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 November 30, 2022
OR
☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Transition Period from __________ to __________

Commission file number 0-11330

Paychex, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**16-1124166**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
911 Panorama Trail South	**14625-2396**
Rochester, NY	(Zip Code)
(Address of principal executive offices)	

Registrant's telephone number, including area code: **(585) 385-6666**

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.01 par value	**PAYX**	**Nasdaq Global Select Market**

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 November 30, 2022, 360,466,548 shares of the registrant's common stock, $.01 par value, were outstanding.

PAYCHEX, INC.
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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 November 30, 2022	For the three months ended November 30, 2021	For the six months ended November 30, 2022	For the six months ended November 30, 2021
Revenue:				
Management Solutions	$ 895.3	$ 832.0	$ 1,800.8	$ 1,637.5
PEO and Insurance Solutions	273.3	262.4	556.1	525.3
Total service revenue	**1,168.6**	**1,094.4**	**2,356.9**	**2,162.8**
Interest on funds held for clients	21.7	14.1	39.6	28.6
Total revenue	**1,190.3**	**1,108.5**	**2,396.5**	**2,191.4**
Expenses:				
Cost of service revenue	359.3	331.6	710.3	644.1
Selling, general and administrative expenses	358.7	336.6	718.3	664.1
Total expenses	**718.0**	**668.2**	**1,428.6**	**1,308.2**
Operating income	**472.3**	**440.3**	**967.9**	**883.2**
Other income/(expense), net	2.9	(2.7)	(0.7)	(1.7)
Income before income taxes	**475.2**	**437.6**	**967.2**	**881.5**
Income taxes	114.9	105.5	227.7	215.8
Net income	**$ 360.3**	**$ 332.1**	**$ 739.5**	**$ 665.7**
Other comprehensive loss, net of tax	(26.9)	(41.3)	(64.4)	(48.0)
Comprehensive income	**$ 333.4**	**$ 290.8**	**$ 675.1**	**$ 617.7**
Basic earnings per share	**$ 1.00**	**$ 0.92**	**$ 2.05**	**$ 1.85**
Diluted earnings per share	**$ 0.99**	**$ 0.91**	**$ 2.04**	**$ 1.83**
Weighted-average common shares outstanding	**360.5**	**360.7**	**360.2**	**360.4**
Weighted-average common shares outstanding, assuming dilution	**362.3**	**363.1**	**362.3**	**362.9**

See Notes to Consolidated Financial Statements.

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

	November 30, 2022	May 31, 2022
Assets		
Cash and cash equivalents	$ 1,096.5	$ 370.0
Restricted cash	57.8	50.3
Corporate investments	165.6	853.9
Interest receivable	23.2	22.3
Accounts receivable, net of allowance for credit losses	873.6	723.8
PEO unbilled receivables, net of advance collections	494.8	572.1
Prepaid income taxes	67.3	34.0
Prepaid expenses and other current assets	286.7	272.3
Current assets before funds held for clients	**3,065.5**	**2,898.7**
Funds held for clients	3,132.7	3,682.9
Total current assets	**6,198.2**	**6,581.6**
Long-term restricted cash	10.4	25.5
Long-term corporate investments	3.9	5.0
Property and equipment, net of accumulated depreciation	393.0	401.3
Operating lease right-of-use assets, net of accumulated amortization	70.7	78.7
Intangible assets, net of accumulated amortization	203.9	224.6
Goodwill	1,830.0	1,831.5
Long-term deferred costs	443.6	433.3
Other long-term assets	60.6	53.7
Total assets	**$ 9,214.3**	**$ 9,635.2**
Liabilities		
Accounts payable	$ 86.7	$ 105.7
Accrued corporate compensation and related items	173.8	225.4
Accrued worksite employee compensation and related items	742.0	683.4
Short-term borrowings	10.1	8.7
Deferred revenue	44.8	38.4
Other current liabilities	346.1	388.4
Current liabilities before client fund obligations	**1,403.5**	**1,450.0**
Client fund obligations	3,350.4	3,819.2
Total current liabilities	**4,753.9**	**5,269.2**
Accrued income taxes	65.6	58.1
Deferred income taxes	129.8	165.5
Long-term borrowings, net of debt issuance costs	797.9	797.7
Operating lease liabilities	66.8	74.8
Other long-term liabilities	195.0	184.7
Total liabilities	**6,009.0**	**6,550.0**
Commitments and contingencies — Note H		
Stockholders' equity		
Common stock, $0.01 par value; Authorized: 600.0 shares; Issued and outstanding: 360.5 shares as of November 30, 2022 and 359.9 shares as of May 31, 2022	3.6	3.6
Additional paid-in capital	1,588.6	1,545.9
Retained earnings	1,811.4	1,669.6
Accumulated other comprehensive loss	(198.3)	(133.9)
Total stockholders' equity	**3,205.3**	**3,085.2**
Total liabilities and stockholders' equity	**$ 9,214.3**	**$ 9,635.2**

See Notes to Consolidated Financial Statements.

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

	For the six months ended November 30, 2022					
	Common stock		Additional paid-in capital	Retained earnings	Accumulated other comprehensive loss	Total
	Shares	Amount				
Balance as of May 31, 2022	**359.9**	**$ 3.6**	**$ 1,545.9**	**$ 1,669.6**	**$ (133.9)**	**$ 3,085.2**
Net income	—	—	—	739.5	—	739.5
Unrealized losses on securities, net of $20.0 million in tax benefit	—	—	—	—	(61.3)	(61.3)
Reclassification adjustment for realized gains on securities, net of $ - million in tax expense (1)	—	—	—	—	(0.1)	(0.1)
Cash dividends declared ($1.58 per share)	—	—	—	(569.6)	—	(569.6)
Stock-based compensation costs	—	—	29.7	—	—	29.7
Foreign currency translation adjustment	—	—	—	—	(3.0)	(3.0)
Activity related to equity-based plans	0.6	0.0	13.0	(28.1)	—	(15.1)
Balance as of November 30, 2022	**360.5**	**$ 3.6**	**$ 1,588.6**	**$ 1,811.4**	**$ (198.3)**	**$ 3,205.3**

	For the three months ended November 30, 2022					
	Common stock		Additional paid-in capital	Retained earnings	Accumulated other comprehensive loss	Total
	Shares	Amount				
Balance as of August 31, 2022	**360.4**	**$ 3.6**	**$ 1,568.9**	**$ 1,736.3**	**$ (171.4)**	**$ 3,137.4**
Net income	—	—	—	360.3	—	360.3
Unrealized losses on securities, net of $10.3 million in tax benefit	—	—	—	—	(31.8)	(31.8)
Reclassification adjustment for realized losses on securities, net of $ - million in tax benefit (1)	—	—	—	—	—	—
Cash dividends declared ($0.79 per share)	—	—	—	(284.9)	—	(284.9)
Stock-based compensation costs	—	—	15.3	—	—	15.3
Foreign currency translation adjustment	—	—	—	—	4.9	4.9
Activity related to equity-based plans	0.1	0.0	4.4	(0.3)	—	4.1
Balance as of November 30, 2022	**360.5**	**$ 3.6**	**$ 1,588.6**	**$ 1,811.4**	**$ (198.3)**	**$ 3,205.3**

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

See Notes to Consolidated Financial Statements.

	For the six months ended November 30, 2021					
	Common stock		Additional paid-in capital	Retained earnings	Accumulated other comprehensive income	Total
	Shares	Amount				
Balance as of May 31, 2021	**359.8**	**$ 3.6**	**$ 1,446.7**	**$ 1,445.9**	**$ 51.8**	**$ 2,948.0**
Net income	—	—	—	665.7	—	665.7
Unrealized losses on securities, net of $10.6 million in tax benefit	—	—	—	—	(32.7)	(32.7)
Reclassification adjustment for realized gains on securities, net of $ - million in tax expense [(1)]	—	—	—	—	(0.1)	(0.1)
Cash dividends declared ($1.32 per share)	—	—	—	(476.4)	—	(476.4)
Stock-based compensation costs	—	—	26.4	—	—	26.4
Foreign currency translation adjustment	—	—	—	—	(15.2)	(15.2)
Activity related to equity-based plans	1.0	0.0	32.4	(28.3)	—	4.1
Balance as of November 30, 2021	**360.8**	**$ 3.6**	**$ 1,505.5**	**$ 1,606.9**	**$ 3.8**	**$ 3,119.8**

	For the three months ended November 30, 2021					
	Common stock		Additional paid-in capital	Retained earnings	Accumulated other comprehensive income	Total
	Shares	Amount				
Balance as of August 31, 2021	**360.6**	**$ 3.6**	**$ 1,481.5**	**$ 1,513.3**	**$ 45.1**	**$ 3,043.5**
Net income	—	—	—	332.1	—	332.1
Unrealized losses on securities, net of $10.5 million in tax benefit	—	—	—	—	(32.2)	(32.2)
Reclassification adjustment for realized gains on securities, net of $ - million in tax expense [(1)]	—	—	—	—	—	—
Cash dividends declared ($0.66 per share)	—	—	—	(238.3)	—	(238.3)
Acquisition of businesses	—	—	—	—	—	—
Stock-based compensation costs	—	—	14.0	—	—	14.0
Foreign currency translation adjustment	—	—	—	—	(9.1)	(9.1)
Activity related to equity-based plans	0.2	0.0	10.0	(0.2)	—	9.8
Balance as of November 30, 2021	**360.8**	**$ 3.6**	**$ 1,505.5**	**$ 1,606.9**	**$ 3.8**	**$ 3,119.8**

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

See Notes to Consolidated Financial Statements.

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

	For the six months ended November 30, 2022	For the six months ended November 30, 2021
Operating activities		
Net income	$ 739.5	$ 665.7
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	88.3	94.3
Amortization of premiums and discounts on AFS securities, net	11.2	15.3
Amortization of deferred contract costs	107.5	99.1
Stock-based compensation costs	29.7	26.4
(Benefit from)/provision for deferred income taxes	(15.3)	5.5
Provision for credit losses	8.1	1.0
Net realized gains on sales of AFS securities	(0.1)	(0.1)
Changes in operating assets and liabilities:		
Interest receivable	(0.9)	1.7
Accounts receivable and PEO unbilled receivables, net	(80.6)	(320.4)
Prepaid expenses and other current assets	(43.4)	(35.2)
Accounts payable and other current liabilities	(46.9)	95.0
Deferred costs	(122.1)	(112.6)
Net change in other long-term assets and liabilities	13.8	20.6
Net change in operating lease right-of-use assets and liabilities	(2.9)	(0.9)
Net cash provided by operating activities	**685.9**	**555.4**
Investing activities		
Purchases of AFS securities	(6,504.9)	(1,889.8)
Proceeds from sales and maturities of AFS securities	7,631.3	1,534.6
Purchases of property and equipment	(65.9)	(64.6)
Proceeds from sales of property and equipment	9.7	—
Acquisition of businesses, net of cash acquired	—	(24.9)
Purchases of other assets, net	(8.6)	(6.7)
Net cash provided by/(used in) investing activities	**1,061.6**	**(451.4)**
Financing activities		
Net change in client fund obligations	(468.7)	167.9
Net change in short-term borrowings	2.0	1.5
Dividends paid	(569.3)	(476.4)
Activity related to equity-based plans	(15.1)	4.1
Net cash used in financing activities	**(1,051.1)**	**(302.9)**
Net change in cash, restricted cash, and equivalents	**696.4**	**(198.9)**
Cash, restricted cash, and equivalents, beginning of period	928.4	1,823.1
Cash, restricted cash, and equivalents, end of period	**$ 1,624.8**	**$ 1,624.2**
Reconciliation of cash, restricted cash, and equivalents		
Cash and cash equivalents	$ 1,096.5	$ 636.2
Restricted cash	68.2	82.4
Restricted cash and restricted cash equivalents included in funds held for clients	460.1	905.6
Total cash, restricted cash, and equivalents	**$ 1,624.8**	**$ 1,624.2**

See Notes to Consolidated Financial Statements.

PAYCHEX, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)
November 30, 2022

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

Description of business: Paychex, Inc. and its wholly owned subsidiaries (collectively, the "Company" or "Paychex") is a leading provider of integrated human capital management ("HCM") solutions for human resources ("HR"), payroll, benefits, and insurance for small- to medium-sized businesses in the United States ("U.S.") and parts of Europe. The Company also has operations India. Paychex, a Delaware corporation formed in 1979, reports as one segment.

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 and Article 10 of Regulation S-X. Accordingly, they do not include all 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) necessary for a fair statement 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, 2022 ("fiscal 2022"). Operating results and cash flows for the six months ended November 30, 2022 are not necessarily indicative of the results that may be expected for other interim periods or for the fiscal year ending May 31, 2023 ("fiscal 2023").

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 to secure commitments for certain workers' compensation insurance policies.

Accounts receivable, net of allowance for credit losses: Accounts receivable balances are shown on the Consolidated Balance Sheets net of the allowance for credit losses of $20.4 million and $18.2 million as of November 30, 2022 and May 31, 2022, 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 $277.1 million and $123.2 million as of November 30, 2022 and May 31, 2022, respectively. Purchased receivables, at gross, were $616.9 million and $618.8 million as of November 30, 2022 and May 31, 2022, respectively.

The Company is exposed to credit losses through the sale of services, payment of client obligations, and collection of purchased receivables. To mitigate this credit risk, the Company has multiple programs in place to assess and continuously monitor each client's ability to pay for products and services. Credit monitoring programs include, but are not limited to, new client credit reviews, establishing appropriate credit limits, monitoring of credit distressed clients, and early electronic wire and collection procedures. The Company also considers contract terms and conditions, client business type or strategy and may require collateralized asset support or prepayment to mitigate credit risk.

Accounts receivable are written off and charged against the allowance for credit losses when the Company has exhausted all collection efforts without success. The Company estimates its credit losses based on historical loss activity adjusted for current economic conditions and reasonable and supportable forecast factors, when applicable. The provision for the allowance for credit losses and accounts written off were not material for the three and six months ended November 30, 2022 and November 30, 2021. No single client had a material impact on total accounts receivable as of November 30, 2022 and May 31, 2022 or service revenue and results of operations for the three and six months ended November 30, 2022 and November 30, 2021.

Professional Employer Organization ("PEO") unbilled receivables, net of advance collections: PEO 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 November 30, 2022 and May 31, 2022, advance collections were $34.4 million and $2.6 million, respectively.

PEO insurance reserves: As part of its PEO solution, the Company offers workers' compensation insurance and health insurance coverage to clients for the benefit of client employees. Workers' compensation insurance is primarily provided under fully insured high deductible workers' compensation insurance policies. Workers' compensation insurance reserves are established to provide for the estimated costs of paying claims up to per occurrence liability limits. These reserves include estimates of certain expenses associated with processing and settling claims. For fiscal 2023 and fiscal 2022, the Company has an aggregate maximum liability of $2.0 million for claims exceeding $1.0 million, and once met, the maximum individual claims liability is $1.0 million.

With respect to PEO health insurance coverage, the Company offers various health insurance plans that take the form of either fully insured guaranteed cost plans or fully insured insurance arrangements where the Company retains claims risk. A reserve for insurance arrangements where the Company retains risk is established to provide for the payment of claims in accordance with the Company's service contract with the carrier. The claims liability includes estimates for reported losses, plus amounts for those claims incurred but not reported, and estimates of certain expenses associated with processing and settling the claims. The Company's maximum individual claims liability is $0.5 million under its policies covering both fiscal 2023 and fiscal 2022.

In establishing the PEO workers' compensation insurance reserves, the Company uses an independent actuarial estimate of undiscounted future cash payments that would be made to settle claims. Estimating the ultimate cost of future claims is an uncertain and complex process based upon historical loss experience and accepted actuarial methods and assumptions. These reserves are 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.

Stock-based compensation costs: The Company has issued stock-based awards to employees and members of its Board of Directors (the "Board") consisting of stock options, restricted stock units, and restricted stock awards. The Company accounts for all stock-based awards to employees and members of the Board 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 $15.3 million and $29.7 million for the three and six months ended November 30, 2022, respectively, as compared with $14.0 million and $26.4 million, respectively, for the three and six months ended November 30, 2021. 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 Form 10-K for fiscal 2022.

Recently adopted accounting pronouncements: Effective June 1, 2022, the Company adopted Accounting Standards Update ("ASU"), No. 2021-10 "Government Assistance (Topic 832): Disclosures by Business Entities about Government Assistance," which did not have a material impact on its consolidated financial statements.

Recently issued accounting pronouncements: In October 2021, the FASB issued ASU No. 2021-08 "Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers." This ASU clarifies that an acquirer of a business should recognize and measure contract assets and contract liabilities in a business combination in accordance with Accounting Standards Codification ("ASC") Topic 606, Revenue from Contracts with Customers. ASU No. 2021-08 is effective for public business entities for fiscal years, including interim periods within those fiscal years, beginning after December 15, 2022, with early application permitted. This ASU is applicable to the Company's fiscal year beginning June 1, 2023, and the impact of its adoption on the Company's consolidated financial statements will depend on the contract assets and liabilities acquired in business combinations after that date.

Other recent authoritative guidance issued by the FASB (including technical corrections to the FASB ASC), the American Institute of Certified Public Accountants, and the Securities and Exchange Commission during the six months ended November 30, 2022 and through the date of this report did not, or are not expected to, have a material impact on the Company's consolidated financial statements.

Note B: Service Revenue

Service revenue is primarily attributable to fees for providing services to the Company's clients and is recognized when control of the contracted services is transferred to its clients, in an amount that reflects the consideration it expects to receive in exchange for such services. Insurance Solutions revenue is commissions earned on premiums collected and remitted to insurance carriers. The Company's contracts generally do not contain specified contract periods and may be terminated by either party with a 30-day notice of termination. Sales and other applicable non-payroll related taxes are excluded from service revenue.

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

Management Solutions Revenue

Management Solutions revenue is primarily derived from the Company's integrated HCM services and HR 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 services covering the HCM spectrum. Management Solutions revenue is generally recognized over time as services are performed and the client simultaneously receives and controls the benefits from these services.

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

PEO and Insurance Solutions Revenue

PEO solutions are sold through the Company's registered and licensed subsidiaries and offer businesses HCM and HR solutions. 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 offerings. PEO Solutions revenue is recognized over time as the services are performed and the client simultaneously receives and controls the benefits from these services. PEO Solutions revenue is reported net of certain pass-through costs billed and incurred, which include payroll wages, payroll taxes, including federal and state unemployment insurance, and health insurance premiums on guaranteed cost benefit plans. For workers' compensation and health insurance plans where the Company retains risk, revenues and costs are recorded on a gross basis.

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

	For the three months ended November 30,		For the six months ended November 30,	
In millions	**2022**	**2021**	**2022**	**2021**
Payroll wages and payroll taxes	$ 6,333.3	$ 5,806.1	$ 12,671.1	$ 11,363.3
State unemployment insurance (included in payroll wages and payroll taxes)	30.3	18.6	$ 39.8	$ 34.0
Guaranteed cost benefit plans	180.3	156.7	$ 337.0	$ 307.6

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

Contract Balances

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

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

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

	For the three months ended November 30,				For the six months ended November 30,			
In millions	**2022**		**2021**		**2022**		**2021**	
Balance, beginning of period	$	52.2	$	41.5	$	48.9	$	40.2
Deferral of revenue		10.0		8.7		20.1		16.3
Recognition of unearned revenue		(7.0)		(6.4)		(13.8)		(12.7)
Balance, end of period	$	55.2	$	43.8	$	55.2	$	43.8

Deferred revenue related to material rights is reported in the deferred revenue and other long-term liabilities line items on the Company's Consolidated Balance Sheets. As of November 30, 2022, the Company expects to recognize deferred revenue related to these material rights for the remainder of fiscal 2023 and subsequent fiscal years as follows:

In millions **Year ending May 31,**	**Estimated recognition of unearned revenue**	
2023	$	13.1
2024		20.6
Thereafter		21.5
Total recognition of unearned revenue	$	55.2

Assets Recognized from the Costs to Obtain and Fulfill Contracts

The Company recognizes an asset for the incremental costs of obtaining a contract with a client if it is expected that the economic benefit and amortization period will be longer than one year. The Company also recognizes an asset for the costs to fulfill a contract with a client if the costs are specifically identifiable, generate or enhance resources used to satisfy future performance obligations, and are expected to be recovered.

Deferred costs to obtain and fulfill contracts are reported in the prepaid expenses and other current assets and long-term deferred costs line items on the Company's Consolidated Balance Sheets. Amortization expense related to costs to obtain and fulfill a contract are included in cost of service revenue and selling, general and administrative expenses in the Company's Consolidated Statements of Income and Comprehensive Income and recognized over the expected economic benefit period.

The Company regularly reviews its deferred costs for potential impairment and did not recognize an impairment loss during the six months ended November 30, 2022 or November 30, 2021.

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

Costs to obtain contracts:

	For the three months ended November 30,				For the six months ended November 30,			
In millions	**2022**		**2021**		**2022**		**2021**	
Balance, beginning of period	$	560.6	$	491.9	$	550.2	$	488.2
Capitalization of costs		50.0		52.4		107.0		99.0
Amortization		(48.0)		(43.8)		(94.6)		(86.7)
Balance, end of period	$	562.6	$	500.5	$	562.6	$	500.5

Costs to fulfill contracts:

In millions	For the three months ended November 30, 2022	2021	For the six months ended November 30, 2022	2021
Balance, beginning of period	$ 73.4	$ 70.2	$ 72.3	$ 69.3
Capitalization of costs	7.6	6.5	15.1	13.6
Amortization	(6.5)	(6.2)	(12.9)	(12.4)
Balance, end of period	$ 74.5	$ 70.5	$ 74.5	$ 70.5

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 November 30, 2022	2021	For the six months ended November 30, 2022	2021
Basic earnings per share:				
Net income	$ 360.3	$ 332.1	$ 739.5	$ 665.7
Weighted-average common shares outstanding	360.5	360.7	360.2	360.4
Basic earnings per share	**$ 1.00**	**$ 0.92**	**$ 2.05**	**$ 1.85**
Diluted earnings per share:				
Net income	$ 360.3	$ 332.1	$ 739.5	$ 665.7
Weighted-average common shares outstanding	360.5	360.7	360.2	360.4
Dilutive effect of common share equivalents	1.8	2.4	2.1	2.5
Weighted-average common shares outstanding, assuming dilution	362.3	363.1	362.3	362.9
Diluted earnings per share	**$ 0.99**	**$ 0.91**	**$ 2.04**	**$ 1.83**
Weighted-average anti-dilutive common share equivalents	**0.9**	**0.4**	**0.7**	**0.3**

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

Note D: Other Income/(Expense), Net

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

In millions	For the three months ended November 30, 2022	2021	For the six months ended November 30, 2022	2021
Interest income on corporate investments	$ 10.1	$ 0.4	$ 15.5	$ 0.6
Interest expense	(9.2)	(9.3)	(18.3)	(18.5)
Other	2.0	6.2	2.1	16.2
Other income/(expense), net	**$ 2.9**	**$ (2.7)**	**$ (0.7)**	**$ (1.7)**

Note E: Funds Held for Clients and Corporate Investments

Funds held for clients and corporate investments were as follows:

	November 30, 2022			
In millions	**Amortized cost**	**Gross unrealized gains**	**Gross unrealized losses**	**Fair value**
Type of issue:				
Funds held for clients' money market securities and other restricted cash equivalents	$ 460.1	$ —	$ —	$ 460.1
AFS securities:				
Asset-backed securities	51.6	—	(2.1)	49.5
Corporate bonds	773.6	1.5	(36.2)	738.9
Municipal bonds	1,469.6	0.0	(133.7)	1,335.9
U.S. government agency and treasury securities	602.0	—	(47.3)	554.7
Variable rate demand notes	131.3	—	—	131.3
Total AFS securities	3,028.1	1.5	(219.3)	2,810.3
Other	33.2	1.5	(2.9)	31.8
Total funds held for clients and corporate investments	**$ 3,521.4**	**$ 3.0**	**$ (222.2)**	**$ 3,302.2**

	May 31, 2022			
In millions	**Amortized cost**	**Gross unrealized gains**	**Gross unrealized losses**	**Fair value**
Type of issue:				
Funds held for clients' money market securities and other restricted cash equivalents	$ 482.6	$ —	$ —	$ 482.6
AFS securities:				
Asset-backed securities	68.5	0.0	(1.3)	67.2
Corporate bonds	699.3	1.8	(19.0)	682.1
Municipal bonds	1,577.6	0.6	(92.4)	1,485.8
U.S. government agency and treasury securities	574.5	0.3	(26.3)	548.5
Variable rate demand notes	1,245.6	—	—	1,245.6
Total AFS securities	4,165.5	2.7	(139.0)	4,029.2
Other	30.4	1.8	(2.2)	30.0
Total funds held for clients and corporate investments	**$ 4,678.5**	**$ 4.5**	**$ (141.2)**	**$ 4,541.8**

Included in funds held for clients' money market securities and other restricted cash equivalents as of November 30, 2022 were bank demand deposit accounts, time deposits, money market funds and commercial paper with a maturity of 90 days or less at acquisition.

Included in asset-backed securities as of November 30, 2022 were investment-grade securities primarily collateralized by fixed-rate auto loans and credit card receivables and all have credit ratings of AAA. The primary risk associated with these securities is the collection of the underlying receivables. Collateral on these asset-backed securities has performed as expected through November 30, 2022.

Included in corporate bonds as of November 30, 2022 were investment-grade securities covering a wide range of issuers, industries, and sectors primarily carrying credit ratings of A or better and having maturities ranging from December 1, 2022 through December 13, 2028.

Included in municipal bonds as of November 30, 2022 were general obligation bonds and revenue bonds primarily carrying credit ratings of AA or better and have maturities ranging from December 1, 2022 through April 1, 2030.

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

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

In millions	November 30, 2022	May 31, 2022
Funds held for clients	$ 3,132.7	$ 3,682.9
Corporate investments	165.6	853.9
Long-term corporate investments	3.9	5.0
Total funds held for clients and corporate investments	**$ 3,302.2**	**$ 4,541.8**

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

The Company's AFS securities reflected net unrealized losses of $217.8 million and $136.3 million as of November 30, 2022 and May 31, 2022, respectively. Included in net unrealized losses as of November 30, 2022 and May 31, 2022, were 1,105 and 817 AFS securities in an unrealized loss position, representing approximately 97% and 64% of the total securities held, respectively. AFS securities in an unrealized loss position for which a credit loss has not been recognized were as follows:

	November 30, 2022					
	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:						
Asset-backed securities	$ (0.8)	$ 35.4	$ (1.3)	$ 14.1	$ (2.1)	$ 49.5
Corporate bonds	(23.4)	584.0	(12.8)	93.7	(36.2)	677.7
Municipal bonds	(38.6)	721.7	(95.1)	606.5	(133.7)	1,328.2
U.S. government agency and treasury securities	(29.9)	441.6	(17.4)	113.1	(47.3)	554.7
Total	**$ (92.7)**	**$ 1,782.7**	**$ (126.6)**	**$ 827.4**	**$ (219.3)**	**$ 2,610.1**

In millions	May 31, 2022 Securities in an unrealized loss position for less than twelve months Gross unrealized losses	Fair value	Securities in an unrealized loss position for more than twelve months Gross unrealized losses	Fair value	Total Gross unrealized losses	Fair value
Type of issue:						
Asset-backed securities	$ (0.9)	$ 48.5	$ (0.3)	$ 5.7	$ (1.2)	$ 54.2
Corporate bonds	(17.5)	425.4	(1.5)	16.7	(19.0)	442.1
Municipal bonds	(81.9)	1,171.5	(10.6)	86.6	(92.5)	1,258.1
U.S. government agency and treasury securities	(15.9)	414.2	(10.4)	91.7	(26.3)	505.9
Total	**$ (116.2)**	**$ 2,059.6**	**$ (22.8)**	**$ 200.7**	**$ (139.0)**	**$ 2,260.3**

The Company regularly reviews its investment portfolios to determine if any investment is impaired due to changes in credit risk or other potential valuation concerns. The Company believes the investments held as of November 30, 2022 that had gross unrealized losses of $219.3 million were not impaired due to credit risk or other valuation concerns, and the Company was not required to record a credit loss or an allowance for credit losses on its AFS securities. The Company believes 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 substantial portion of the securities in an unrealized loss position as of November 30, 2022 and as of May 31, 2022 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 impaired due to credit risk or other valuation concerns 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 sale of AFS securities are determined by specific identification of the cost basis of each security. On the Consolidated Statements of Income and Comprehensive Income, realized gains and losses from the funds held for clients portfolio and corporate investments portfolio are included in interest on funds held for clients and other expense, net, respectively. Realized gains and losses from the sale of AFS securities were as follows:

In millions	For the three months ended November 30, 2022	2021	For the six months ended November 30, 2022	2021
Gross realized gains	$ 0.0	$ 0.0	$ 0.1	$ 0.1
Gross realized losses	(0.0)	(0.0)	(0.0)	(0.0)
Net realized gains	**$ (0.0)**	**$ 0.0**	**$ 0.1**	**$ 0.1**

The amortized cost and fair value of AFS securities that had stated maturities as of November 30, 2022 are shown below by expected maturity.

In millions	November 30, 2022 Amortized cost	Fair value
Maturity date:		
Due in one year or less	$ 307.3	$ 305.0
Due after one year through three years	845.5	809.7
Due after three years through five years	1,399.4	1,259.5
Due after five years	475.9	436.1
Total	**$ 3,028.1**	**$ 2,810.3**

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

Note F: 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 credit losses, PEO unbilled receivables, net of advance collections, 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 AFS 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:

	November 30, 2022			
In millions	**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	$ 0.9	$ —	$ 0.9	$ —
Time deposits	59.3	—	59.3	—
Money market securities	20.4	20.4	—	—
Total restricted and unrestricted cash equivalents	$ 80.6	$ 20.4	$ 60.2	$ —
AFS securities:				
Asset-backed securities	$ 49.5	$ —	$ 49.5	$ —
Corporate bonds	738.9	—	738.9	—
Municipal bonds	1,335.9	—	1,335.9	—
U.S. government agency and treasury securities	554.7	—	554.7	—
VRDNs	131.3	—	131.3	—
Total AFS securities	$ 2,810.3	$ —	$ 2,810.3	$ —
Other	$ 31.8	$ 31.8	$ —	$ —
Liabilities:				
Other long-term liabilities	$ 31.7	$ 31.7	$ —	$ —

In millions	May 31, 2022 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	$ 5.2	$ —	$ 5.2	$ —
Time deposits	187.9	—	187.9	—
VRDNs	10.0	—	10.0	—
Money market securities	$ 16.1	$ 16.1	$ —	$ —
Total restricted and unrestricted cash equivalents	$ 219.2	$ 16.1	$ 203.1	$ —
AFS securities:				
Asset-backed securities	$ 67.2	$ —	$ 67.2	$ —
Corporate bonds	682.1	—	682.1	—
Municipal bonds	1,485.8	—	1,485.8	—
U.S. government agency and treasury securities	548.5	—	548.5	—
VRDNs	1,245.6	—	1,245.6	—
Total AFS securities	$ 4,029.2	$ —	$ 4,029.2	$ —
Other	$ 30.0	$ 30.0	$ —	$ —
Liabilities:				
Other long-term liabilities	$ 29.9	$ 29.9	$ —	$ —

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, time deposits, and VRDNs which are considered Level 2 investments as they are valued based on similar, but not identical, instruments in active markets. AFS securities, including asset-backed securities, corporate bonds, municipal bonds, U.S. government agency securities, and VRDNs, when held by the Company, 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 AFS securities, the independent pricing service uses a variety of inputs, including benchmark yields, reported trades, non-binding broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, reference data, new issue data, and monthly payment information. The Company has not adjusted the prices obtained from the independent pricing service because it believes that they are appropriately valued.

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

The Company's long-term borrowings are accounted for on a historical cost basis. As of November 30, 2022 and May 31, 2022, the fair value of long-term borrowings, net of debt issuance costs was $392.5 million and $404.1 million for the Senior Notes, Series A, respectively, and $389.5 million and $402.5 million for the Senior Notes, Series B, respectively.

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

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

Note G: Supplemental Information

Property and equipment, net of accumulated depreciation: Depreciation expense was $31.7 million and $63.1 million for the three and six months ended November 30, 2022, compared to $32.5 million and $63.2 million for the three and six months ended November 30, 2021.

Goodwill and intangible assets, net of accumulated amortization: Amortization expense relating to intangible assets was $12.6 million and $25.2 million for the three and six months ended November 30, 2022, compared to $16.1 million and $31.1 million for the three and six months ended November 30, 2021. The Company did not recognize an impairment loss as it relates to its goodwill or intangible assets during the six months ended November 30, 2022 or November 30, 2021.

Short-term financing: Outstanding borrowings on the Company's credit facilities had a weighted-average interest rate of 4.97% and 2.34% as of November 30, 2022 and May 31, 2022, respectively. The unused amount available under these credit facilities as of November 30, 2022 was approximately $2.0 billion.

The 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 November 30, 2022.

Letters of credit: The Company had irrevocable standby letters of credit available totaling $141.5 million and $140.2 million as of November 30, 2022 and May 31, 2022, respectively, required to secure commitments for certain insurance policies. The letters of credit expire at various dates between December 5, 2022 and November 22, 2023. No amounts were outstanding on these letters of credit as of, or during the six months ended November 30, 2022 and November 30, 2021, or as of May 31, 2022.

Long-term debt: There have been no material changes to the Company's long-term debt agreement or balances subsequent to May 31, 2022. The Company's long-term debt 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 November 30, 2022.

Note H: Commitments and Contingencies

Other commitments: The Company had outstanding commitments under existing workers' compensation insurance agreements, joint ventures and legally binding contractual arrangements, which include immaterial leases that have yet to commence. The Company also enters into various purchase commitments with vendors in the ordinary course of business and had outstanding commitments to purchase capital assets of approximately $10.4 million as of November 30, 2022 and $7.6 million as of May 31, 2022.

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

The Company currently self-insures the deductible portion of various insured exposures under certain corporate employee and PEO employee health and medical benefit plans. The Company's estimated loss exposure under these insurance arrangements is recorded in other current liabilities on the Consolidated Balance Sheets. Historically, the amounts accrued have not been material and were not material as of November 30, 2022. The Company also maintains insurance, 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, as well as 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, 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 I: Income Taxes

The Company's effective income tax rate was 24.2% and 24.1% for the three months ended November 30, 2022 and 2021, respectively, and 23.5% and 24.5% for the six months ended November 30, 2022 and 2021, respectively. All periods were impacted by the recognition of excess tax benefits related to employee stock-based compensation payments. The effective income tax rate for the six months ended November 30, 2021 was also impacted by an increase in state taxes.

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 November 30, 2022 (the "second quarter"), the six months ended November 30, 2022 (the "six months"), the respective prior year periods ended November 30, 2021 (the "prior year periods"), and our financial condition as of November 30, 2022. 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 November 30, 2022 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, 2022 ("fiscal 2022"). Forward-looking statements in this Form 10-Q are qualified by the cautionary statement included under the next sub-heading, "Cautionary Note Regarding Forward-Looking Statements."

Cautionary Note Regarding Forward-Looking Statements

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 "expect," "estimate," "intend," "outlook," "will," "would," "project," "projections," "strategy," "anticipate," "believe," "could," "may," "potential," "purpose," "mission," 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 condition 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:

- our ability to keep pace with changes in technology or provide timely enhancements to our products and services;
- software defects, undetected errors, and development delays for our products;
- the possibility of cyberattacks, security vulnerabilities or Internet disruptions, including data security and privacy leaks and data loss and business interruptions;
- the possibility of failure of our business continuity plan during a catastrophic event;
- the failure of third-party service providers to perform their functions;
- the possibility that we may be exposed to additional risks related to our co-employment relationship with our professional employer organization ("PEO") business;
- changes in health insurance and workers' compensation insurance rates and underlying claim trends;
- risks related to acquisitions and the integration of the businesses we acquire;
- 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;
- our failure to comply with covenants in our debt agreements;
- changes in governmental regulations and policies;
- our ability to comply with U.S. and foreign laws and regulations;
- our compliance with data privacy laws and regulations;
- our failure to protect our intellectual property rights;
- potential outcomes related to pending or future litigation matters;
- the impact of the COVID-19 pandemic and other macroeconomic factors on the U.S. and global economy, and in particular on our small- and medium-sized business clients;
- volatility in the political and economic environment, including rising inflation;
- changes in the availability and retention of qualified people; and
- the possible effects of negative publicity on our reputation and the value of our brand.

Any of these factors, as well as other factors discussed in our Form 10-K for fiscal 2022 or in our 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.

Our investor presentation regarding the financial results for the second quarter is available and accessible on our Paychex Investor Relations portal at https://investor.paychex.com. Information available on our website is not a part of, and is not incorporated into, this Form 10-Q. We intend to make future investor presentations available exclusively on our Paychex Investor Relations portal.

Overview

We are a leading provider of integrated human capital management ("HCM") solutions for human resources ("HR"), payroll, benefits, and insurance for small- to medium-sized businesses and their employees across the United States ("U.S.") and parts of Europe. We offer a comprehensive portfolio of technology solutions and HR advisory services that help our clients address the evolving challenges of HR. Our purpose is to empower our clients to focus on their success and help them navigate the complexities of HR and payroll.

Paychex Flex® is our proprietary HCM software-as-a-service ("SaaS") platform that unites HR, payroll, time and attendance, and benefits processes to maximize efficiency and savings. Paychex Flex helps clients manage the employee life cycle from recruiting and hiring to retirement through an integrated suite of solutions and digital support capabilities. It utilizes a single cloud-based platform, with single client and employee records that allows a client to customize their set of solutions and modify it as their needs change. In addition, we provide comprehensive HR solutions and advisory services to help our clients plan, manage, and comply with all aspects of HR.

Our portfolio of technology and HR advisory services and employee benefit-related solutions is disaggregated into two categories, (1) Management Solutions and (2) PEO and Insurance Solutions, as discussed under the heading "Description of Solutions" in Part I, Item 1 of our Form 10-K for fiscal 2022.

Our strategy focuses on providing industry-leading, integrated technology; delivering superior customer experiences; expanding our leadership in HR; growing our client bases; and engaging in strategic acquisitions. We believe that successfully executing this strategy will lead to strong, long-term financial performance.

We maintain industry-leading margins by managing our personnel costs and expenses while continuing to invest in our business, particularly in sales and marketing and leading-edge technology. We believe these investments are critical to our success. Looking to the future, we believe that investing in our products, people, and digital capabilities will position us to capitalize on opportunities for long-term growth.

We closely monitor the evolving challenges and needs of small- and mid-sized businesses. Through our unique blend of innovative technology solutions, backed by our extensive compliance and HR expertise, we help clients more effectively hire, engage, train, and retain top talent in this challenging workforce environment. As businesses operate in a tight labor market, having an online portal for employee self-service that is intuitive and easy-to-use helps increase employee retention and efficiency for our clients. Recent enhancements to our Paychex Flex platform were designed to improve the client and employee experiences from hiring and onboarding through employee retention.

Second Quarter and Year to Date Business Highlights

Highlights compared to the prior year periods are as follows:

In millions, except per share amounts	For the three months ended November 30, 2022	For the three months ended November 30, 2021	Change[2]	For the six months ended November 30, 2022	For the six months ended November 30, 2021	Change[2]
Total service revenue	$ 1,168.6	$ 1,094.4	7 %	$ 2,356.9	$ 2,162.8	9 %
Total revenue	$ 1,190.3	$ 1,108.5	7 %	$ 2,396.5	$ 2,191.4	9 %
Operating income	$ 472.3	$ 440.3	7 %	$ 967.9	$ 883.2	10 %
Net income	$ 360.3	$ 332.1	8 %	$ 739.5	$ 665.7	11 %
Adjusted net income[1]	$ 359.4	$ 329.8	9 %	$ 731.3	$ 653.0	12 %
Diluted earnings per share	$ 0.99	$ 0.91	9 %	$ 2.04	$ 1.83	11 %
Adjusted diluted earnings per share[1]	$ 0.99	$ 0.91	9 %	$ 2.02	$ 1.80	12 %
Dividends paid to stockholders	$ 284.7	$ 238.3	19 %	$ 569.3	$ 476.4	20 %

(1) Adjusted net income and adjusted diluted earnings per share are not U.S. generally accepted accounting principle ("GAAP") measures. Refer to the "Non-GAAP Financial Measures" section of this Item 2 for a discussion of non-GAAP measures and a reconciliation to the U.S. GAAP measures of net income and diluted earnings per share.
(2) Percentage changes are calculated based on unrounded numbers.

For further analysis of our results of operations for the second quarter and six months, the prior year periods, and our financial position as of November 30, 2022, refer to the tables and analysis in the "Results of Operations" and "Liquidity and Capital Resources" sections of this Item 2.

RESULTS OF OPERATIONS

Summary of Results of Operations:

In millions, except per share amounts	For the three months ended November 30, 2022	For the three months ended November 30, 2021	Change[1]	For the six months ended November 30, 2022	For the six months ended November 30, 2021	Change[1]
Revenue:						
Management Solutions	$ 895.3	$ 832.0	8 %	$ 1,800.8	$ 1,637.5	10 %
PEO and Insurance Solutions	273.3	262.4	4 %	556.1	525.3	6 %
Total service revenue	**1,168.6**	**1,094.4**	**7 %**	**2,356.9**	**2,162.8**	**9 %**
Interest on funds held for clients	21.7	14.1	54 %	39.6	28.6	39 %
Total revenue	**1,190.3**	**1,108.5**	**7 %**	**2,396.5**	**2,191.4**	**9 %**
Total expenses	718.0	668.2	7 %	1,428.6	1,308.2	9 %
Operating income	**472.3**	**440.3**	**7 %**	**967.9**	**883.2**	**10 %**
Other income/(expense), net	2.9	(2.7)	n/m	(0.7)	(1.7)	n/m
Income before income taxes	**475.2**	**437.6**	**9 %**	**967.2**	**881.5**	**10 %**
Income taxes	114.9	105.5	9 %	227.7	215.8	6 %
Effective income tax rate	24.2 %	24.1 %		23.5 %	24.5 %	
Net income	**$ 360.3**	**$ 332.1**	**8 %**	**$ 739.5**	**$ 665.7**	**11 %**
Diluted earnings per share	**$ 0.99**	**$ 0.91**	**9 %**	**$ 2.04**	**$ 1.83**	**11 %**

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

The changes in revenue as compared to the prior year periods were primarily driven by the following factors:

- ***Management Solutions revenue:*** $895.3 million for the second quarter and $1.8 billion for the six months, reflecting increases of 8% and 10%, respectively:

- Growth in the number of clients and clients' employees served for HCM and additional worksite employees for HR Solutions;
- Expanded revenue per client resulting from price realization and higher product attachment, including increased demand for HR Solutions, retirement, and time and attendance solutions; and
- Continued demand for HCM ancillary services.

• ***PEO and Insurance Solutions revenue:*** $273.3 million for the second quarter and $556.1 million for the six months, reflecting increases of 4% and 6%, respectively:

- Growth in the number of average worksite employees; and
- Increase in PEO health insurance revenue.

• ***Interest on funds held for clients:*** $21.7 million for the second quarter and $39.6 million for the six months, reflecting increases of 54% and 39%, respectively, due to higher average interest rates earned and higher average invested balances.

We invest in highly liquid, investment-grade fixed income securities and do not utilize derivative instruments to manage interest rate risk.

Details regarding our combined funds held for clients and corporate cash equivalents and investment portfolios were as follows:

$ in millions	**For the three months ended November 30, 2022**	**2021**	**Change[1]**	**For the six months ended November 30, 2022**	**2021**	**Change[1]**
Average investment balances:						
Funds held for clients	$ 4,012.7	$ 3,917.5	2 %	$ 4,065.4	$ 3,907.5	4 %
Corporate cash equivalents and investments	1,349.3	1,182.8	14 %	1,363.0	1,189.9	15 %
Total	$ 5,362.0	$ 5,100.3	5 %	$ 5,428.4	$ 5,097.4	6 %
Average interest rates earned (exclusive of net realized gains):						
Funds held for clients	2.2 %	1.4 %		1.9 %	1.5 %	
Corporate cash equivalents and investments	3.0 %	0.1 %		2.3 %	0.1 %	
Combined funds held for clients and corporate cash equivalents and investments	2.4 %	1.1 %		2.0 %	1.1 %	
Total net realized (losses)/gains	$ (0.0)	$ 0.0		$ 0.1	0.1	

[1] Percentage changes are calculated based on unrounded numbers.

$ in millions	**November 30, 2022**	**May 31, 2022**
Net unrealized losses on available for sale ("AFS") securities [1]	$ (217.8)	$ (136.3)
Federal Funds rate [2]	4.00 %	1.00 %
Total fair value of AFS securities	$ 2,810.3	$ 4,029.2
Weighted-average duration of AFS securities in years [3]	3.0	3.2
Weighted-average yield-to-maturity of AFS securities [3]	2.0 %	1.9 %

[1] The net unrealized loss on our investment portfolio was approximately $212.1 million as of December 20, 2022.

[2] The Federal Funds rate was in the range of 3.75% to 4.00% as of November 30, 2022 and in the range of 0.75% to 1.00% as of May 31, 2022. Effective December 15, 2022, the Federal Reserve increased the Federal Funds rate to a range of 4.25% to 4.50%.

[3] These items exclude the impact of variable rate demand notes ("VRDNs") as they are tied to short-term interest rates.

Total expenses: The following table summarizes the total combined cost of service revenue and selling, general and administrative expenses for the periods below:

In millions	For the three months ended November 30, 2022	2021	Change[1]	For the six months ended November 30, 2022	2021	Change[1]
Compensation-related expenses	$ 442.8	$ 394.2	12 %	$ 869.4	$ 777.1	12 %
PEO insurance costs	102.9	100.2	3 %	207.4	196.2	6 %
Depreciation and amortization	44.3	48.6	(9) %	88.3	94.3	(6) %
Other expenses	128.0	125.2	2 %	263.5	240.6	10 %
Total expenses	$ 718.0	$ 668.2	7 %	$ 1,428.6	$ 1,308.2	9 %

[1] Percentage changes are calculated based on unrounded numbers.

Total expenses increased 7% to $718.0 million for the second quarter and 9% to $1.4 billion for the six months compared to the prior year periods. Total expenses increased as a result of the following:

- ***Compensation-related expenses:*** $442.8 million for the second quarter and $869.4 million for the six months, both periods reflecting an increase of 12%, due to increases in headcount and wage rates.
- ***Other expenses:*** $128.0 million for the second quarter and $263.5 million for the six months, reflecting an increase of 2% for the second quarter and 10% for the six months, due to general cost increases to support business growth.

Operating income: Operating income increased 7% to $472.3 million and 10% to $967.9 million for the six months, as a result of revenue growth outpacing expense increases as previously discussed.

Operating margin (operating income as a percentage of total revenue) was as follows:

	For the three months ended November 30, 2022	2021	For the six months ended November 30, 2022	2021
Operating margin	39.7 %	39.7 %	40.4 %	40.3 %

Income taxes: Our effective income tax rate was 24.2% for the second quarter and 23.5% for the six months ended November 30, 2022, compared to 24.1% and 24.5%, for the prior year periods. Both periods were impacted by the recognition of excess tax benefits related to employee stock-based compensation payments. The six months ended November 30, 2021 were also impacted by an increase in state taxes.

Non-GAAP Financial Measures: Adjusted net income, adjusted diluted earnings per share, and earnings before interest, taxes, depreciation, and amortization ("EBITDA") are summarized as follows:

$ in millions	For the three months ended November 30, 2022	For the three months ended November 30, 2021	Change	For the six months ended November 30, 2022	For the six months ended November 30, 2021	Change
Net income	$ 360.3	$ 332.1	8 %	$ 739.5	$ 665.7	11 %
Non-GAAP adjustments:						
Excess tax benefits related to employee stock-based compensation payments(1)	(0.9)	(2.3)		(8.2)	(12.7)	
Adjusted net income	$ 359.4	$ 329.8	9 %	$ 731.3	$ 653.0	12 %
Diluted earnings per share(2)	$ 0.99	$ 0.91	9 %	$ 2.04	$ 1.83	11 %
Non-GAAP adjustments:						
Excess tax benefits related to employee stock-based compensation payments(1)	—	(0.01)		(0.02)	(0.03)	
Adjusted diluted earnings per share	$ 0.99	$ 0.91	9 %	$ 2.02	$ 1.80	12 %
Net income	$ 360.3	$ 332.1	8 %	$ 739.5	$ 665.7	11 %
Non-GAAP adjustments:						
Interest (income)/expense, net	(0.9)	8.9		2.8	17.9	
Income taxes	114.9	105.5		227.7	215.8	
Depreciation and amortization expense	44.3	48.6		88.3	94.3	
Total non-GAAP adjustments	158.3	163.0		318.8	328.0	
EBITDA	$ 518.6	495.1	5 %	$ 1,058.3	$ 993.7	7 %

(1) Excess tax 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.

(2) 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.

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 these additional measures are indicators of our core business operations' performance 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 a substitute for the U.S. GAAP measures of net income and diluted earnings per share, and, therefore, they 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

As of November 30, 2022, our financial position remained strong with cash, restricted cash, and total corporate investments of $1.3 billion. Total short-term and long-term borrowings, net of debt issuance costs, were $808.0 million as of November 30, 2022. Our primary source of cash is our ongoing operations. Cash flow from operations was $685.9 million for the six months. Our positive cash flows have allowed us to support our business and pay dividends. We currently anticipate that cash, restricted cash, and total corporate investments as of November 30, 2022, along with projected operating cash flows and available short-term financing, will support our business operations, capital purchases, share repurchases, and dividend payments for the foreseeable future.

We believe that our investments in an unrealized loss position as of November 30, 2022 were not impaired due to increased credit risk or other valuation concerns, nor has any event occurred subsequent to that date to indicate any change in our assessment.

Financing

Short-term financing: We maintain committed and unsecured credit facilities and irrevocable letters of credit as part of our normal and recurring business operations. The purpose of these credit facilities is to meet short-term funding requirements, finance working capital needs, and for general corporate purposes. We typically borrow on an overnight or short-term basis under our credit facilities. Refer to Note L of the Notes to Consolidated Financial Statements contained in Item 8 of our Form 10-K for fiscal 2022 for further discussion on our credit facilities.

Details of our credit facilities as of November 30, 2022 were as follows:

$ in millions	**Expiration Date**	**Maximum Amount Available**	**November 30, 2022 Outstanding Amount**	**November 30, 2022 Available Amount**
Credit facilities:				
JP Morgan Chase Bank, N.A. (“JPM”)	July 31, 2024	$ 1,000.0	$ -	$ 1,000.0
JPM	September 17, 2026	$ 750.0	-	750.0
PNC Bank, National Association (“PNC”)	February 6, 2023	$ 250.0	10.1	239.9
Total Lines of Credit Outstanding and Available			$ 10.1	$ 1,989.9

Amounts outstanding under the PNC credit facility as of November 30, 2022 remain outstanding as of the date of this report.

Details of borrowings under each credit facility during the second quarter and the prior year period were as follows:

	For the three months ended November 30, 2022		
	Credit Facility		
$ in millions	**$1 Billion JPM**	**$750 Million JPM**	**$250 Million PNC**
Number of days borrowed	—	—	91
Maximum amount borrowed	$ —	$ —	$ 10.4
Weighted-average amount borrowed	$ —	$ —	$ 10.0
Weighted-average interest rate	— %	— %	4.61 %

	For the three months ended November 30, 2021		
	Credit Facility		
$ in millions	**$1 Billion JPM**	**$750 Million JPM**	**$250 Million PNC**
Number of days borrowed	—	—	91
Maximum amount borrowed	$ —	$ —	$ 8.9
Weighted-average amount borrowed	$ —	$ —	$ 8.5
Weighted-average interest rate	— %	— %	1.21 %

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

Subsequent to November 30, 2022, there were no additional overnight borrowings under our PNC and JPM credit facilities.

We expect to have access to the amounts available under our current credit facilities to meet our ongoing financial needs. However, if we experience reductions in our operating cash flows due to any of the risk factors outlined in, but not limited to, Item 1A in our Form 10-K for fiscal 2022 and other SEC filings, we may need to adjust our capital, operating and other discretionary spending to realign our working capital requirements with the capital resources available to us. Furthermore, if we determine the need for additional short-term liquidity, there is no assurance that such financing, if pursued and obtained, would be adequate or on terms acceptable to us.

Letters of credit: As of November 30, 2022, we had irrevocable standby letters of credit available totaling $141.5 million, required to secure commitments for certain insurance policies. The letters of credit expire at various dates between December 5, 2022 and November 22, 2023. No amounts were outstanding on these letters of credit during the second quarter or as of November 30, 2022.

Long-term financing: We have borrowed $800.0 million through the issuance of long-term private placement debt ("Senior Notes"). Certain information related to our 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%	4.31%
Interest rate type	Fixed	Fixed
Interest payment dates	Semi-annual, in arrears	Semi-annual, in arrears
Principal payment dates	March 13, 2026	March 13, 2029
Note type	Unsecured	Unsecured

Refer to Note M of the Notes to Consolidated Financial Statements contained in Item 8 of our Form 10-K for fiscal 2022 for further discussion on our long-term financing.

Other commitments: We had outstanding commitments under existing workers' compensation insurance agreements and legally binding contractual arrangements, which included immaterial leases that have yet to commence. We also entered into various purchase commitments with vendors in the ordinary course of business and had outstanding commitments to purchase approximately $10.4 million of capital assets as of November 30, 2022. In addition, we are involved in three limited partnership agreements to contribute a maximum of $30.0 million to venture capital funds in the financial technology sector. As of November 30, 2022, we have contributed approximately $20.9 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. We have also entered into indemnification agreements with our officers and directors, which require us to defend and, if necessary, indemnify these individuals for certain pending or future 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 and PEO employee health and medical 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 November 30, 2022. 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.

Operating, Investing, and Financing Cash Flow Activities

In millions	For the six months ended November 30, 2022	2021	Change
Net cash provided by operating activities	$ 685.9	$ 555.4	$ 130.5
Net cash provided by/(used in) investing activities	1,061.6	(451.4)	1,513.0
Net cash used in financing activities	(1,051.1)	(302.9)	(748.2)
Net change in cash, restricted cash, and equivalents	$ 696.4	$ (198.9)	$ 895.3
Cash dividends per common share	$ 1.58	$ 1.32	

The changes in our cash flow for the six months compared to the prior year period were primarily the result of the following key drivers:

Operating Cash Flow Activities

- Higher net income attributable to the reasons discussed in the "Results of Operations" section of this Item 2; and
- Changes in funding for temporary staffing clients; partially offset by
- Various changes in other assets and liabilities.

Investing Cash Flow Activities

- The increase in cash provided was primarily related to an increase in the net sales of VRDNs, that were reinvested into cash/money market accounts due to more favorable interest rates;

Fluctuations in the net purchases and sales/maturities of AFS securities are also due to timing within the client funds portfolio and market conditions. Amounts will vary based upon the timing of collection from clients and the related remittance to applicable tax or regulatory agencies for payroll tax administration services and to employees of clients utilizing employee payment services.

Discussion of interest rates and related risks is included in the "Market Risk Factors" section of this Item 2.

Financing Cash Flow Activities

- Increase in net cash outflows from changes in client fund obligations due the timing of collections and remittances of client funds,
- Dividends paid increased compared to the prior year period due to an increase in our cumulative dividend from $1.32 per share to $1.58 per share for the six months. 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, and
- Decrease in cash inflows from equity-based plans primarily due to a decrease in the number of stock options exercised during the fiscal 2023 period when compared with the fiscal 2022 period.

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.

MARKET RISK FACTORS

Changes in interest rates and interest rate risk: Funds held for clients are primarily comprised of short-term funds and AFS securities. Corporate investments are primarily comprised of AFS 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 AFS 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; corporate bonds; U.S. government agency securities; and VRDNs. 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 AFS securities to a benchmark duration of two and one-half to three and three-quarters years.

During the six months ended November 30, 2022, our primary short-term investment vehicles were bank demand deposit accounts, VRDNs, and commercial paper. We have no exposure to high-risk or non-liquid investments. We have insignificant exposure to European investments. We have not and do not utilize derivative financial instruments to manage our interest rate risk.

During the six months ended November 30, 2022, the average interest rate earned on our combined funds held for clients and corporate cash equivalents and investment portfolios was 2.0% compared to 1.1% for the prior year period. When interest rates are rising, the full impact of higher interest rates will not immediately be reflected in net income due to the interaction of short- and long-term interest rate changes. During a rising interest rate environment, earnings will increase from our short-term investments, and over time, increase from our longer-term AFS securities. Earnings from AFS securities, which as of November 30, 2022 had an average duration of 3.0 years, would not reflect increases in interest rates until the investments are sold or mature and the proceeds are reinvested at higher rates.

The amortized cost and fair value of AFS securities that had stated maturities as of November 30, 2022 are shown below by expected maturity.

	November 30, 2022	
In millions	**Amortized cost**	**Fair value**
Maturity date:		
Due in one year or less	$ 307.3	$ 305.0
Due after one year through three years	845.5	809.7
Due after three years through five years	1,399.4	1,259.5
Due after five years	475.9	436.1
Total	**$ 3,028.1**	**$ 2,810.3**

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 November 30, 2022, the Federal Funds rate was in the range of 3.75% to 4.00%. Effective December 15, 2022, the Federal Reserve raised the Federal Funds rate 50 basis points placing it in the range of 4.25% to 4.50%. There continues to be uncertainty in the changing market and economic conditions, including the possibility of additional measures that could be taken by the Federal Reserve and other government agencies, related to concerns over inflation risk. We will continue to monitor the market and economic conditions.

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

- governmental action to address inflation;
- daily interest rate changes;
- seasonal variations in investment balances;
- actual duration of short-term and AFS 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 $4.5 million to $5.0 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 $6.0 billion for the year ended May 31, 2023. Our anticipated allocation is approximately 50% invested in short-term securities and VRDNs with an average duration of less than 30 days and 50% invested in AFS securities, with an average duration of two and one-half to three and three-quarters years.

The combined funds held for clients and corporate AFS securities reflected net unrealized losses of $217.8 million as of November 30, 2022 and $136.3 million as of May 31, 2022. During the six months ended November 30, 2022, the net unrealized loss on our investment portfolios ranged from a loss of $126.5 million to a loss of $263.6 million. These fluctuations were driven by changes in market rates of interest. The net unrealized loss on our investment portfolio was approximately $212.1 million as of December 20, 2022.

As of November 30, 2022 and May 31, 2022, we had $2.8 billion and $4.0 billion, respectively, invested in AFS securities at fair value. The weighted-average yield-to-maturity was 2.0% as of November 30, 2022 and 1.9% as of May 31, 2022. The weighted-average yield-to-maturity excludes AFS 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 AFS securities as of November 30, 2022, 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 our results of operations unless any declines in fair value are due to credit related concerns and an impairment loss is recognized.

We are also exposed to interest rate risk through the use of our credit facilities as outlined in the Liquidity and Capital Resources section of this Form 10-Q. If interest rates were to increase, or we increase the frequency or amounts borrowed under these credit facilities, we could experience additional interest expense and a corresponding decrease in earnings.

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 impaired due to increased credit risk or other valuation concerns and we believe that the investments we held as of November 30, 2022 were not impaired as a result of the previously discussed reasons. While $2.6 billion of our AFS 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 $219.3 million were due to changes in interest rates and were not due to increased credit risk or other valuation concerns. A substantial portion of the AFS securities in an unrealized loss position as of November 30, 2022 and May 31, 2022 had 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 impaired due to increased credit risk or other valuation concerns could change in the future due to new developments, including changes in our strategies or assumptions related to any particular investment.

We have some credit risk exposure relating to the purchase of accounts receivable as a means of providing payroll funding to clients in the temporary staffing industry. There is also credit risk exposure relating to our trade accounts receivable. 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 as of November 30, 2022.

CRITICAL ACCOUNTING POLICIES

Our critical accounting policies are described in Item 7 of our Form 10-K for fiscal 2022, filed with the SEC on July 15, 2022. 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;
- assets recognized from the costs to obtain and fulfill contracts;
- 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 the Company's 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 the Company's management, including the Company's principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures: As of the end of the period covered by this report, the Company carried out an evaluation, under the supervision and with the participation of the Company's principal executive officer and principal financial officer, of the effectiveness of disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Based on such evaluation, the Company's principal executive officer and principal financial officer have concluded that as of November 30, 2022, 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: The Company also carried out an evaluation of the internal control over financial reporting to determine whether any changes occurred during the fiscal quarter ended November 30, 2022. Based on such evaluation, there have been no changes in the Company's internal control over financial reporting that occurred during the Company's most recently completed fiscal quarter ended November 30, 2022, that 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

The Company maintains a program to repurchase up to $400 million of the Company's common stock with authorization expiring on January 31, 2024. The purpose of this program is to manage common stock dilution. There were no shares repurchased during the second quarter and $327.1 million remains available for share repurchases in total under the program.

Item 6. Exhibits

INDEX TO EXHIBITS

	Exhibit number	Description
*#	10.1	Amendment No. 1 to Paychex, Inc. 2002 Stock Incentive Plan (as amended and restated effective October 15, 2020).
*#	10.2	Amendment to Award Agreements of Martin Mucci under the Amended and Restated 2002 Stock Incentive Plan (as amended and restated) dated as of October 14, 2022.
*	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	Inline XBRL Instance Document– the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.
*	101.SCH	Inline XBRL Taxonomy Extension Schema Document
*	101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
*	101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
*	101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
*	101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
*	104	Cover Page Interactive Data File (embedded within the Inline XBRL 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:	December 22, 2022	/s/ John B. Gibson John B. Gibson President and Chief Executive Officer (Principal Executive Officer)
Date:	December 22, 2022	/s/ Efrain Rivera Efrain Rivera Senior Vice President and Chief Financial Officer (Principal Financial Officer)
Date:	December 22, 2022	/s/ Robert L. Schrader Robert L. Schrader Vice President and Controller (Principal Accounting Officer)