to $55.6 million. These fluctuations were driven by changes in market rates of interest. The net unrealized gain on our investment portfolios was approximately $41.5 million as of October 1, 2019.

As of August 31, 2019 and May 31, 2019, we had $3.1 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 August 31, 2019 and as of May 31, 2019. The weighted-average yield-to-maturity excludes available-for-sale securities tied to short-term interest rates, such as 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 August 31, 2019, would be in the range of $20.0 million to $25.0 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 August 31, 2019 were not other-than-temporarily impaired. While $174.2 million of our available-for-sale 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 the gross unrealized losses of $0.5 million were due to changes in interest rates and were not due to increased credit risk or other valuation concerns. A majority of the securities in an unrealized loss position as of August 31, 2019 and May 31, 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 in connection with our 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.

CRITICAL ACCOUNTING POLICIES

Our critical accounting policies are described in Item 7 of our Form 10-K for fiscal 2019, filed with the SEC on July 24, 2019. On an ongoing basis, we evaluate the critical accounting policies used to prepare our consolidated financial statements, including, but not limited to, those related to:

- revenue recognition;

- PEO insurance reserves;

- goodwill and other intangible assets;

- impairment of long-lived assets;

- stock-based compensation costs; and
- income taxes.

There have been no material changes in these aforementioned critical accounting policies.

NEW ACCOUNTING PRONOUNCEMENTS

Recently adopted accounting pronouncements: Refer to Note A of the Notes to Consolidated Financial Statements (Unaudited) contained in Item 1 of this Form 10-Q for a discussion of recently adopted accounting pronouncements.

Recently issued accounting pronouncements: Refer to Note A of the Notes to Consolidated Financial Statements (Unaudited) contained in Item 1 of this Form 10-Q for a discussion of recently issued accounting pronouncements.

Item 3. Quantitative and Qualitative Disclosures of Market Risk

The information called for by this item is provided under the caption "Market Risk Factors" under Item 2 – Management's Discussion and Analysis of Financial Condition and Results of Operations and is incorporated herein by reference.

Item 4. 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 our reports filed under the Securities Exchange Act of 1934, as amended (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 our management, including our Chief Executive Officer and Chief 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, we carried out an evaluation, under the supervision and with the participation of our Chief Executive Officer and Chief 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 Chief Executive Officer (principal executive officer) and Chief Financial Officer (principal financial officer) have concluded that as of August 31, 2019, the end of the period covered by this report, our disclosure controls and procedures were effective at a reasonable assurance level.

Changes in Internal Control over Financial Reporting: In connection with the Company's adoption of Accounting Standards Update No. 2016-02, "Leases (Topic 842)," the Company has updated its control framework effective June 1, 2019 for certain new internal controls and changes to certain existing controls, including reconciliation controls, management review controls, and contract review controls. Other than these changes, there have been no material changes in the Company's internal control over financial reporting that occurred during the quarter ended August 31, 2019 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

PART II. OTHER INFORMATION

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Issuer Purchases of Equity Securities

In May 2019, the Company's Board of Directors approved a program to repurchase up to $400.0 million of the Company's common stock, authorized through May 31, 2022. The purpose of the program is to manage common stock dilution. Shares repurchased under this program during the first quarter were as follows:

In millions	Total number of shares purchased	Average price paid per share	Total dollars	Approximate dollar value of shares that may yet be purchased under the programs
June 1, 2019 - June 30, 2019	—	$ —	$ —	$ 400.0
July 1, 2019 - July 31, 2019	1.8	$ 85.00	$ 153.4	$ 246.6
August 1, 2019 - August 31, 2019	0.2	$ 82.14	$ 18.5	$ 228.1
Total for the period	2.0	$ 84.68	$ 171.9	$ 228.1

All shares of common stock repurchased during the first quarter were retired.

Table of Contents

Item 6. Exhibits

INDEX TO EXHIBITS

	Exhibit number	Description
*#	10.1	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 14, 2015) Amended Form of Restricted Stock Unit Award Agreement.
*#	10.2	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 14, 2015) Amended Form of Restricted Stock Unit Award Agreement (Officer).
*#	10.3	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 14, 2015) Amended Form of 2019-2021 Performance Incentive Award Agreement.
*#	10.4	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 14, 2015) Amended Form of Non-Qualified Stock Option Award Agreement.
*#	10.5	Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 14, 2015) Master Restricted Stock Unit Award Agreement.
	10.6	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.
*	31.1	Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
*	31.2	Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
*	32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-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.

* Exhibit filed with this report
# Management contract or compensatory plan

SIGNATURES

Pursuant to the requirements 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.

PAYCHEX, INC.

Date:	October 4, 2019	/s/ Martin Mucci Martin Mucci President and Chief Executive Officer (Principal Executive Officer)
Date:	October 4, 2019	/s/ Efrain Rivera Efrain Rivera Senior Vice President, Chief Financial Officer, and Treasurer (Principal Financial Officer)
Date:	October 4, 2019	/s/ Robert L. Schrader Robert L. Schrader Vice President and Controller (Principal Accounting Officer)

Exhibit 10.1

PAYCHEX, INC.
2002 STOCK INCENTIVE PLAN

(as amended and restated effective October 14, 2015)

<u>RESTRICTED STOCK UNIT AWARD NOTICE (2019)</u>

Participant:	[ ]
Type of Award:	Restricted Stock Units
Number of Restricted Stock Units:	[ ]
Date of Grant:	[ ]

This Award Notice serves to notify you that the Governance and Compensation Committee (the "Committee") of the Board of Directors of Paychex, Inc. (the "Company") hereby grants to you, under the Company's 2002 Stock Incentive Plan, as amended and restated effective October 14, 2015 (the "Plan"), a Restricted Stock Unit Award (the "Award"), on the terms and conditions set forth in the Plan and in the attached Restricted Stock Unit Award Agreement, which is incorporated herein by reference.

PAYCHEX, INC.

PAYCHEX, INC.
2002 STOCK INCENTIVE PLAN

(as amended and restated effective October 14, 2015)

RESTRICTED STOCK UNIT AWARD AGREEMENT

1. Grant of Restricted Stock Units. This Restricted Stock Unit Award Agreement (the "Award Agreement"), sets forth the terms and conditions of the Restricted Stock Units (the "Award") granted to you by the Governance and Compensation Committee (the "Committee") of the Board of Directors of Paychex, Inc. (the "Company") under the Company's 2002 Stock Incentive Plan, as amended and restated effective October 14, 2015 (the "Plan"), as described on your Award Notice. The Award is subject to all of the provisions of the Plan, which is hereby incorporated by reference and made a part of this Award Agreement. The capitalized terms used in this Award Agreement, and not otherwise defined herein, are defined in the Plan.

2. Restriction and Vesting. Subject to the terms set forth in this Award Agreement and the Plan, and provided that you are still an employee of the Company at that time, 20 percent of the Shares, as set forth on your Award Notice, represented by the Award will vest on each of the first, second, third, fourth and fifth anniversaries of the date of grant, (each, a "Vesting Date"). Except in the event of your death or Disability or your Retirement (as defined below) on or after the one-year anniversary of the Date of Grant, if your employment terminates before a Vesting Date, then the unvested portion of the Award shall be forfeited and cancelled immediately. If your employment terminates due to death or Disability, your Award shall immediately become 100% vested. If your employment terminates due to Retirement on or after the one-year anniversary of the Date of Grant, the unvested portion of the Award that would otherwise vest during the one-year period following your Retirement, if any, shall remain outstanding and continue to vest in accordance with the terms of this Award Agreement on its scheduled Vesting Date, and the remaining unvested portion of the Award shall be forfeited and cancelled as of your last day worked. Notwithstanding the terms of the Plan, for purposes of this Award Agreement the term "Retirement" means retirement from the Company at age 60 or later with ten or more years of employment (full-time or part-time) with the Company.

3. Nature of Units. The Units represent book-keeping entries only, and constitute the Company's unfunded and unsecured promise to issue shares of Common Stock to you on a future date. As a holder of Units, you have no rights other than the rights of a general creditor of the Company.

4. Issuance of Shares. If your employment terminates due to death or Disability, the Company will issue a certificate or certificates representing the Shares underlying the Award that have vested as promptly as practicable following the date of your termination of employment due to death or Disability, but no later than 90 days following such date. Otherwise, the Company shall, provided that the conditions to vesting specified in Section 2 of this Award Agreement are satisfied, issue a certificate or certificates for Shares representing the vested portion of the Award

as promptly as practicable following each Vesting Date, but no later than 90 days following such Vesting Date.

5. Rights as a Stockholder. Prior to the issuance of Shares to you pursuant to Section 4, you will not have any of the rights of a stockholder with respect to the Shares to be issued on vesting of the Units, including, but not limited to, the right to receive such cash dividends, if any, as may be declared on such Shares from time to time and the right to vote (in person or by proxy) such Shares at any meeting of stockholders of the Company.

6. Restrictions on Transfer of Units. Units, may not, except as otherwise provided in the Plan, be sold, assigned, transferred, pledged or encumbered in any way, whether by operation of law or otherwise, except by will or the laws of descent and distribution. After the Vesting Date, the Shares may be issued during your lifetime only to you, or after your death to your designated beneficiary, or, in the absence of such beneficiary, to your duly qualified personal representative.

7. Restrictions on Issuance of Shares. If at any time the Company determines that listing, registration or qualification of the Shares covered by the Award upon any securities exchange or under any state or federal law, or the approval of any governmental agency, is necessary or advisable as a condition to the Award or the issuance of certificate(s) for Shares hereunder, such Award or issuance may not be made in whole or in part unless and until such listing, registration, qualification or approval shall have been effected or obtained free of any conditions not acceptable to the Company.

8. Withholding. The vesting of the Award is conditioned upon your making arrangements satisfactory to the Company for the payment to the Company of the amount of all taxes required by any governmental authority to be withheld and paid over by the Company or any Affiliate to the governmental authority on account of such vesting. The payment of such withholding taxes to the Company may be made (i) by you in cash or by check, (ii) subject to the consent of the Company and in accordance with any guidelines established by the Committee, by the Company retaining the number of the Shares that would otherwise be delivered to you upon vesting that have an aggregate Fair Market Value (at the time retained by the Company) equal to the amount of withholding taxes (using your minimum required tax withholding rate or such other rate that the Company determines will not trigger a negative accounting impact to the Company) required to be paid, or (iii) by the Company or any Affiliate withholding such taxes from any other compensation owed to you by the Company or any Affiliate. Unless you make arrangements prior to vesting to pay withholdings taxes in cash or by check, or to have such withholding taxes withheld from other compensation owed to you by the Company or any Affiliate, then at the time of vesting, the Company shall have the right to retain the number of the Shares that would otherwise be delivered to you upon vesting that have an aggregate Fair Market Value (at the time retained by the Company) equal to the amount of withholding taxes (using your minimum required tax withholding rate or such other rate that the Company determines will not trigger a negative accounting impact to the Company) required to be paid.

9. Limitation of Rights. Neither the Plan, the granting of the Award, the Award Notice nor this Award Agreement gives you any right to remain in the employment of the Company or any Affiliate.

10. Non-competition, Non-solicitation, Confidentiality, and Detrimental Conduct. In consideration for the Award, you agree that during your employment and for a period of twelve (12) months following termination of employment for any reason, you will not, directly or indirectly, either as an employee, employer, consultant, agent, principal, partner, stockholder, corporate officer, board member, director, or in any other individual or representative capacity, engage or attempt to engage in any activity that is competitive to the business of the Company and would involve, or is likely to involve, the use or disclosure of Paychex's Trade Secrets (as defined below) within the geographic and substantive area or areas of responsibility assigned to the you during the last 24 months of employment. In addition, you agree that for a period of eighteen (18) months following the termination of employment for any reason, you will not directly or indirectly, solicit Company clients, prospects or referral resources, including but not limited to accountants, banks, and consultants, with which you had substantial personal involvement during your employment; nor will you recruit or hire, or attempt to recruit or hire, any other employee of Company or its affiliates, or induce or attempt to induce any employee of Company to terminate employment with Company. You also agree and acknowledge that during the course of your employment with the Company, you will obtain, have access and be privy to nonpublic, confidential, and proprietary information important to the Company's business solely as a result of your employment with the Company, including but not limited to, sales and marketing strategies, price lists, client lists, client confidential information, referral sources, and goodwill ("Trade Secrets"). You hereby recognize and agree that Paychex's Trade Secrets are confidential, proprietary and highly valued protectable interests. You agree that during and after employment, you shall not divulge or make use of any Trade Secrets, directly or indirectly, personally or on behalf of any other person, business, corporation, or entity without prior written consent of the Company. This Agreement does not, however, limit your ability to communicate with any federal governmental agency or otherwise participate in any investigation or proceeding that may be conducted by any federal governmental agency, including providing documents or other information, without notice to the Company. You further agree that you will not, during your employment, engage in conduct which is detrimental to the Company, including violation of the Company's Code of Business Ethics and Conduct, criminal conduct, fraud, or willful misconduct. These covenants are not intended to, and do not, limit in any way the rights and remedies provided to the Company under the Plan, other agreements with you, or under common or statutory law.

11. Repayment of Financial Gain.

(a) If you fail to comply with Section 10 of this Award Agreement, the Company may cancel any unvested portion of this Award and recover from you the total number or Vesting Date value of Shares whose Vesting Date occurred pursuant to this Award during the 24-month period preceding your breach of any covenant in Section 10 of this Award Agreement. The total number or value of the vested Shares shall include the amount of any dividends paid to you during the 24-month period specified above and shall not be reduced for the payment of applicable taxes or other amounts.

(b) If you fail to comply with Section 10 of this Award Agreement, upon demand by the Company, you will repay the Company in accordance with the terms above in this Section, and the Company shall be entitled to offset the amount of any such repayment obligation against any amount owed to you by the Company. The remedies set forth in this Section are in addition to any other remedies the Company may have, at law or equity, for your violation of the terms of this Award Agreement.

12. Rights of Company and Affiliates. This Award Agreement does not affect the right of the Company or any Affiliate to take any corporate action whatsoever, including without limitation its right to recapitalize, reorganize or make other changes in its capital structure or business, merge or consolidate, issue bonds, notes, Shares or other securities, including preferred stock, or options therefor, dissolve or liquidate, or sell or transfer any part of its assets or business.

13. Plan Controls. In the event of any conflict among the provisions of the Plan and this Award Agreement, the provisions of the Plan will be controlling and determinative.

14. Amendment. Except as otherwise provided by the Plan, the Company may only alter, amend or terminate the Award with your consent.

15. Governing Law. This Award Agreement shall be governed by and construed in accordance with the laws of the State of New York, except as superseded by applicable federal law, without giving effect to its conflicts of law provisions. All parties consent to exclusive personal jurisdiction in New York courts and agree that venue shall be New York State Supreme Court, Monroe County.

16. Section 409A. The Award is intended to comply with the requirements of Section 409A of the Internal Revenue Code of 1986, as amended, and the treasury regulations promulgated and other official guidance issued thereunder, and the Plan and this Award Agreement shall be interpreted and administered consistent with such intention. References to “termination of employment” and similar terms used in this Award Agreement mean, to the extent necessary to comply with Section 409A, the date that you incur a “separation from service” within the meaning of Section 409A. Notwithstanding anything in this Award Agreement to the contrary, if at the time of your separation from service, you are a “specified employee” for purposes of Section 409A, and payment under this Award Agreement as a result of such separation from service is required by Section 409A to be delayed by six months, then the Company shall make such payment on the day following the six-month anniversary of your separation from service to the extent required to comply with Section 409A. The Company’s right to offset pursuant to Section 11(b) of this Award Agreement is limited to the extent that and until the application of an offset at a given time would not result in a violation of Section 409A.

* * * * *

Exhibit 10.2

PAYCHEX, INC.
2002 STOCK INCENTIVE PLAN
(as amended and restated effective October 14, 2015)
RESTRICTED STOCK UNIT AWARD NOTICE (2019)

Participant:	[ ]
Type of Award:	Restricted Stock Units
Number of Restricted Stock Units:	[ ]
Date of Grant:	[ ]

This Award Notice serves to notify you that the Governance and Compensation Committee (the "Committee") of the Board of Directors of Paychex, Inc. (the "Company") hereby grants to you, under the Company's 2002 Stock Incentive Plan, as amended and restated effective October 14, 2015 (the "Plan"), an award (the "Award") of Restricted Stock Units, on the terms and conditions set forth in the attached Restricted Stock Unit Award Agreement and the Plan, covering the number of shares of the Company's $.01 par value common stock (the "Common Stock") equal to the Number of Restricted Stock Units set forth above.

Stock Retention Requirement. For purposes of the Award, during the term of your employment by the Company, the Committee has established a target of ownership of Common Stock with a value of three times your annual base salary. Stock that counts toward satisfaction of this target includes, but is not limited to, stock purchased by you on the open market, stock obtained through stock option exercise or upon grant of a restricted stock award, stock owned (indirectly) through a qualified retirement plan maintained by the Company, stock owned jointly with your spouse; and stock beneficially owned by a trust for the benefit of you, your spouse and/or your children. Notwithstanding the terms of the Restricted Stock Unit Award Agreement, until you reach the established stock ownership target, you will be required to retain the shares of Common Stock that you receive when the shares represented by this Award vest, except that you may sell sufficient shares to satisfy your tax obligations as set forth in Section 9 of the Award Agreement. Once you have achieved the target ownership, the number of shares of Common Stock associated with your target ownership amount will be determined based on the stock price at that time, and unless otherwise prohibited by agreement, policy, law or otherwise, you may thereafter sell, gift or otherwise transfer any vested shares of Common Stock received under the Award so long as after such sale, gift or other transfer you will continue to own the number of shares of Common Stock associated with your target ownership amount. The Company shall be authorized to add a legend regarding this restriction on transfer to any certificate representing the shares of Common Stock under the Award.

PAYCHEX, INC.

PAYCHEX, INC.
2002 STOCK INCENTIVE PLAN
(as amended and restated effective October 14, 2015)
RESTRICTED STOCK UNIT AWARD AGREEMENT (OFFICER)

1. Grant of Restricted Stock Units. This Restricted Stock Unit Award Agreement (the "Award Agreement"), sets forth the terms and conditions of the award (the "Award") of Restricted Stock Units (the "Units") granted to you by the Governance and Compensation Committee (the "Committee") of the Board of Directors of Paychex, Inc. (the "Company") under the Company's 2002 Stock Incentive Plan, as amended and restated effective October 14, 2015 (the "Plan"), as described on your Award Notice. The Award is subject to all of the provisions of the Plan, which is hereby incorporated by reference and made a part of this Award Agreement. The capitalized terms used in this Award Agreement, and not otherwise defined herein, are defined in the Plan.

2. Restriction and Vesting.

(a) Subject to the terms set forth in this Award Agreement and the Plan, unless earlier vested under or otherwise subject to Section 2(b) of this Award Agreement, provided you are still a full-time employee of the Company at that time, the Units will vest pro rata with respect to one-third of the Number of Restricted Stock Units on the first, second, and third anniversaries of the Date of Grant, with any fractional Unit resulting from such pro-ration vesting on the third anniversary of the Date of Grant as set forth on your Award Notice (a "Vesting Date").

(b) Except in the event of your death or Disability or your Retirement (as defined below) on or after the one-year anniversary of the Date of Grant, if your employment terminates before a Vesting Date for any reason, then the unvested portion of the Award shall be forfeited and cancelled immediately. If your employment terminates due to death or Disability, your Award shall immediately become 100% vested. If your employment terminates due to Retirement on or after the one-year anniversary of the Date of Grant, the unvested portion of the Award that would otherwise vest during the one-year period following your Retirement, if any, shall remain outstanding and continue to vest in accordance with the terms of this Award Agreement on its scheduled Vesting Date, and the remaining unvested portion of the Award shall be forfeited and cancelled as of your last day worked. Notwithstanding the terms of the Plan, for purposes of this Award Agreement the term "Retirement" means retirement from the Company at age 60 or later with ten or more years of employment (full-time or part-time) with the Company.

3. Nature of Units. The Units represent book-keeping entries only, and constitute the Company's unfunded and unsecured promise to issue Shares to you on a future date. As a holder of Units, you have no rights other than the rights of a general creditor of the Company.

4. Issuance of Shares. If your employment terminates due to death or Disability, the Company will issue a certificate or certificates representing the Shares underlying the Award that have vested as promptly as practicable following the date of your termination of employment due to death or Disability, but no later than 90 days following such date. Otherwise, the Company shall, when the conditions to vesting specified in Section 2 of this Award Agreement are satisfied,

issue a certificate or certificates representing the Shares underlying the Award that have vested as promptly as practicable following each Vesting Date, but no later than 90 days following such Vesting Date.

5. Rights as a Stockholder. Prior to the issuance of Shares to you pursuant to Section 4, you will not have any of the rights of a stockholder with respect to the Shares to be issued on vesting of the Units, including, but not limited to, the right to vote (in person or by proxy) such Shares at any meeting of stockholders of the Company.

6. Dividend Equivalents. Prior to the vesting or forfeiture of the Award, there shall be accrued on the Units an amount equivalent to the regular cash dividends paid, if any, on the Shares underlying the Units. In the event of the vesting and payment of any Units, the dividend equivalents accrued on such Units, less any withholding that the Company determines is required to be withheld therefrom, shall be paid at the time that such Units are paid to you. In the event of the forfeiture or cancellation of any Units, the dividend equivalents accrued on the Units that are forfeited shall also be forfeited.

7. Restrictions on Transfer of Units. Units may not, except as otherwise provided in the Plan, be sold, assigned, transferred, pledged or encumbered in any way, whether by operation of law or otherwise, except by will or the laws of descent and distribution. After a Vesting Date, the Shares may be issued during your lifetime only to you, or after your death to your designated beneficiary, or, in the absence of such beneficiary, to your duly qualified personal representative.

8. Restrictions on Issuance of Shares. If at any time the Company determines that listing, registration or qualification of the Shares covered by the Award upon any securities exchange or under any state or federal law, or the approval of any governmental agency, is necessary or advisable as a condition to the Award or the issuance of certificate(s) for Shares hereunder, such Award or issuance may not be made in whole or in part unless and until such listing, registration, qualification or approval shall have been effected or obtained free of any conditions not acceptable to the Company.

9. Withholding. The vesting of the Award is conditioned upon your making arrangements satisfactory to the Company for the payment to the Company of the amount of all taxes required by any governmental authority to be withheld and paid over by the Company or any Affiliate to the governmental authority on account of such vesting. The payment of such withholding taxes to the Company may be made (i) by you in cash or by check, (ii) subject to the consent of the Company and in accordance with any guidelines established by the Committee, by the Company retaining the number of the Shares that would otherwise be delivered to you upon vesting that have an aggregate Fair Market Value (at the time retained by the Company) equal to the amount of withholding taxes (using your minimum required tax withholding rate or such other rate that the Company determines will not trigger a negative accounting impact to the Company) required to be paid, or (iii) by the Company or any Affiliate withholding such taxes from any other compensation owed to you by the Company or any Affiliate. Unless you make arrangements prior to vesting to pay withholdings taxes in cash or by check, or to have such withholding taxes withheld from other compensation owed to you by the Company or any Affiliate, then at the time of vesting, the Company shall have the right to retain the number of the Shares that would otherwise be delivered to you upon vesting that have an aggregate Fair Market Value (at the time

retained by the Company) equal to the amount of withholding taxes (using your minimum required tax withholding rate or such other rate that the Company determines will not trigger a negative accounting impact to the Company) required to be paid.

10. Limitation of Rights. Neither the Plan, the granting of the Award, the Award Notice nor this Award Agreement gives you any right to remain in the employment of the Company or any Affiliate.

11. Non-competition, Non-solicitation, Confidentiality, and Detrimental Conduct. In consideration for the Award, you agree that during your employment and for a period of twelve (12) months following termination of employment for any reason, you will not, directly or indirectly, either as an employee, employer, consultant, agent, principal, partner, stockholder, corporate officer, board member, director, or in any other individual or representative capacity, engage or attempt to engage in any activity that is competitive to the business of the Company and would involve, or is likely to involve, the use or disclosure of Paychex's Trade Secrets (as defined below) within the geographic and substantive area or areas of responsibility assigned to the you during the last 24 months of employment. In addition, you agree that for a period of eighteen (18) months following the termination of employment for any reason, you will not directly or indirectly, solicit Company clients, prospects or referral resources, including but not limited to accountants, banks, and consultants, with which you had substantial personal involvement during your employment; nor will you recruit or hire, or attempt to recruit or hire, any other employee of Company or its affiliates, or induce or attempt to induce any employee of Company to terminate employment with Company. You also agree and acknowledge that during the course of your employment with the Company, you will obtain, have access and be privy to nonpublic, confidential, and proprietary information important to the Company's business solely as a result of your employment with the Company, including but not limited to, sales and marketing strategies, price lists, client lists, client confidential information, referral sources, and goodwill ("Trade Secrets"). You hereby recognize and agree that Paychex's Trade Secrets are confidential, proprietary and highly valued protectable interests. You agree that during and after employment, you shall not divulge or make use of any Trade Secrets, directly or indirectly, personally or on behalf of any other person, business, corporation, or entity without prior written consent of the Company. This Agreement does not, however, limit your ability to communicate with any federal governmental agency or otherwise participate in any investigation or proceeding that may be conducted by any federal governmental agency, including providing documents or other information, without notice to the Company. You further agree that you will not, during your employment, engage in conduct which is detrimental to the Company, including violation of the Company's Code of Business Ethics and Conduct, criminal conduct, fraud, or willful misconduct. These covenants are not intended to, and do not, limit in any way the rights and remedies provided to the Company under the Plan, other agreements with you, or under common or statutory law.

12. Repayment of Financial Gain.

(a) If you fail to comply with Section 11 of this Award Agreement, the Company may cancel any unvested portion of this Award and recover from you the total number or Vesting Date value of Shares whose Vesting Date occurred pursuant to this Award during the 24-month period preceding your breach of any covenant in Section 11 of this Award Agreement. The total number or value of the vested Shares shall include the amount of any dividends paid to you during the 24-month period specified above and shall not be reduced for the payment of applicable taxes or other amounts.

(c) If you fail to comply with Section 11 of this Award Agreement, upon demand by the Company, you will repay the Company in accordance with the terms of Section 12(a), and the Company shall be entitled to offset the amount of any such repayment obligation against any amount owed to you by the Company. The remedies set forth in this Section are in addition to any other remedies the Company may have, at law or equity, for your violation of the terms of this Award Agreement.

13. Rights of Company and Affiliates. This Award Agreement does not affect the right of the Company or any Affiliate to take any corporate action whatsoever, including without limitation its right to recapitalize, reorganize or make other changes in its capital structure or business, merge or consolidate, issue bonds, notes, Shares or other securities, including preferred stock, or options therefor, dissolve or liquidate, or sell or transfer any part of its assets or business.

14. Plan Controls. In the event of any conflict among the provisions of the Plan and this Award Agreement, the provisions of the Plan will be controlling and determinative.

15. Amendment. Except as otherwise provided by the Plan, the Company may only alter, amend or terminate the Award with your consent.

16. Governing Law. This Award Agreement shall be governed by and construed in accordance with the laws of the State of New York, except as superseded by applicable federal law, without giving effect to its conflicts of law provisions. All parties consent to exclusive personal jurisdiction in New York courts and agree that venue shall be New York State Supreme Court, Monroe County.

17. Section 409A. The Award is intended to comply with the requirements of Section 409A of the Internal Revenue Code of 1986, as amended, and the treasury regulations promulgated and other official guidance issued thereunder, and the Plan and this Award Agreement shall be administered and interpreted consistent with such intention. References to “termination of employment” and similar terms used in this Award Agreement mean, to the extent necessary to comply with Section 409A, the date that you incur a “separation from service” within the meaning of Section 409A. Notwithstanding anything in this Award Agreement to the contrary, if at the time of your separation from service, you are a “specified employee” for purposes of Section 409A, and payment under this Award Agreement as a result of such separation from service is required by Section 409A to be delayed by six months, then the Company shall make such payment on the day following the six-month anniversary of your separation from service to the extent required to comply with Section 409A. The Company’s right to offset pursuant to Section 12(b) of this Award Agreement is limited to the extent that and until the application of an offset at a given time would not result in a violation of Section 409A.

* * * * *

Exhibit 10.3

PAYCHEX, INC.
2002 STOCK INCENTIVE PLAN

(as amended and restated effective October 14, 2015)

2019-2021 PERFORMANCE INCENTIVE AWARD AGREEMENT

Participant Name	[ ]
Award Date	[ ]
Performance Period	June 1, 2019 through May 31, 2021
Maximum Number of Restricted Stock Units	[ ]

1. Grant of Award. This 2019-2021 Officer Performance Incentive Award Agreement (this "Award Agreement") sets forth the terms and conditions of the Performance Award (the "Award") granted to you by the Governance and Compensation Committee (the "Committee") of the Board of Directors of Paychex, Inc. (the "Company") under the Company's 2002 Stock Incentive Plan, as amended and restated effective October 14, 2015 (the "Plan"). The Award is subject to all of the provisions of your Award Notice and the Plan, which is hereby incorporated by reference and made a part of this Award Agreement. The capitalized terms used in this Award Agreement, and not otherwise defined herein, are defined in the Plan. In the event of any conflict among the provisions of the Plan and this Award Agreement, the provisions of the Plan will be controlling and determinative.

2. Maximum Number of Restricted Stock Units and Components. The Maximum Number of Restricted Stock Units of the Award is set forth above and consists of two components: (a) the Service Revenue component; and (b) the Operating Income component, each of which shall represent 50 percent of the Maximum Number of Restricted Stock Units.

3. Requirement of Employment. Your rights to the Actual Number of Restricted Stock Units (as that term is defined below) under Section 5, shall be provisional and shall be canceled in whole or in part, as determined by the Committee in its sole discretion if your continuous employment with the Company terminates for any reason other than death or Disability on or before the last day of the Performance Period. Whether and as of what date your employment with the Company shall terminate if you are granted a leave of absence or commence any other break in employment intended by your employer to be temporary, shall be determined by the Committee in its sole discretion. In the event of your death or Disability, you or your estate shall

be entitled to receive a pro-rata payment of the Actual Number of Restricted Stock Units of the Award based on the ratio of the number of days from the beginning of the Performance Period through the date of your death or Disability, and the total number of days in the Performance Period.

4. Determination of Number of Restricted Stock Units.

(a) *Potential Number of Restricted Stock Units and Actual Number of Restricted Stock Units*. As soon as practicable after the last day of the Performance Period and prior to the payment of the Award, the Committee shall determine the Restricted Stock Units due under Section 4(b) and 4(c), each as of the last day of the Performance Period, if any. The sum of the Restricted Stock Units under the Service Revenue metric and the Restricted Stock Units under the Operating Income metric shall be the Potential Number of Restricted Stock Units of the Award as so determined. The Committee may, in its sole discretion, then reduce, but not increase, the Potential Number of Restricted Stock Units to determine the Actual Number of Restricted Stock Units of the Award.

(b) *Service Revenue*. The Restricted Stock Units earned under the Service Revenue metric shall be determined based upon the Company's cumulative Service Revenue for the Performance Period, as determined by the Committee, and the Service Revenue Restricted Stock Units matrix attached hereto as Exhibit A.

(c) *Operating Income*. The Restricted Stock Units earned under the Operating Income metric shall be determined based upon the Company's cumulative Operating Income for the Performance Period, as determined by the Committee, and the Operating Income Restricted Stock Units matrix attached hereto as Exhibit A.

(d) *Calculation*. In determining the Potential Number of Restricted Stock Units of the Award, "Service Revenue" and "Operating Income" for the Performance Period, mean the cumulative Company Service Revenue and Operating Income, respectively, each as determined by summing the values reported in the Company's annual audited financial statements for such period, but in each case excluding the following (each, an "Exclusion Item"): asset write-downs or impairments; litigation or claim judgments or settlements; changes in tax law, accounting principles or other such laws or provisions affecting reported results; severance, contract termination and other costs related to entering or exiting certain business activities; and gains or losses from the acquisition or disposition of businesses or assets, from discontinued operations, or from the early extinguishment of debt, or other unusual items. Notwithstanding the Exclusion Items, "Service Revenue" shall include cumulative Company Service Revenue attributable to business acquisitions in an amount not to exceed 2% of the Service Revenue target goal set forth in the Service Revenue Restricted Stock Units matrix attached hereto as Exhibit A. In addition to its general authority to reduce the Potential Number of Restricted Stock Units when determining the Actual Number of Restricted Stock Units of the Award, the Committee may, in its sole discretion, take into consideration the effect of the inclusion of one or more of the Exclusion Items, provided, however, that the Actual Number of Restricted Stock Units may not exceed the Potential Number of Restricted Stock Units as determined pursuant to this Section 4.

(e) *Committee's Determinations Final*. The Committee's determination of the Service Revenue, the Operating Income, the Potential Number of Restricted Stock Units and the Actual Number of Restricted Stock Units pursuant to this Award Agreement shall be final, binding and conclusive upon you and all persons claiming under or through you.

5. Payment of Award.

(a) The Actual Number of Restricted Stock Units, as determined pursuant to Section 4, if any, shall become payable to you in Restricted Stock Units as promptly as practicable following the Committee's certification of performance achievement at the end of the Performance Period, but in no event later than 90 days after the end of the Performance Period (the "Payment Date"). Except as provided in the award agreement for the Restricted Stock Units or in the event of your Retirement (as defined below), such Restricted Stock Units shall be subject to a one-year continued-employment vesting period commencing as of the date of issuance of the Restricted Stock Units and subject to such other terms and conditions as may be set forth by the Committee at the time of issue. You shall not be entitled to receive dividend equivalents with respect to the Restricted Stock Units underlying this Award until such Restricted Stock Units have been issued to you following the end of the Performance Period, and the dividend equivalents accrued on any unvested Restricted Stock Units shall be retained by the Company and shall only be paid to you upon the vesting and payment of the Restricted Stock Units to which the dividend equivalents relate; upon the forfeiture of any Restricted Stock Units, your right to the dividend equivalents accrued on the Restricted Stock Units which are forfeited shall also be forfeited. Notwithstanding the terms of the Plan, for purposes of this Award Agreement and the award agreement for the Restricted Stock Units, the term "Retirement" means retirement from the Company at age 60 or later with ten or more years of employment (full-time or part-time) with the Company.

(b) Any payment made in respect to the Award may be reduced by the amount of all taxes required by any governmental authority to be withheld and paid over by the Company or any Affiliate to the governmental authority on account of such payment; the actual number of Shares issued in payment of any vested Restricted Stock Units may be reduced by the number of Shares necessary to pay such withholding.

6. Miscellaneous.

(a) *Section 409A*. The Award is intended to comply with the requirements of Section 409A of the Code, and this Award Agreement shall be interpreted and the Award shall be administered consistent with such intention.

(b) *Amendment*. Except as otherwise provided by the Plan, the Company may only alter, amend or terminate the Award with your consent.

(c) *No Right to Employment*. Neither the Plan, the granting of the Award nor this Award Agreement gives you any right to remain in the employment of the Company or any Affiliate.

(d) *Nontransferable*. The Award may not be sold, assigned, transferred, pledged or encumbered in any way prior to the payment thereof, whether by operation of law or otherwise.

(e) *Governing Law*. This Award Agreement shall be governed by and construed in accordance with the laws of the State of New York, except as superseded by applicable federal law, without giving effect to its conflicts of law provisions.

* * *

Exhibit 10.4

PAYCHEX, INC.
2002 STOCK INCENTIVE PLAN
(as amended and restated effective October 14, 2015)
NON-QUALIFIED STOCK OPTION AWARD NOTICE (2019)

Participant:	[ ]
Type of Award:	Non-Qualified Stock Options
Number of Shares:	[ ]
Exercise Price:	[ ]
Date of Grant:	[ ]
Expiration Date:	[ ]

This Award Notice serves to notify you that the Governance and Compensation Committee (the "Committee") of the Board of Directors of Paychex, Inc. (the "Company") hereby grants to you, under the Company's 2002 Stock Incentive Plan, as amended and restated effective October 14, 2015 (the "Plan"), a non-qualified stock option award (the "Award"), on the terms and conditions set forth in the attached Non-Qualified Stock Option Award Agreement and the Plan, of the number of options to purchase common stock (the "Common Stock") set forth above.

PAYCHEX, INC

PAYCHEX, INC.
2002 STOCK INCENTIVE PLAN
(as amended and restated effective October 14, 2015)
NON-QUALIFIED STOCK OPTION AWARD AGREEMENT

1. Grant of Option. This Non-Qualified Stock Option Award Agreement (this "Award Agreement") sets forth the terms and conditions of the Non-Qualified Stock Option Award (the "Award") granted to you by the Board of Directors of Paychex, Inc. (the "Company") under the Company's 2002 Stock Incentive Plan, as amended and restated effective October 14, 2015 (the "Plan"), as described on your Award Notice. The Award is subject to all of the provisions of the Plan, which is hereby incorporated by reference and made a part of this Award Agreement. The capitalized terms used in this Award Agreement , and not otherwise defined herein, are defined in the Plan.

2. Term. Unless the Option is previously terminated pursuant to the terms of this Award Agreement or the Plan, the Option will expire at the close of business on the "Expiration Date" set forth in the Award Notice.

3. Vesting. Subject to the terms set forth in this Award Agreement and the Plan, the Option will vest and become exercisable pro rata with respect to one-third of the shares subject to such Option on the first, second, and third anniversaries of the Date of Grant, with any fractional share resulting from such pro-ration vesting on the third anniversary. Vesting is contingent on your continued employment with the Company or one of its affiliates through the vesting dates.

4. Exercise.

(a) *Method of Exercise*. To the extent exercisable under Section 3 of this Award Agreement, the Option may be exercised in whole or in part, provided that the Option may not be exercised for less than one share of Common Stock in any single transaction. The Option may be exercised using a method specified by the Company.

(b) *Payment of Exercise Price*. The exercise of the Option is conditioned upon your payment to the Company of the Exercise Price for the number of shares of Common Stock that you elect to purchase. The Exercise Price may be paid in cash or by check or by way of a broker-assisted stock option exercise program, if such a program is made available by the Company at the time of the exercise of the Option.

(c) *Withholding*. The exercise of the Option is conditioned upon your making arrangements satisfactory to the Company for the payment to the Company of the amount of all taxes required by any governmental authority to be withheld and paid over by the Company or any Affiliate to the governmental authority on account of the exercise. The payment of such withholding taxes to the Company may be made (i) by you in cash or by check, or (ii) by the Company or any Affiliate withholding such taxes from any other compensation owed to you by the Company or any Affiliate. Withholding of shares of Common Stock for payment of tax withholdings is not permitted for any reason.

(d) *Issuance of Shares*. Upon determining that compliance with this Award Agreement has occurred, including compliance with such reasonable requirements as the Company may impose pursuant to the Plan, the Company shall issue to you a certificate for the shares of Common Stock purchased on the earliest practicable date (as determined by the Company) thereafter.

5. Effect of Death and Disability. In the event of your death or Disability prior to the complete exercise of the Option, any unvested portion of the Option will vest in full immediately and the remaining portion of the Option may be exercised in whole or in part, subject to all of the conditions on exercise imposed by the Plan and this Award Agreement, within three years after the date of your death or Disability, but only (i) by you, or in the event of your death, by your estate or the person or persons to whom the Option passes under your will or the laws of descent and distribution, and (ii) prior to the close of business on the Expiration Date of the Option.

6. Effect of Retirement On or After One-Year Anniversary. Upon your Retirement (as defined below) on or after the one-year anniversary of the Date of Grant and prior to the complete exercise of the Option:

(a) the unvested portion of the Option that would otherwise vest during the one-year period following your Retirement shall remain outstanding and continue to vest in accordance with the terms of this Award Agreement on its scheduled vesting date;

(b) except as otherwise provided by Section 6(a) of this Award Agreement, the unvested portion of the Option will be canceled as of your last day worked; and

(c) the remaining portion of the Option may be exercised in whole or in part, subject to all of the conditions on exercise imposed by the Plan and this Award Agreement, within five years after the date of such termination, but only (i) to the extent that the Option was vested and exercisable on the date of such termination or becomes vested and exercisable after the date of such termination in accordance with Sections 3 and 6(a) of this Award Agreement, and (ii) prior to the close of business on the Expiration Date of the Option. Notwithstanding the terms of the Plan, for purposes of this Award Agreement the term “Retirement” means retirement from the Company at age 60 or later with ten or more years of employment (full-time or part-time) with the Company.

7. Effect of Other Termination. Upon your termination for a reason other than death, Disability or Retirement on or after the one-year anniversary of the Date of Grant and prior to the complete exercise of the Option, the unvested portion of the Option will be canceled as of your last day worked, and the remaining portion of the Option may be exercised in whole or in part, subject to all of the conditions on exercise imposed by the Plan and this Award Agreement, within one year after the date of such termination, but only (i) to the extent that the Option was vested and exercisable on the date of such termination, and (ii) prior to the close of business on the Expiration Date of the Option. Notwithstanding the foregoing, if your employment is terminated by reason of conduct that is determined by the Company to have been detrimental to the Company, including violation of the Company’s Code of Business Ethics, or conduct which is criminal, fraudulent, deliberately dishonest, disloyal or willful misconduct, you will forfeit all rights under the Option (both unvested and vested) as of your last day worked.

8. <u>Non-competition, Non-solicitation, Confidentiality, and Detrimental Conduct</u>. In consideration for the Award, you agree that during your employment and for a period of twelve (12) months following termination of employment for any reason, you will not, directly or indirectly, either as an employee, employer, consultant, agent, principal, partner, stockholder, corporate officer, board member, director, or in any other individual or representative capacity, engage or attempt to engage in any activity that is competitive to the business of the Company and would involve, or is likely to involve, the use or disclosure of Paychex's Trade Secrets (as defined below) within the geographic and substantive area or areas of responsibility assigned to the you during the last 24 months of employment. In addition, you agree that for a period of eighteen (18) months following the termination of employment for any reason, you will not directly or indirectly, solicit Company clients, prospects or referral resources, including but not limited to accountants, banks, and consultants, with which you had substantial personal involvement during your employment; nor will you recruit or hire, or attempt to recruit or hire, any other employee of Company or its affiliates, or induce or attempt to induce any employee of Company to terminate employment with Company. You also agree and acknowledge that during the course of your employment with the Company, you will obtain, have access and be privy to nonpublic, confidential, and proprietary information important to the Company's business solely as a result of your employment with the Company, including but not limited to, sales and marketing strategies, price lists, client lists, client confidential information, referral sources, and goodwill ("Trade Secrets"). You hereby recognize and agree that Paychex's Trade Secrets are confidential, proprietary and highly valued protectable interests. You agree that during and after employment, you shall not divulge or make use of any Trade Secrets, directly or indirectly, personally or on behalf of any other person, business, corporation, or entity without prior written consent of the Company. This Agreement does not, however, limit your ability to communicate with any federal governmental agency or otherwise participate in any investigation or proceeding that may be conducted by any federal governmental agency, including providing documents or other information, without notice to the Company. You further agree that you will not, during your employment, engage in conduct which is detrimental to the Company, including violation of the Company's Code of Business Ethics and Conduct, criminal conduct, fraud, or willful misconduct. These covenants are not intended to, and do not, limit in any way the rights and remedies provided to the Company under the Plan, other agreements with you, or under common or statutory law.

9. <u>Repayment of Financial Gain</u>

(a) If you fail to comply with Section 8 of this Award Agreement, the Company may cancel any unexercised portion of this Option and recover from you the gross amount, before deduction of applicable taxes or other amounts, of any gain realized on the exercise of stock options pursuant to this Option during the 24-month period preceding your breach of any covenant in Section 8 of this Award Agreement.

(b) If you fail to comply with Section 8 of this Award Agreement, upon demand by the Company, you will repay the Company in accordance with the terms of Section 9(a), and the Company shall be entitled to offset the amount of any such repayment obligation against any amount owed to you by the Company. The remedies set forth in this Section are in addition to any other remedies the Company may have, at law or equity, for your violation of the terms of this Award Agreement.

10. Transfer of Option. Except as otherwise determined by the Committee, the Option may not be transferred, assigned or pledged (except by will or the laws of descent and distribution, or pursuant to a domestic relations order).

11. Limitation of Rights. You will not have any rights as a stockholder with respect to the shares of Common Stock covered by the Option until you become the holder of record of such shares by exercising the Option. Neither the Plan, the granting of the Option nor this Award Agreement gives you any right to remain in the employment of the Company or any Affiliate.

12. Rights of Company and Affiliates. This Award Agreement does not affect the right of the Company or any Affiliate to take any corporate action whatsoever, including without limitation its right to recapitalize, reorganize or make other changes in its capital structure or business, merge or consolidate, issue bonds, notes, shares of Common Stock or other securities, including preferred stock, or options therefore, dissolve or liquidate, or sell or transfer any part of its assets or business.

13. Restrictions on Issuance of Shares. If at any time the Company determines that the listing, registration or qualification of the shares covered by the Option upon any securities exchange or under any state or federal law, or the approval of any governmental agency, is necessary or advisable as a condition to the exercise of the Option, the Option may not be exercised in whole or in part unless and until such listing, registration, qualification or approval shall have been effected or obtained free of any conditions not acceptable to the Company.

14. Plan Controls. The Option is subject to all of the provisions of the Plan, which is hereby incorporated by reference, and is further subject to all the interpretations, amendments, rules and regulations that may from time to time be promulgated and adopted by the Committee pursuant to the Plan. In the event of any conflict among the provisions of the Plan and this Award Agreement, the provisions of the Plan will be controlling and determinative.

15. Amendment. Except as otherwise provided by the Plan, the Company may only alter, amend or terminate the Option with your consent.

16. Governing Law. This Award Agreement shall be governed by and construed in accordance with the laws of the State of New York, except as superseded by applicable federal law, without giving effect to its conflicts of law provisions. All parties consent to exclusive personal jurisdiction in New York courts and agree that venue shall be New York State Supreme Court, Monroe County.

17. Section 409A. The Option is intended to qualify for an exemption from the requirements of Section 409A of the Internal Revenue Code of 1986, as amended, and the treasury regulations promulgated and other official guidance issued thereunder, and the Plan and this Award Agreement shall be administered and interpreted consistent with such intention.

* * * * *

Exhibit 10.5

PAYCHEX, INC.
2002 STOCK INCENTIVE PLAN

(as amended and restated effective October 14, 2015)

RESTRICTED STOCK UNIT AWARD NOTICE

(GRANT PURSUANT TO 2019 OFFICER PERFORMANCE SHARE AWARD)

Participant:	[ ]
Type of Award:	Restricted Stock Units
Number of Restricted Stock Units:	[ ]
Vesting Date:	[July __, 2022]

This Award Notice serves to notify you that the Governance and Compensation Committee (the "Committee") of the Board of Directors of Paychex, Inc. (the "Company") has certified the level of performance achieved during the June 1, 2019 to May 31, 2021 Performance Period for your 2019 Officer Performance Share Award and, accordingly, hereby grants to you, under the Company's 2002 Stock Incentive Plan, as amended and restated effective October 14, 2015 (the "Plan"), an award (the "Award") of Restricted Stock Units, on the terms and conditions set forth in the "Master Restricted Stock Unit Award Agreement (Grant Pursuant to Officer Performance Share Award)" and the Plan, covering the number of shares of the Company's $.01 par value common stock (the "Common Stock") equal to the Number of Restricted Stock Units set forth above.

Stock Retention Requirement. For purposes of the Award, during the term of your employment by the Company, the Committee has established a target of ownership of Common Stock with a value of three times your annual base salary. Stock that counts toward satisfaction of this target includes, but is not limited to, stock purchased by you on the open market, stock obtained through stock option exercise or restricted stock awards, stock owned (indirectly) through a qualified retirement plan maintained by the Company, stock owned jointly with your spouse; and stock beneficially owned by a trust for the benefit of you, your spouse and/or your children. Notwithstanding the terms of the Restricted Stock Unit Award Agreement, until you reach the established stock ownership target, you will be required to retain the shares of Common Stock that you receive when the shares represented by this Award vest, except that you may sell sufficient shares to satisfy your tax obligations as set forth in the Award Agreement. Once you have achieved the target ownership, the number of shares of Common Stock associated with your target ownership amount will be determined based on the stock price at that time, and unless otherwise prohibited by agreement, policy, law or otherwise, you may thereafter sell, gift or otherwise transfer any vested shares of Common Stock received under the Award so long as after such sale, gift or other transfer you will continue to own the number of shares of Common Stock associated with your target ownership amount. The Company shall be authorized to add a legend regarding this restriction on transfer to any certificate representing the shares of Common Stock under the Award.

PAYCHEX, INC.

PAYCHEX, INC.
2002 STOCK INCENTIVE PLAN

(as amended and restated effective October 14, 2015)

MASTER RESTRICTED STOCK UNIT AWARD AGREEMENT

(GRANT PURSUANT TO OFFICER PERFORMANCE SHARE AWARD)

RECITALS

WHEREAS, the Governance and Compensation Committee (the "Committee") of the Board of Directors of Paychex, Inc. (the "Company") granted to you an Officer Performance Share Award subject to a two-year Performance Period, for Restricted Stock Units under the Company's 2002 Stock Incentive Plan, as amended and restated effective October 12, 2005 (and as subsequently amended and restated effective October 14, 2015, the "Plan"); and

WHEREAS, the Performance Period has now ended and the Committee has certified the level of performance achieved for such Performance Period; and

WHEREAS, the Committee has determined based on the certified level of performance that you are now entitled to receive an award of Restricted Stock Units in the form of the Number of Restricted Stock Units indicated on your Award Notice; and

WHEREAS, the Committee now wishes to grant to you the Restricted Stock Units earned under your Officer Performance Share Award;

NOW, THEREFORE, the Company hereby agrees as follows:

1. Grant of Restricted Stock. This Restricted Stock Unit Award Agreement (the "Award Agreement"), sets forth the terms and conditions of the award (the "Award") of Restricted Stock Units (the "Units") specified in your Award Notice granted to you by the Committee under the Plan as a result of achievement under the Officer Performance Share Award. The Award is subject to all of the provisions of the Plan and the Award Notice, which are hereby incorporated by reference and made a part of this Award Agreement. The capitalized terms used in this Award Agreement, and not otherwise defined herein, are defined in the Plan.

2. Restriction and Vesting.

(a) Subject to the terms set forth in this Award Agreement and the Plan, unless earlier vested under or otherwise subject to Section 2(b) of this Award Agreement, provided you are still a full-time employee of the Company at that time, the Units will vest in full on the vesting date indicated on your Award Notice (the "Vesting Date").

(b) Except in the event of your death, Disability (as defined below) or Retirement (as defined below), if your employment terminates before the Vesting Date for any reason, then the Award shall be forfeited and cancelled immediately. If your employment terminates due to death or Disability, your Award shall immediately become 100% vested. If your employment terminates due to Retirement, your Award shall remain outstanding and vest in accordance with the terms of this Award Agreement. Notwithstanding the terms of the Plan, for purposes of this Award Agreement (i) the term "Disability" means a condition whereby you are unable to perform the essential functions of your position with reasonable accommodations by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted for a continuous period of not less than six months, all as verified by a physician acceptable to, or selected by, the Company, and (ii) the term "Retirement" means retirement from the Company at age 60 or later with ten or more years of employment (full-time or part-time) with the Company.

3. Nature of Units. The Units represent book-keeping entries only, and constitute the Company's unfunded and unsecured promise to issue Shares to you on a future date. As a holder of Units, you have no rights other than the rights of a general creditor of the Company.

4. Issuance of Shares. If your employment terminates due to death or Disability, the Company will issue a certificate or certificates representing the Shares underlying the Award that have vested as promptly as practicable following the date of your termination of employment due to death or Disability, but no later than 90 days following such date. Otherwise, the Company shall, when the conditions to vesting specified in Section 2 of this Award Agreement are satisfied, issue a certificate or certificates representing the Shares underlying the Award that have vested as promptly as practicable following the Vesting Date, but no later than 90 days following such Vesting Date.

5. Rights as a Stockholder. Prior to the issuance of Shares to you pursuant to Section 4, you will not have any of the rights of a stockholder with respect to the Shares to be issued on vesting of the Units, including, but not limited to, the right to vote (in person or by proxy) such Shares at any meeting of stockholders of the Company.

6. Dividend Equivalents. Prior to the vesting or forfeiture of the Award, there shall be accrued on the Units an amount equivalent to the regular cash dividends paid, if any, on the Shares underlying the Units. In the event of the vesting and payment of any Units, the dividend equivalents accrued on such Units, less any withholding that the Company determines is required to be withheld therefrom, shall be paid at the time that such Units are paid to you. In the event of the forfeiture or cancellation of any Units, the dividend equivalents accrued on the Units that are forfeited shall also be forfeited.

7. Restrictions on Transfer of Units. Units may not, except as otherwise provided in the Plan, be sold, assigned, transferred, pledged or encumbered in any way, whether by operation of law or otherwise, except by will or the laws of descent and distribution. After the Vesting Date, the Shares may be issued during your lifetime only to you, or after your death to your designated beneficiary, or, in the absence of such beneficiary, to your duly qualified personal representative.

8. Restrictions on Issuance of Shares. If at any time the Company determines that listing, registration or qualification of the Shares covered by the Award upon any securities exchange or under any state or federal law, or the approval of any governmental agency, is necessary or advisable as a condition to the Award or the issuance of certificate(s) for Shares hereunder, such Award or issuance may not be made in whole or in part unless and until such

listing, registration, qualification or approval shall have been effected or obtained free of any conditions not acceptable to the Company.

9. Withholding. The vesting of the Award is conditioned upon your making arrangements satisfactory to the Company for the payment to the Company of the amount of all taxes required by any governmental authority to be withheld and paid over by the Company or any Affiliate to the governmental authority on account of such vesting. The payment of such withholding taxes to the Company may be made (i) by you in cash or by check, (ii) subject to the consent of the Company and in accordance with any guidelines established by the Committee, by the Company retaining the number of the Shares that would otherwise be delivered to you upon vesting that have an aggregate Fair Market Value (at the time retained by the Company) equal to the amount of withholding taxes (using your minimum required tax withholding rate or such other rate that the Company determines will not trigger a negative accounting impact to the Company) required to be paid, or (iii) by the Company or any Affiliate withholding such taxes from any other compensation owed to you by the Company or any Affiliate. Unless you make arrangements prior to vesting to pay withholdings taxes in cash or by check, or to have such withholding taxes withheld from other compensation owed to you by the Company or any Affiliate, then at the time of vesting, the Company shall have the right to retain the number of the Shares that would otherwise be delivered to you upon vesting that have an aggregate Fair Market Value (at the time retained by the Company) equal to the amount of withholding taxes (using your minimum required tax withholding rate or such other rate that the Company determines will not trigger a negative accounting impact to the Company) required to be paid.

10. Limitation of Rights. Neither the Plan, the granting of the Award, the Award Notice nor this Award Agreement gives you any right to remain in the employment of the Company or any Affiliate.

11. Non-competition, Non-solicitation, Confidentiality, and Detrimental Conduct. In consideration for the Award, you agree that during your employment and for a period of twelve (12) months following termination of employment for any reason, you will not, directly or indirectly, either as an employee, employer, consultant, agent, principal, partner, stockholder, corporate officer, board member, director, or in any other individual or representative capacity, engage or attempt to engage in any activity that is competitive to the business of the Company and would involve, or is likely to involve, the use or disclosure of Paychex's Trade Secrets (as defined below) within the geographic and substantive area or areas of responsibility assigned to the you during the last 24 months of employment. In addition, you agree that for a period of eighteen (18) months following the termination of employment for any reason, you will not directly or indirectly, solicit Company clients, prospects or referral resources, including but not limited to accountants, banks, and consultants, with which you had substantial personal involvement during your employment; nor will you recruit or hire, or attempt to recruit or hire, any other employee of Company or its affiliates, or induce or attempt to induce any employee of Company to terminate employment with Company. You also agree and acknowledge that during the course of your employment with the Company, you will obtain, have access and be privy to nonpublic, confidential, and proprietary information important to the Company's business solely as a result of your employment with the Company, including but not limited to, sales and marketing strategies, price lists, client lists, client confidential information, referral sources, and goodwill ("Trade Secrets"). You hereby recognize and agree that Paychex's Trade Secrets are confidential,

proprietary and highly valued protectable interests. You agree that during and after employment, you shall not divulge or make use of any Trade Secrets, directly or indirectly, personally or on behalf of any other person, business, corporation, or entity without prior written consent of the Company. This Agreement does not, however, limit your ability to communicate with any federal governmental agency or otherwise participate in any investigation or proceeding that may be conducted by any federal governmental agency, including providing documents or other information, without notice to the Company. You further agree that you will not, during your employment, engage in conduct which is detrimental to the Company, including violation of the Company's Code of Business Ethics and Conduct, criminal conduct, fraud, or willful misconduct. These covenants are not intended to, and do not, limit in any way the rights and remedies provided to the Company under the Plan, other agreements with you, or under common or statutory law.

12. Repayment of Financial Gain.

(a) If you fail to comply with Section 11 of this Award Agreement, the Company may cancel any unvested portion of this Award and recover from you the total number or Vesting Date value of Shares whose Vesting Date occurred pursuant to this Award during the 24-month period preceding your breach of any covenant in Section 10 of this Award Agreement. The total number or value of the vested Shares shall include the amount of any dividends paid to you during the 24-month period specified above and shall not be reduced for the payment of applicable taxes or other amounts.

(b) If you fail to comply with Section 11 of this Award Agreement, upon demand by the Company, you will repay the Company in accordance with the terms of Section 11(a), and the Company shall be entitled to offset the amount of any such repayment obligation against any amount owed to you by the Company. The remedies set forth in this Section are in addition to any other remedies the Company may have, at law or equity, for your violation of the terms of this Award Agreement.

13. Rights of Company and Affiliates. This Award Agreement does not affect the right of the Company or any Affiliate to take any corporate action whatsoever, including without limitation its right to recapitalize, reorganize or make other changes in its capital structure or business, merge or consolidate, issue bonds, notes, Shares or other securities, including preferred stock, or options therefor, dissolve or liquidate, or sell or transfer any part of its assets or business.

14. Plan Controls. In the event of any conflict among the provisions of the Plan and this Award Agreement, the provisions of the Plan will be controlling and determinative.

15. Amendment. Except as otherwise provided by the Plan, the Company may only alter, amend or terminate the Award with your consent.

16. Governing Law. This Award Agreement shall be governed by and construed in accordance with the laws of the State of New York, except as superseded by applicable federal law, without giving effect to its conflicts of law provisions. All parties consent to exclusive personal jurisdiction in New York courts and agree that venue shall be New York State Supreme Court, Monroe County.

17. Section 409A. The Award is intended to comply with the requirements of Section 409A of the Internal Revenue Code of 1986, as amended, and the treasury regulations promulgated and other official guidance issued thereunder, and the Plan and this Award Agreement shall be administered and interpreted consistent with such intention. References to “termination of employment” and similar terms used in this Award Agreement mean, to the extent necessary to comply with Section 409A, the date that you incur a “separation from service” within the meaning of Section 409A. Notwithstanding anything in this Award Agreement to the contrary, if at the time of your separation from service, you are a “specified employee” for purposes of Section 409A, and payment under this Award Agreement as a result of such separation from service is required by Section 409A to be delayed by six months, then the Company shall make such payment on the day following the six-month anniversary of your separation from service to the extent required to comply with Section 409A. The Company’s right to offset pursuant to Section 12(b) of this Award Agreement is limited to the extent that and until the application of an offset at a given time would not result in a violation of Section 409A.

* * * * *

EXHIBIT 31.1

CERTIFICATION PURSUANT TO
SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, MARTIN MUCCI, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Paychex, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and
5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: October 4, 2019

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

EXHIBIT 31.2

CERTIFICATION PURSUANT TO
SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, EFRAIN RIVERA, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Paychex, Inc.;

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

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

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

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

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

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

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

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

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

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

Date: October 4, 2019

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

EXHIBIT 32.1

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

In connection with the Quarterly Report of Paychex, Inc. (the "Company") on Form 10-Q for the period ended August 31, 2019 as filed with the Securities and Exchange Commission ("SEC") on the date hereof (the "Report"), I, MARTIN MUCCI, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

A signed original of this written statement has been provided to the Company and will be retained by the Company and furnished to the SEC upon request.

Date: October 4, 2019

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

EXHIBIT 32.2

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

In connection with the Quarterly Report of Paychex, Inc. (the “Company”) on Form 10-Q for the period ended August 31, 2019 as filed with the Securities and Exchange Commission (“SEC”) on the date hereof (the “Report”), I, EFRAIN RIVERA, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. section 1350, as adopted pursuant to section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

A signed original of this written statement has been provided to the Company and will be retained by the Company and furnished to the SEC upon request.

Date: October 4, 2019

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