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 September 30, 2022

or

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

Commission File Number 1-9861

M&T BANK CORPORATION
(Exact name of registrant as specified in its charter)

New York	**16-0968385**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
One M & T Plaza Buffalo, New York	**14203**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code:

(716) 635-4000

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

Title of Each Class	Trading Symbols	Name of Each Exchange on Which Registered
Common Stock, $.50 par value	MTB	New York Stock Exchange
Perpetual Fixed-to-Floating Rate Non-Cumulative Preferred Stock, Series H	MTBPrH	New York Stock Exchange

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 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

Number of shares of the registrant's Common Stock, $0.50 par value, outstanding as of the close of business on November 1, 2022: 172,613,343 shares.

M&T BANK CORPORATION

FORM 10-Q

For the Quarterly Period Ended September 30, 2022

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements.

M&T BANK CORPORATION AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEET (Unaudited)

(Dollars in thousands, except per share)	September 30, 2022	December 31, 2021
Assets		
Cash and due from banks	$ 2,255,810	$ 1,337,577
Interest-bearing deposits at banks	25,391,528	41,872,304
Trading account	129,672	49,745
Investment securities		
Available for sale (cost: $11,340,155 at September 30, 2022; $3,849,347 at December 31, 2021)	10,870,346	3,955,804
Held to maturity (fair value: $11,554,655 at September 30, 2022; $2,771,290 at December 31, 2021)	12,898,862	2,734,674
Equity and other securities (cost: $832,604 at September 30, 2022; $461,516 at December 31, 2021)	834,557	465,382
Total investment securities	24,603,765	7,155,860
Loans and leases	128,608,538	93,136,678
Unearned discount	(382,951)	(224,226)
Loans and leases, net of unearned discount	128,225,587	92,912,452
Allowance for credit losses	(1,875,591)	(1,469,226)
Loans and leases, net	126,349,996	91,443,226
Premises and equipment	1,620,339	1,144,765
Goodwill	8,501,357	4,593,112
Core deposit and other intangible assets	226,974	3,998
Accrued interest and other assets	8,876,038	7,506,573
Total assets	$ 197,955,479	$ 155,107,160
Liabilities		
Noninterest-bearing deposits	$ 73,023,271	$ 60,131,480
Savings and interest-checking deposits	86,015,700	68,603,966
Time deposits	4,806,417	2,807,963
Total deposits	163,845,388	131,543,409
Short-term borrowings	917,806	47,046
Accrued interest and other liabilities	4,476,456	2,127,931
Long-term borrowings	3,459,336	3,485,369
Total liabilities	172,698,986	137,203,755
Shareholders' equity		
Preferred stock, $1.00 par, 20,000,000 shares authorized; Issued and outstanding: Liquidation preference of $1,000 per share: 350,000 shares at September 30, 2022 and December 31, 2021; Liquidation preference of $10,000 per share: 140,000 shares at September 30, 2022 and December 31, 2021; Liquidation preference of $25 per share: 10,000,000 shares at September 30, 2022	2,010,600	1,750,000
Common stock, $.50 par, 250,000,000 shares authorized, 179,436,779 shares issued at September 30, 2022 and 159,741,898 shares issued at December 31, 2021	89,718	79,871
Common stock issuable, 13,951 shares at September 30, 2022; 15,769 shares at December 31, 2021	1,098	1,212
Additional paid-in capital	9,994,395	6,635,000
Retained earnings	15,219,828	14,646,448
Accumulated other comprehensive income (loss), net	(899,993)	(127,578)
Treasury stock — common, at cost — 6,551,133 shares at September 30, 2022; 31,052,845 shares at December 31, 2021	(1,159,153)	(5,081,548)
Total shareholders’ equity	25,256,493	17,903,405
Total liabilities and shareholders’ equity	$ 197,955,479	$ 155,107,160

See accompanying notes to financial statements.

M&T BANK CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF INCOME (Unaudited)

	Three Months Ended September 30		Nine Months Ended September 30	
(In thousands, except per share)	**2022**	**2021**	**2022**	**2021**
Interest income				
Loans and leases, including fees	$ 1,455,612	$ 944,422	$ 3,572,954	$ 2,843,969
Investment securities				
Fully taxable	135,766	33,209	294,290	104,736
Exempt from federal taxes	16,555	48	34,388	113
Deposits at banks	172,956	14,923	272,009	30,507
Other	624	344	1,270	941
Total interest income	1,781,513	992,946	4,174,911	2,980,266
Interest expense				
Savings and interest-checking deposits	68,690	7,000	103,344	26,556
Time deposits	1,124	3,573	3,748	15,667
Deposits at Cayman Islands office	—	—	—	201
Short-term borrowings	2,670	2	6,090	5
Long-term borrowings	30,338	15,121	67,147	46,852
Total interest expense	102,822	25,696	180,329	89,281
Net interest income	1,678,691	967,250	3,994,582	2,890,985
Provision for credit losses	115,000	(20,000)	427,000	(60,000)
Net interest income after provision for credit losses	1,563,691	987,250	3,567,582	2,950,985
Other income				
Mortgage banking revenues	83,041	159,995	275,115	432,062
Service charges on deposit accounts	115,213	105,426	340,890	296,721
Trust income	186,577	156,876	545,874	475,889
Brokerage services income	21,086	20,490	65,414	43,868
Trading account and non-hedging derivative gains	5,081	5,563	12,743	18,349
Gain/(loss) on bank investment securities	(1,108)	291	(1,913)	(22,646)
Other revenues from operations	153,189	120,485	436,943	344,114
Total other income	563,079	569,126	1,675,066	1,588,357
Other expense				
Salaries and employee benefits	736,354	510,422	2,090,075	1,530,634
Equipment and net occupancy	127,117	80,738	337,584	244,057
Outside data processing and software	95,068	72,782	268,607	213,025
FDIC assessments	28,105	18,810	66,266	50,874
Advertising and marketing	21,398	15,208	58,057	43,200
Printing, postage and supplies	14,768	7,917	40,488	28,367
Amortization of core deposit and other intangible assets	18,384	2,738	38,024	8,213
Other costs of operations	238,059	190,719	743,047	565,753
Total other expense	1,279,253	899,334	3,642,148	2,684,123
Income before taxes	847,517	657,042	1,600,500	1,855,219
Income taxes	200,921	161,582	374,208	454,441
Net income	$ 646,596	$ 495,460	$ 1,226,292	$ 1,400,778
Net income available to common shareholders				
Basic	$ 620,549	$ 475,958	$ 1,152,400	$ 1,342,805
Diluted	620,554	475,961	1,152,406	1,342,812
Net income per common share				
Basic	$ 3.55	$ 3.70	$ 7.18	$ 10.44
Diluted	3.53	3.69	7.14	10.43
Average common shares outstanding				
Basic	174,609	128,689	160,474	128,632
Diluted	175,682	128,844	161,295	128,786

See accompanying notes to financial statements.

M&T BANK CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (Unaudited)

(In thousands)	Three Months Ended September 30 2022	Three Months Ended September 30 2021	Nine Months Ended September 30 2022	Nine Months Ended September 30 2021
Net income	$ 646,596	$ 495,460	$ 1,226,292	$ 1,400,778
Other comprehensive income (loss), net of tax and reclassification adjustments:				
Net unrealized losses on investment securities	(218,852)	(9,314)	(425,770)	(39,808)
Cash flow hedges adjustments	(172,285)	(38,038)	(344,534)	(152,175)
Foreign currency translation adjustments	(5,359)	(1,579)	(11,271)	(886)
Defined benefit plans liability adjustments	2,993	15,486	9,160	45,482
Total other comprehensive income (loss)	(393,503)	(33,445)	(772,415)	(147,387)
Total comprehensive income	$ 253,093	$ 462,015	$ 453,877	$ 1,253,391

See accompanying notes to financial statements.

M&T BANK CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF CASH FLOWS (Unaudited)

	Nine Months Ended September 30	
(In thousands)	**2022**	**2021**
Cash flows from operating activities		
Net income	$ 1,226,292	$ 1,400,778
Adjustments to reconcile net income to net cash provided by operating activities		
Provision for credit losses	427,000	(60,000)
Depreciation and amortization of premises and equipment	219,737	169,232
Amortization of capitalized servicing rights	75,165	66,000
Amortization of core deposit and other intangible assets	38,024	8,213
Provision for deferred income taxes	(89,413)	70,190
Asset write-downs	7,358	5,046
Net gain on sales of assets	(14,583)	(15,260)
Net change in accrued interest receivable, payable	(58,629)	20,395
Net change in other accrued income and expense	(71,004)	50,804
Net change in loans originated for sale	560,861	(117,139)
Net change in trading account and non-hedging derivative assets and liabilities	1,299,313	419,772
Net cash provided by operating activities	3,620,121	2,018,031
Cash flows from investing activities		
Proceeds from sales of investment securities		
Equity and other securities	42,999	8,937
Proceeds from maturities of investment securities		
Available for sale	641,573	1,139,203
Held to maturity	1,053,989	476,352
Purchases of investment securities		
Available for sale	(7,219,785)	(5,389)
Held to maturity	(796,312)	(1,087,656)
Equity and other securities	(155,290)	(27,270)
Net (increase) decrease in loans and leases	(58,942)	4,977,272
Net (increase) decrease in interest-bearing deposits at banks	25,674,122	(14,781,978)
Capital expenditures, net	(126,810)	(87,165)
Net (increase) decrease in loan servicing advances	1,324,912	(402,175)
Acquisition, net of cash consideration		
Bank and bank holding company	393,923	—
Other, net	(516,504)	(388,305)
Net cash provided (used) by investing activities	20,257,875	(10,178,174)
Cash flows from financing activities		
Net increase (decrease) in deposits	(20,663,949)	8,895,558
Net increase (decrease) in short-term borrowings	(24,111)	44,066
Proceeds from long-term borrowings	499,250	9,500
Payments on long-term borrowings	(907,191)	(853,041)
Purchases of treasury stock	(1,200,000)	—
Dividends paid — common	(578,968)	(425,541)
Dividends paid — preferred	(80,600)	(55,388)
Proceeds from issuance of Series I preferred stock	—	495,000
Other, net	(4,194)	(23,042)
Net cash provided (used) by financing activities	(22,959,763)	8,087,112
Net increase (decrease) in cash, cash equivalents and restricted cash	918,233	(73,031)
Cash, cash equivalents and restricted cash at beginning of period	1,337,577	1,552,743
Cash, cash equivalents and restricted cash at end of period	$ 2,255,810	$ 1,479,712
Supplemental disclosure of cash flow information		
Interest received during the period	$ 4,145,231	$ 2,976,574
Interest paid during the period	214,552	116,402
Income taxes paid during the period	362,866	278,783
Supplemental schedule of noncash investing and financing activities		
Real estate acquired in settlement of loans	$ 21,017	$ 6,822
Additions to right-of-use assets under operating leases	99,705	34,404
Loans held for sale transferred to loans held for investment	—	330,188
Acquisition of bank and bank holding company		
Common stock issued	8,286,515	—
Common stock awards converted	104,810	—
Fair value of		
Assets acquired (noncash)	63,757,316	—
Liabilities assumed	55,499,314	—
Preferred stock converted	260,600	—

See accompanying notes to financial statements.

M&T BANK CORPORATION AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY (Unaudited)

Dollars in thousands, except per share	Preferred Stock	Common Stock	Common Stock Issuable	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss), Net	Treasury Stock	Total
Three Months Ended September 30, 2022								
Balance — July 1, 2022	$ 2,010,600	$ 89,718	$ 1,090	$ 9,986,881	$ 14,808,637	$ (506,490)	$ (595,905)	$ 25,794,531
Total comprehensive income	—	—	—	—	646,596	(393,503)	—	253,093
Preferred stock cash dividends (a)	—	—	—	—	(24,941)	—	—	(24,941)
Purchases of treasury stock	—	—	—	—	—	—	(600,000)	(600,000)
Stock-based compensation transactions, net	—	—	8	7,514	(327)	—	36,752	43,947
Common stock cash dividends — $1.20 per share	—	—	—	—	(210,137)	—	—	(210,137)
Balance — September 30, 2022	$ 2,010,600	$ 89,718	$ 1,098	$ 9,994,395	$ 15,219,828	$ (899,993)	$ (1,159,153)	$ 25,256,493
Nine Months Ended September 30, 2022								
Balance — January 1, 2022	$ 1,750,000	$ 79,871	$ 1,212	$ 6,635,000	$ 14,646,448	$ (127,578)	$ (5,081,548)	$ 17,903,405
Total comprehensive income	—	—	—	—	1,226,292	(772,415)	—	453,877
Acquisition of People's United Financial, Inc.:								
Common stock issued	—	9,824	—	3,256,821	—	—	5,019,870	8,286,515
Common stock awards converted	—	—	—	104,810	—	—	—	104,810
Conversion of Series H preferred stock	260,600	—	—	—	—	—	—	260,600
Preferred stock cash dividends (a)	—	—	—	—	(71,647)	—	—	(71,647)
Purchases of treasury stock	—	—	—	—	—	—	(1,200,000)	(1,200,000)
Stock-based compensation transactions, net	—	23	(114)	(2,236)	(970)	—	102,525	99,228
Common stock cash dividends — $3.60 per share	—	—	—	—	(580,295)	—	—	(580,295)
Balance — September 30, 2022	$ 2,010,600	$ 89,718	$ 1,098	$ 9,994,395	$ 15,219,828	$ (899,993)	$ (1,159,153)	$ 25,256,493
Three Months Ended September 30, 2021								
Balance — July 1, 2021	$ 1,250,000	$ 79,871	$ 1,179	$ 6,620,528	$ 14,030,215	$ (176,974)	$ (5,084,515)	$ 16,720,304
Total comprehensive income	—	—	—	—	495,460	(33,445)	—	462,015
Preferred stock cash dividends (a)	—	—	—	—	(17,050)	—	—	(17,050)
Issuance of Series I preferred stock	500,000	—	—	(5,000)	—	—	—	495,000
Stock-based compensation transactions, net	—	—	17	9,128	(207)	—	2,069	11,007
Common stock cash dividends — $1.10 per share	—	—	—	—	(142,505)	—	—	(142,505)
Balance — September 30, 2021	$ 1,750,000	$ 79,871	$ 1,196	$ 6,624,656	$ 14,365,913	$ (210,419)	$ (5,082,446)	$ 17,528,771
Nine Months Ended September 30, 2021								
Balance — January 1, 2021	$ 1,250,000	$ 79,871	$ 1,344	$ 6,617,404	$ 13,444,428	$ (63,032)	$ (5,142,732)	$ 16,187,283
Total comprehensive income	—	—	—	—	1,400,778	(147,387)	—	1,253,391
Preferred stock cash dividends (a)	—	—	—	—	(51,150)	—	—	(51,150)
Issuance of Series I preferred stock	500,000	—	—	(5,000)	—	—	—	495,000
Stock-based compensation transactions, net	—	—	(148)	12,252	(616)	—	60,286	71,774
Common stock cash dividends — $3.30 per share	—	—	—	—	(427,527)	—	—	(427,527)
Balance — September 30, 2021	$ 1,750,000	$ 79,871	$ 1,196	$ 6,624,656	$ 14,365,913	$ (210,419)	$ (5,082,446)	$ 17,528,771

(a) *For the three-month and nine-month periods ended September 30, 2022, dividends per preferred share were: Preferred Series E - $16.125 and $48.375, respectively; Preferred Series F - $128.125 and $384.375, respectively; Preferred Series G - $125.00 and $375.00, respectively; Preferred Series H - $0.3516 and $0.7031, respectively; and Preferred Series I - $87.50 and $269.31, respectively. Dividends per preferred share for the three-month and nine-month periods ended September 30, 2021 were: Preferred Series E - $16.125 and $48.375, respectively; Preferred Series F - $128.125 and $384.375, respectively; and Preferred Series G - $125.00 and $375.00, respectively.*

See accompanying notes to financial statements.

1. Significant accounting policies

The consolidated interim financial statements of M&T Bank Corporation (“M&T”) and subsidiaries (“the Company”) were compiled in accordance with generally accepted accounting principles (“GAAP”) using the accounting policies set forth in note 1 of Notes to Financial Statements included in Form 10-K for the year ended December 31, 2021 (“2021 Annual Report”). Following the acquisition of People's United Financial, Inc. ("People's United") on April 1, 2022 and conformance of financial statement presentation, certain reclassifications have been made to prior period amounts to conform with current period presentation. The reclassifications had no effect on previously reported total assets, total liabilities, shareholders' equity or net income. Specifically, the fair values of interest rate and foreign exchange derivative contracts not designated as hedging instruments as presented in note 11 have been included in other assets and other liabilities rather than in trading account assets and liabilities. The financial statements contain all adjustments which are, in the opinion of management, necessary for a fair statement of the Company’s financial position, results of operations and cash flows for the interim periods presented.

2. Acquisition and divestiture

On April 1, 2022, M&T completed the acquisition of People's United. Through subsidiaries, People's United provided commercial banking, retail banking and wealth management services to individual, corporate and municipal customers through a network of branches located in Connecticut, southeastern New York, Massachusetts, Vermont, New Hampshire and Maine. Following the merger, People's United Bank, National Association, a national banking association and a wholly owned subsidiary of People's United, merged with and into Manufacturers and Traders Trust Company ("M&T Bank"), the principal banking subsidiary of M&T, with M&T Bank as the surviving entity. The results of operations acquired from People's United have been included in the Company's financial results since April 1, 2022.

Pursuant to the terms of the merger agreement dated February 22, 2021, People’s United shareholders received consideration valued at .118 of an M&T common share in exchange for each common share of People’s United. The purchase price totaled approximately $8.4 billion (with the price based on M&T’s closing price of $164.66 per share as of April 1, 2022). M&T issued 50,325,004 common shares in completing the transaction. Additionally, People’s United outstanding preferred stock was converted into new shares of Series H Preferred Stock of M&T. The acquisition of People's United expanded the Company's geographical footprint and management expects the Company will benefit from greater geographical diversity and the advantages of scale associated with a larger company.

2. Acquisition and divestiture, continued

The People's United transaction has been accounted for using the acquisition method of accounting and, accordingly, assets acquired, liabilities assumed and preferred stock converted were recorded at estimated fair value on the acquisition date. The consideration paid for People's United common equity and the preliminary amounts of identifiable assets acquired, liabilities assumed and preferred stock converted as of the acquisition date follows.

		(In thousands)
Consideration:		
Common stock issued (50,325,004 shares)	$	8,286,515
Common stock awards converted		104,810
Cash		1,824
Total consideration		8,393,149
Net assets acquired:		
Identifiable assets		
Cash and due from banks		395,747
Interest-bearing deposits at banks		9,193,346
Investment securities		11,574,689
Loans and leases		35,840,648
Core deposit and other intangible assets		261,000
Other assets		2,979,388
Total identifiable assets acquired		60,244,818
Liabilities and preferred stock		
Deposits		52,967,915
Borrowings		1,389,012
Other liabilities		1,142,387
Total liabilities assumed		55,499,314
Preferred stock		260,600
Total liabilities and preferred stock		55,759,914
Net assets acquired		4,484,904
Goodwill	$	3,908,245

The following is a description of the methodologies used to estimate the fair values of the significant assets acquired, liabilities assumed and preferred stock converted at the acquisition date:

Cash and due from banks and interest-bearing deposits in banks: Given the short-term nature of these assets, the carrying amount was determined to be a reasonable estimate of fair value.

Investment securities: Investment securities have been determined using quoted market prices, if available. If quoted market prices were not available, investment securities were valued by reference to quoted prices for similar securities or through model-based techniques.

Loans and leases: The fair values of loans and leases were generally based on a discounted cash flow methodology that considered market interest rates, expected credit losses, prepayment assumptions and other market factors for loans with similar characteristics including loan type, collateral, fixed or variable interest rate and credit risk characteristics. Expected credit losses were determined based on credit characteristics and other factors such as default and recovery rates of similar products.

Core deposit and other intangible assets: The core deposit intangible asset represents the value of certain customer deposit relationships. The fair value of the core deposit intangible asset was based on a discounted cash flow methodology that considered expected customer attrition rates, costs associated with maintaining the deposit relationships and alternative funding costs. Other intangible assets were also valued using expected and contractual cash flows.

Deposits: The fair value of deposits with no maturity date was determined to be the amount payable on demand at the acquisition date. The fair value of time deposits was determined by discounting contractual cash flows, that considered market interest rates in relation to contractual interest rates for instruments with like remaining maturities.

2. Acquisition and divestiture, continued

Borrowings: The fair value of borrowings was determined using quoted market prices for the instrument, if available. If quoted market prices for the instrument were not available, similar instruments with quoted market prices were referenced.

Preferred stock: The fair value of preferred stock converted was determined using quoted market prices.

GAAP requires loans and leases obtained through an acquisition that have experienced a more-than-insignificant deterioration in credit quality since origination be considered purchased credit deteriorated ("PCD"). The Company considered several factors in the determination of PCD loans, including loan grades assigned to acquired commercial loans and leases and commercial real estate loans utilizing the Company's loan grading system and delinquency status and history for acquired loans backed by residential real estate. Loans and leases acquired from People's United and identified as PCD totaled $3.4 billion at April 1, 2022. For those loans and leases, the initial estimate of expected credit losses of $99 million was established through an adjustment to increase both the initial carrying value and allowance for credit losses. GAAP also provides that an allowance for credit losses on loans acquired, but not classified as PCD, also be recognized. Accordingly, the Company recorded $242 million of provision for credit losses for non-PCD acquired loans and leases at the acquisition date. The following table reconciles the unpaid principal balance to the fair value of PCD loans and leases at April 1, 2022:

	Total
Unpaid principal balance (a)	$ 3,410,506
Allowance for credit losses at acquisition (a)	(99,000)
Non-credit discount	(106,814)
Fair value	$ 3,204,692

(a) The unpaid principal balance and allowance for credit losses at acquisition is net of charge-offs of $33 million recognized on the PCD loans.

In connection with the acquisition, the Company recorded approximately $3.9 billion of goodwill, which represents the excess of the purchase price over the fair value of the net assets acquired, and $261 million of core deposit and other intangible assets. The core deposit and other intangible assets are being amortized over periods of three to seven years. The preliminary allocation of goodwill recorded as a result of the acquisition to the Company's reportable segments is as follows:

	December 31, 2021	Acquisition of People's United	September 30, 2022
		(In thousands)	
Business Banking	$ 864,366	$ 693,905	$ 1,558,271
Commercial Banking	1,401,873	2,686,253	4,088,126
Commercial Real Estate	654,389	291,217	945,606
Discretionary Portfolio	—	—	—
Residential Mortgage Banking	—	—	—
Retail Banking	1,309,191	221,196	1,530,387
All Other	363,293	15,674	378,967
Total	$ 4,593,112	$ 3,908,245	$ 8,501,357

Due to the integration of People's United operating systems and activities with those of the Company, the Company's ability to report on the former operations of People's United is inherently limited. The Company estimates that included in the Consolidated Statement of Income from the acquisition date through September 30, 2022 are total revenues of approximately $1.0 billion and a net loss of approximately $13 million related to the acquisition of People's United.

2. Acquisition and divestiture, continued

The following table presents certain pro forma information as if People's United had been acquired on January 1, 2021. These results combine the historical results of People's United into the Company's consolidated statement of income and, while adjustments were made for the estimated impact of certain fair valuation adjustments and other acquisition-related activity, they are not indicative of what would have occurred had the acquisition taken place as indicated. For example, merger-related expenses noted below are included in the periods where such expenses were incurred. Additionally, the Company expects to achieve operating cost savings and other business synergies as a result of the acquisition which are not reflected in the pro forma amounts that follow:

	Pro forma Nine Months Ended September 30,		Pro forma Three Months Ended September 30
	2022	2021	2021
	(In thousands)		(In thousands)
Total revenues(a)	$ 6,134,400	$ 6,056,364	$ 2,054,462
Net income	1,399,913	1,769,781	664,820

(a) *Represents the total of net interest income and other income.*

In connection with the People's United acquisition, the Company incurred merger-related expenses related to systems conversions and other costs of integrating and conforming acquired operations with and into the Company. Those expenses consisted largely of professional services and other temporary help fees associated with preparing for systems conversions and/or integration of operations; costs related to termination of existing contractual arrangements for various services; initial marketing and promotion expenses designed to introduce M&T Bank to its new customers; severance (for former People's United employees); travel costs; and other costs of completing the transaction and commencing operations in new markets and offices. The Company expects that there will be additional merger-related expenses in 2022. A summary of merger-related expenses included in the consolidated statement of income follows.

	Three Months Ended September 30		Nine Months Ended September 30	
	2022	2021	2022	2021
	(In thousands)		(In thousands)	
Salaries and employee benefits	$ 13,094	$ 60	$ 98,480	$ 64
Equipment and net occupancy	2,106	1	4,415	1
Outside data processing software	2,277	625	3,245	869
Advertising and marketing	2,177	505	4,004	529
Printing, postage and supplies	651	730	3,833	2,779
Other cost of operations	32,722	6,905	179,231	18,428
Other expense	$ 53,027	$ 8,826	$ 293,208	$ 22,670

The Company also recognized a $242 million provision for credit losses on acquired loans that were not deemed to be PCD on April 1, 2022. GAAP requires that acquired loans be recorded at estimated fair value, which includes the use of interest rate and expected credit loss assumptions to forecast estimated cash flows. GAAP also provides that an allowance for credit losses on loans acquired, but not classified as PCD also be recognized above and beyond the impact of forecasted losses used in determining the fair value of acquired loans. Accordingly, the Company recorded a $242 million provision for credit losses related to such loans obtained in the People's United transaction in the three months ended June 30, 2022.

On September 29, 2022 M&T Bank announced it had entered into a definitive agreement to sell M&T Insurance Agency, Inc. ("MTIA"), a wholly owned insurance agency subsidiary of M&T Bank to Arthur J. Gallagher & Co. The transaction was completed on October 31, 2022. The Company expects to recognize a pre-tax gain on the sale of approximately $135 million. MTIA had assets of $25 million and shareholders' equity of $10 million at September 30, 2022. For the nine months ended September 30, 2022 and 2021, MTIA recorded revenues of $31 million and $29 million, respectively, and net income of $4 million and $1 million, respectively.

3. Investment securities

The amortized cost and estimated fair value of investment securities were as follows:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
		(In thousands)		
September 30, 2022				
Investment securities available for sale:				
U.S. Treasury and federal agencies	$ 7,908,153	$ 413	$ 249,838	$ 7,658,728
Mortgage-backed securities:				
Government issued or guaranteed				
Commercial	613,752	—	7,181	606,571
Residential	2,635,976	127	205,157	2,430,946
Other debt securities	182,274	311	8,484	174,101
	11,340,155	851	470,660	10,870,346
Investment securities held to maturity:				
U.S. Treasury and federal agencies	1,199,539	—	49,633	1,149,906
Obligations of states and political subdivisions	2,663,917	6	221,631	2,442,292
Mortgage-backed securities:				
Government issued or guaranteed				
Commercial	927,503	—	106,215	821,288
Residential	8,053,619	—	967,653	7,085,966
Privately issued	52,479	9,260	8,341	53,398
Other debt securities	1,805	—	—	1,805
	12,898,862	9,266	1,353,473	11,554,655
Total debt securities	$ 24,239,017	$ 10,117	$ 1,824,133	$ 22,425,001
Equity and other securities:				
Readily marketable equity — at fair value	$ 192,584	$ 4,943	$ 2,990	$ 194,537
Other — at cost	640,020	—	—	640,020
Total equity and other securities	$ 832,604	$ 4,943	$ 2,990	$ 834,557
December 31, 2021				
Investment securities available for sale:				
U.S. Treasury and federal agencies	$ 682,267	$ 229	$ 3,806	$ 678,690
Mortgage-backed securities:				
Government issued or guaranteed				
Residential	3,042,771	113,102	561	3,155,312
Other debt securities	124,309	1,974	4,481	121,802
	3,849,347	115,305	8,848	3,955,804
Investment securities held to maturity:				
U.S. Treasury and federal agencies	3,052	—	9	3,043
Obligations of states and political subdivisions	177	2	—	179
Mortgage-backed securities:				
Government issued or guaranteed				
Residential	2,667,328	49,221	8,376	2,708,173
Privately issued	61,555	10,520	14,742	57,333
Other debt securities	2,562	—	—	2,562
	2,734,674	59,743	23,127	2,771,290
Total debt securities	$ 6,584,021	$ 175,048	$ 31,975	$ 6,727,094
Equity and other securities:				
Readily marketable equity — at fair value	$ 73,774	$ 4,460	$ 594	$ 77,640
Other — at cost	387,742	—	—	387,742
Total equity and other securities	$ 461,516	$ 4,460	$ 594	$ 465,382

3. Investment securities, continued

There were no significant gross realized gains or losses from sales of investment securities for the three-month and nine-month periods ended September 30, 2022 and 2021. Unrealized losses on equity securities were $1 million and $2 million during the three months and nine months ended September 30, 2022, respectively, compared with unrealized gains on equity securities of less than $1 million and unrealized losses of $23 million during the three months and nine months ended September 30, 2021, respectively.

At September 30, 2022, the amortized cost and estimated fair value of debt securities by contractual maturity were as follows:

	Amortized Cost	Estimated Fair Value
	(In thousands)	
Debt securities available for sale:		
Due in one year or less	$ 6,886	$ 6,813
Due after one year through five years	7,979,072	7,727,233
Due after five years through ten years	74,469	71,558
Due after ten years	30,000	27,225
	8,090,427	7,832,829
Mortgage-backed securities available for sale	3,249,728	3,037,517
	$ 11,340,155	$ 10,870,346
Debt securities held to maturity:		
Due in one year or less	$ 292,223	$ 290,088
Due after one year through five years	1,096,658	1,045,997
Due after five years through ten years	1,045,507	992,244
Due after ten years	1,430,873	1,265,674
	3,865,261	3,594,003
Mortgage-backed securities held to maturity	9,033,601	7,960,652
	$ 12,898,862	$ 11,554,655

3. Investment securities, continued

A summary of investment securities that as of September 30, 2022 and December 31, 2021 had been in a continuous unrealized loss position for less than twelve months and those that had been in a continuous unrealized loss position for twelve months or longer follows:

	Less Than 12 Months		12 Months or More	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
	(In thousands)			
September 30, 2022				
Investment securities available for sale:				
U.S. Treasury and federal agencies	$ 7,159,893	$ 224,986	$ 253,585	$ 24,852
Mortgage-backed securities:				
Government issued or guaranteed				
Commercial	606,571	7,181	—	—
Residential	2,401,907	204,279	18,668	878
Other debt securities	99,347	2,827	68,872	5,657
	10,267,718	439,273	341,125	31,387
Investment securities held to maturity:				
U.S. Treasury and federal agencies	1,146,912	49,618	2,994	15
Obligations of states and political subdivisions	2,426,287	221,631	—	—
Mortgage-backed securities:				
Government issued or guaranteed				
Commercial	821,288	106,215	—	—
Residential	6,416,154	819,363	669,812	148,290
Privately issued	—	—	37,642	8,341
	10,810,641	1,196,827	710,448	156,646
Total	$ 21,078,359	$ 1,636,100	$ 1,051,573	$ 188,033
December 31, 2021				
Investment securities available for sale:				
U.S. Treasury and federal agencies	$ 598,566	$ 3,806	$ —	$ —
Mortgage-backed securities:				
Government issued or guaranteed				
Residential	10,111	54	20,824	507
Other debt securities	3,760	74	66,419	4,407
	612,437	3,934	87,243	4,914
Investment securities held to maturity:				
U.S. Treasury and federal agencies	3,043	9	—	—
Mortgage-backed securities:				
Government issued or guaranteed				
Residential	1,372,236	8,356	1,251	20
Privately issued	—	—	43,692	14,742
	1,375,279	8,365	44,943	14,762
Total	$ 1,987,716	$ 12,299	$ 132,186	$ 19,676

The Company owned 4,330 individual debt securities with aggregate gross unrealized losses of $1.8 billion at September 30, 2022. Based on a review of each of the securities in the investment securities portfolio at September 30, 2022, the Company concluded that it expected to recover the amortized cost basis of its investment. As of September 30, 2022, the Company does not intend to sell nor is it anticipated that it would be required to sell any of its impaired investment securities at a loss. At September 30, 2022, the Company has not identified events or changes in circumstances which may have a significant adverse effect on the fair value of the $640 million of cost method equity securities.

3. Investment securities, continued

The Company estimated no material allowance for credit losses for its investment securities classified as held-to-maturity at September 30, 2022 or December 31, 2021.

At September 30, 2022 and December 31, 2021 investment securities with carrying values of $10.3 billion (including $581 million related to repurchase transactions) and $5.1 billion (including $96 million related to repurchase transactions), respectively, were pledged to secure borrowings, lines of credit and governmental deposits.

4. Loans and leases and the allowance for credit losses

A summary of current, past due and nonaccrual loans as of September 30, 2022 and December 31, 2021 follows:

	Current	30-89 Days Past Due	Accruing Loans Past Due 90 Days or More	Nonaccrual	Total
			(In thousands)		
September 30, 2022					
Commercial, financial, leasing, etc.	$ 37,938,053	481,091	20,639	368,166	$ 38,807,949
Real estate:					
Commercial	35,880,425	227,399	38,470	1,406,200	37,552,494
Residential builder and developer	1,377,505	62	—	1,930	1,379,497
Other commercial construction	6,981,412	157,175	1,900	66,187	7,206,674
Residential	20,709,362	580,357	411,731	285,395	21,986,845
Residential — limited documentation	974,779	17,274	—	95,382	1,087,435
Consumer:					
Home equity lines and loans	4,959,845	25,370	—	78,208	5,063,423
Recreational finance	8,738,849	41,758	—	38,718	8,819,325
Automobile	4,282,895	35,550	—	40,318	4,358,763
Other	1,897,867	12,730	3,763	48,822	1,963,182
Total	$ 123,740,992	1,578,766	476,503	2,429,326	$ 128,225,587
December 31, 2021					
Commercial, financial, leasing, etc.	$ 23,101,810	142,208	8,284	221,022	$ 23,473,324
Real estate:					
Commercial	24,712,643	319,099	31,733	1,069,280	26,132,755
Residential builder and developer	1,400,437	2,904	—	3,005	1,406,346
Other commercial construction	7,722,049	17,175	—	111,405	7,850,629
Residential	13,294,872	239,561	920,080	355,858	14,810,371
Residential — limited documentation	1,124,520	16,666	—	122,888	1,264,074
Consumer:					
Home equity lines and loans	3,476,617	15,486	—	70,488	3,562,591
Recreational finance	7,985,173	40,544	—	27,811	8,053,528
Automobile	4,604,772	40,064	—	34,037	4,678,873
Other	1,620,147	12,223	3,302	44,289	1,679,961
Total	$ 89,043,040	845,930	963,399	2,060,083	$ 92,912,452

At September 30, 2022 and December 31, 2021, the Company had $39 million and $1.2 billion, respectively, of outstanding loan balances, consisting predominantly of residential real estate loans, for which COVID-19 related payment deferrals were granted. Those loans met the criteria described in note 1 of Notes to Financial Statements in the 2021 Annual Report and, accordingly, are not considered past due or otherwise in default of loan terms as of the date presented. Included in those loan balances were $20 million and $974 million of government-guaranteed loans at September 30, 2022 and December 31, 2021, respectively. Payment deferrals are generally scheduled to expire in 2022 and/or are in the process of formal modification of repayment terms for previously deferred payments.

One-to-four family residential mortgage loans held for sale were $43 million and $474 million at September 30, 2022 and December 31, 2021, respectively. Commercial real estate loans held for sale were $300 million at September 30, 2022 and $425 million at December 31, 2021.

4. Loans and leases and the allowance for credit losses, continued

Credit quality indicators

The Company utilizes a loan grading system to differentiate risk amongst its commercial loans and commercial real estate loans. Loans with a lower expectation of default are assigned one of ten possible “pass” loan grades and are generally ascribed lower loss factors when determining the allowance for credit losses. Loans with an elevated level of credit risk are classified as “criticized” and are ascribed a higher loss factor when determining the allowance for credit losses. Criticized loans may be classified as “nonaccrual” if the Company no longer expects to collect all amounts according to the contractual terms of the loan agreement or the loan is delinquent 90 days or more.

Line of business personnel in different geographic locations with support from and review by the Company’s credit risk personnel review and reassign loan grades based on their detailed knowledge of individual borrowers and their judgment of the impact on such borrowers resulting from changing conditions in their respective regions. Factors considered in assigning loan grades include borrower-specific information related to expected future cash flows and operating results, collateral values, geographic location, financial condition and performance, payment status, and other information. The Company’s policy is that at least annually, updated financial information be obtained from commercial borrowers associated with pass grade loans and additional analysis performed. On a quarterly basis, the Company’s centralized credit risk department reviews all criticized commercial loans and commercial real estate loans greater than $1 million to determine the appropriateness of the assigned loan grade, including whether the loan should be reported as accruing or nonaccruing.

The following table summarizes the loan grades applied at September 30, 2022 to the various classes of the Company’s commercial loans and commercial real estate loans by origination year.

	Term Loans by Origination Year						Revolving Loans	Revolving Loans Converted to Term Loans	Total
	2022	2021	2020	2019	2018	Prior			
	(In thousands)								
Commercial, financial, leasing, etc.:									
Loan grades:									
Pass	$ 5,781,789	5,344,496	2,395,097	2,002,268	984,260	2,170,726	17,905,476	33,403	$ 36,617,515
Criticized accrual	183,126	255,935	159,898	119,906	67,885	302,787	715,190	17,541	1,822,268
Criticized nonaccrual	15,954	47,840	42,491	43,953	37,789	64,076	110,414	5,649	368,166
Total commercial, financial, leasing, etc.	$ 5,980,869	5,648,271	2,597,486	2,166,127	1,089,934	2,537,589	18,731,080	56,593	$ 38,807,949
Real estate:									
Commercial:									
Loan grades:									
Pass	$ 3,169,811	3,566,811	3,480,606	4,628,815	3,534,628	11,778,026	852,233	45,264	$ 31,056,194
Criticized accrual	116,303	325,114	532,354	1,028,855	1,040,898	1,987,906	58,670	—	5,090,100
Criticized nonaccrual	9,313	9,119	199,654	185,468	187,115	791,882	23,649	—	1,406,200
Total commercial real estate	$ 3,295,427	3,901,044	4,212,614	5,843,138	4,762,641	14,557,814	934,552	45,264	$ 37,552,494
Residential builder and developer:									
Loan grades:									
Pass	$ 561,314	367,867	33,935	31,596	18,574	9,878	169,941	—	$ 1,193,105
Criticized accrual	—	23,263	11,294	107,408	14,514	62	27,921	—	184,462
Criticized nonaccrual	—	654	—	518	—	758	—	—	1,930
Total residential builder and developer	$ 561,314	391,784	45,229	139,522	33,088	10,698	197,862	—	$ 1,379,497
Other commercial construction:									
Loan grades:									
Pass	$ 526,338	1,079,329	1,388,737	1,431,834	401,870	327,992	23,584	618	$ 5,180,302
Criticized accrual	46,282	163,004	249,622	971,447	386,480	136,358	6,992	—	1,960,185
Criticized nonaccrual	—	—	—	25,352	10,588	27,814	2,433	—	66,187
Total other commercial construction	$ 572,620	1,242,333	1,638,359	2,428,633	798,938	492,164	33,009	618	$ 7,206,674

4. Loans and leases and the allowance for credit losses, continued

The Company considers repayment performance a significant indicator of credit quality for its residential real estate loan and consumer loan portfolios. A summary of loans in accrual and nonaccrual status at September 30, 2022 for the various classes of the Company’s residential real estate loans and consumer loans by origination year follows.

	Term Loans by Origination Year						Revolving Loans	Revolving Loans Converted to Term Loans	Total
	2022	2021	2020	2019	2018	Prior			
					(In thousands)				
Residential:									
Current	$ 4,057,196	4,049,835	2,734,863	1,345,076	760,442	7,731,831	30,119	—	$ 20,709,362
30-89 days past due	35,387	53,249	28,996	76,049	15,744	363,807	7,125	—	580,357
Accruing loans past due 90 days or more	6,137	39,753	27,044	12,697	17,304	308,796	—	—	411,731
Nonaccrual	2,741	7,978	2,831	7,899	2,954	260,243	749	—	285,395
Total residential	$ 4,101,461	4,150,815	2,793,734	1,441,721	796,444	8,664,677	37,993	—	$ 21,986,845
Residential - limited documentation:									
Current	$ —	—	—	—	—	974,779	—	—	$ 974,779
30-89 days past due	—	—	—	—	—	17,274	—	—	17,274
Accruing loans past due 90 days or more	—	—	—	—	—	—	—	—	—
Nonaccrual	—	—	—	—	—	95,382	—	—	95,382
Total residential - limited documentation	$ —	—	—	—	—	1,087,435	—	—	$ 1,087,435
Consumer:									
Home equity lines and loans:									
Current	$ 179	2,205	2,506	16,700	25,043	104,764	3,323,628	1,484,820	$ 4,959,845
30-89 days past due	—	—	—	27	—	993	1,376	22,974	25,370
Accruing loans past due 90 days or more	—	—	—	—	—	—	—	—	—
Nonaccrual	3	15	—	—	—	6,311	8,748	63,131	78,208
Total home equity lines and loans	$ 182	2,220	2,506	16,727	25,043	112,068	3,333,752	1,570,925	$ 5,063,423
Recreational finance:									
Current	$ 2,270,380	2,397,260	1,673,217	1,016,693	517,571	863,728	—	—	$ 8,738,849
30-89 days past due	3,636	7,922	9,136	6,797	4,199	10,068	—	—	41,758
Accruing loans past due 90 days or more	—	—	—	—	—	—	—	—	—
Nonaccrual	862	5,310	7,946	6,905	5,821	11,874	—	—	38,718
Total recreational finance	$ 2,274,878	2,410,492	1,690,299	1,030,395	527,591	885,670	—	—	$ 8,819,325
Automobile:									
Current	$ 1,040,034	1,698,621	780,755	433,718	202,662	127,105	—	—	$ 4,282,895
30-89 days past due	3,753	9,992	6,091	6,354	4,641	4,719	—	—	35,550
Accruing loans past due 90 days or more	—	—	—	—	—	—	—	—	—
Nonaccrual	557	8,573	7,837	8,418	6,710	8,223	—	—	40,318
Total automobile	$ 1,044,344	1,717,186	794,683	448,490	214,013	140,047	—	—	$ 4,358,763
Other:									
Current	$ 210,244	192,316	66,148	42,643	11,594	25,864	1,338,436	10,622	$ 1,897,867
30-89 days past due	2,558	1,083	338	441	161	114	7,598	437	12,730
Accruing loans past due 90 days or more	—	—	—	—	—	8	3,755	—	3,763
Nonaccrual	1,405	742	304	277	79	245	45,668	102	48,822
Total other	$ 214,207	194,141	66,790	43,361	11,834	26,231	1,395,457	11,161	$ 1,963,182
Total loans and leases at June 30, 2022	$ 18,045,302	19,658,286	13,841,700	13,558,114	8,259,526	28,514,393	24,663,705	1,684,561	$ 128,225,587

4. Loans and leases and the allowance for credit losses, continued

The following table summarizes the loan grades applied at December 31, 2021 to the various classes of the Company's commercial loans and commercial real estate loans by origination year.

	Term Loans by Origination Year						Revolving Loans	Revolving Loans Converted to Term Loans	Total
	2021	2020	2019	2018	2017	Prior			
					(In thousands)				
Commercial, financial, leasing, etc.:									
Loan grades:									
Pass	$ 4,798,052	1,916,072	1,476,786	951,881	500,615	1,398,775	10,993,461	18,699	$ 22,054,341
Criticized accrual	196,680	98,595	107,010	73,126	36,232	185,935	484,755	15,628	1,197,961
Criticized nonaccrual	19,462	23,229	17,114	39,908	20,927	33,698	60,175	6,509	221,022
Total commercial, financial, leasing, etc.	$ 5,014,194	2,037,896	1,600,910	1,064,915	557,774	1,618,408	11,538,391	40,836	$ 23,473,324
Real estate:									
Commercial:									
Loan grades:									
Pass	$ 3,413,587	2,662,999	3,682,178	2,648,388	2,076,155	5,232,790	728,948	—	$ 20,445,045
Criticized accrual	133,133	480,146	685,701	1,068,552	468,530	1,743,798	38,570	—	4,618,430
Criticized nonaccrual	21,587	133,560	195,084	83,857	76,628	520,473	38,091	—	1,069,280
Total commercial real estate	$ 3,568,307	3,276,705	4,562,963	3,800,797	2,621,313	7,497,061	805,609	—	$ 26,132,755
Residential builder and developer:									
Loan grades:									
Pass	$ 786,983	106,510	75,287	47,587	4,680	12,450	230,017	—	$ 1,263,514
Criticized accrual	2,055	5,356	117,258	13,637	630	—	891	—	139,827
Criticized nonaccrual	—	—	2,910	—	—	95	—	—	3,005
Total residential builder and developer	$ 789,038	111,866	195,455	61,224	5,310	12,545	230,908	—	$ 1,406,346
Other commercial construction:									
Loan grades:									
Pass	$ 957,947	1,781,603	2,022,276	832,547	152,669	273,556	38,781	—	$ 6,059,379
Criticized accrual	24,103	54,191	675,226	583,428	228,739	114,158	—	—	1,679,845
Criticized nonaccrual	—	—	71,613	3,303	12,263	19,970	4,256	—	111,405
Total other commercial construction	$ 982,050	1,835,794	2,769,115	1,419,278	393,671	407,684	43,037	—	$ 7,850,629

4. Loans and leases and the allowance for credit losses, continued

A summary of loans in accrual and nonaccrual status at December 31, 2021 for the various classes of the Company's residential real estate loans and consumer loans by origination year follows.

	Term Loans by Origination Year						Revolving Loans	Revolving Loans Converted to Term Loans	Total
	2021	2020	2019	2018	2017	Prior			
					(In thousands)				
Residential:									
Current	$ 3,057,118	1,672,090	1,075,896	466,040	1,037,958	5,913,461	72,309	—	$ 13,294,872
30-89 days past due	15,245	12,535	9,886	6,132	33,097	162,666	—	—	239,561
Accruing loans past due 90 days or more	10,924	100,581	28,512	31,996	205,318	542,749	—	—	920,080
Nonaccrual	3,359	19,858	7,119	4,577	5,890	314,792	263	—	355,858
Total residential	$ 3,086,646	1,805,064	1,121,413	508,745	1,282,263	6,933,668	72,572	—	$ 14,810,371
Residential - limited documentation:									
Current	$ —	—	—	—	—	1,124,520	—	—	$ 1,124,520
30-89 days past due	—	—	—	—	—	16,666	—	—	16,666
Accruing loans past due 90 days or more	—	—	—	—	—	—	—	—	—
Nonaccrual	—	—	—	—	—	122,888	—	—	122,888
Total residential - limited documentation	$ —	—	—	—	—	1,264,074	—	—	$ 1,264,074
Consumer:									
Home equity lines and loans:									
Current	$ 304	777	2,793	1,730	1,944	38,015	2,348,279	1,082,775	$ 3,476,617
30-89 days past due	—	—	—	21	—	698	346	14,421	15,486
Accruing loans past due 90 days or more	—	—	—	—	—	—	—	—	—
Nonaccrual	—	—	—	—	—	5,750	4,951	59,787	70,488
Total home equity lines and loans	$ 304	777	2,793	1,751	1,944	44,463	2,353,576	1,156,983	$ 3,562,591
Recreational finance:									
Current	$ 2,890,111	2,088,342	1,267,929	646,883	445,868	646,040	—	—	$ 7,985,173
30-89 days past due	5,929	8,912	8,317	5,074	5,189	7,123	—	—	40,544
Accruing loans past due 90 days or more	—	—	—	—	—	—	—	—	—
Nonaccrual	1,341	4,646	4,871	4,918	4,039	7,996	—	—	27,811
Total recreational finance	$ 2,897,381	2,101,900	1,281,117	656,875	455,096	661,159	—	—	$ 8,053,528
Automobile:									
Current	$ 2,220,061	1,097,684	662,000	341,655	211,774	71,598	—	—	$ 4,604,772
30-89 days past due	8,508	6,615	8,936	7,161	5,715	3,129	—	—	40,064
Accruing loans past due 90 days or more	—	—	—	—	—	—	—	—	—
Nonaccrual	1,588	4,390	7,847	7,867	6,882	5,463	—	—	34,037
Total automobile	$ 2,230,157	1,108,689	678,783	356,683	224,371	80,190	—	—	$ 4,678,873
Other:									
Current	$ 244,346	96,945	73,586	24,424	16,924	14,321	1,148,096	1,505	$ 1,620,147
30-89 days past due	2,937	404	472	255	101	5,712	1,908	434	12,223
Accruing loans past due 90 days or more	—	—	—	—	—	3,302	—	—	3,302
Nonaccrual	2,051	326	326	193	104	353	40,807	129	44,289
Total other	$ 249,334	97,675	74,384	24,872	17,129	23,688	1,190,811	2,068	$ 1,679,961
Total loans and leases at December 31, 2021	$ 18,817,411	12,376,366	12,286,933	7,895,140	5,558,871	18,542,940	16,234,904	1,199,887	$ 92,912,452

4. Loans and leases and the allowance for credit losses, continued

Allowance for credit losses

For purposes of determining the level of the allowance for credit losses, the Company evaluates its loan and lease portfolio by type. Changes in the allowance for credit losses for the three months ended September 30, 2022 and 2021 were as follows:

	Commercial, Financial, Leasing, etc.	Real Estate Commercial	Real Estate Residential	Consumer	Total
	(In thousands)				
Three Months Ended September 30, 2022					
Beginning balance	$ 414,473	708,393	124,326	576,598	$ 1,823,790
Provision for credit losses	43,343	26,949	(11,169)	55,877	115,000
Net charge-offs					
Charge-offs	(37,396)	(35,213)	(2,572)	(26,086)	(101,267)
Recoveries	22,022	401	2,234	13,411	38,068
Net charge-offs	(15,374)	(34,812)	(338)	(12,675)	(63,199)
Ending balance	$ 442,442	700,530	112,819	619,800	$ 1,875,591

	Commercial, Financial, Leasing, etc.	Real Estate Commercial	Real Estate Residential	Consumer	Total
	(In thousands)				
Three Months Ended September 30, 2021					
Beginning balance	$ 314,852	679,963	77,869	502,444	$ 1,575,128
Provision for credit losses	(292)	(42,016)	(3,522)	25,830	(20,000)
Net charge-offs					
Charge-offs	(26,598)	(14,242)	(1,925)	(21,508)	(64,273)
Recoveries	3,785	2,362	1,903	16,119	24,169
Net charge-offs	(22,813)	(11,880)	(22)	(5,389)	(40,104)
Ending balance	$ 291,747	626,067	74,325	522,885	$ 1,515,024

Changes in the allowance for credit losses for the nine months ended September 30, 2022 and 2021 were as follows:

	Commercial, Financial, Leasing, etc.	Real Estate Commercial	Real Estate Residential	Consumer	Total
	(In thousands)				
Nine Months Ended September 30, 2022					
Beginning balance	$ 283,899	557,239	71,726	556,362	$ 1,469,226
Allowance on acquired PCD loans	41,003	55,812	1,833	352	99,000
Provision for credit losses (a)	167,985	116,288	40,719	102,008	427,000
Net charge-offs					
Charge-offs (b)	(94,555)	(45,809)	(9,407)	(78,148)	(227,919)
Recoveries	44,110	17,000	7,948	39,226	108,284
Net charge-offs	(50,445)	(28,809)	(1,459)	(38,922)	(119,635)
Ending balance	$ 442,442	700,530	112,819	619,800	$ 1,875,591

4. Loans and leases and the allowance for credit losses, continued

	Commercial, Financial, Leasing, etc.	Real Estate Commercial	Real Estate Residential	Consumer	Total
			(In thousands)		
Nine Months Ended September 30, 2021					
Beginning balance	$ 405,846	670,719	103,590	556,232	$ 1,736,387
Provision for credit losses	(57,610)	32,650	(29,026)	(6,014)	(60,000)
Net charge-offs					
Charge-offs	(93,638)	(87,417)	(6,586)	(79,926)	(267,567)
Recoveries	37,149	10,115	6,347	52,593	106,204
Net charge-offs	(56,489)	(77,302)	(239)	(27,333)	(161,363)
Ending balance	$ 291,747	626,067	74,325	522,885	$ 1,515,024

(a) *Includes $242 million related to non-PCD acquired loans for the nine months ended September 30, 2022.*

(b) *For the nine months ended September 30, 2022, net charge-offs do not reflect $33 million of charge-offs related to PCD acquired loans.*

Despite the allocation in the preceding tables, the allowance for credit losses is general in nature and is available to absorb losses from any loan or lease type. In determining the allowance for credit losses, accruing loans with similar risk characteristics are generally evaluated collectively. The Company utilizes statistically developed models to project principal balances over the remaining contractual lives of the loan portfolios and to determine estimated credit losses through a reasonable and supportable forecast period. Individual loan credit quality indicators including loan grade and borrower repayment performance can inform the models, which have been statistically developed based on historical correlations of credit losses with prevailing economic metrics, including unemployment, gross domestic product and real estate prices. Model forecasts may be adjusted for inherent limitations or biases that have been identified through independent validation and back-testing of model performance to actual realized results. At each of September 30, 2022 and December 31, 2021, the Company utilized a reasonable and supportable forecast period of two years. Subsequent to this forecast period the Company reverted, ratably over a one-year period, to historical loss experience to inform its estimate of losses for the remaining contractual life of each portfolio. The Company also estimates losses attributable to specific troubled credits identified through both normal and targeted credit review processes. The amounts of specific loss components in the Company’s loan and lease portfolios are determined through a loan-by-loan analysis of larger balance commercial loans and commercial real estate loans that are in nonaccrual status. Such loss estimates are typically based on expected future cash flows, collateral values and other factors that may impact the borrower’s ability to pay. To the extent that those loans are collateral-dependent, they are evaluated based on the fair value of the loan’s collateral as estimated at or near the financial statement date. As the quality of a loan deteriorates to the point of classifying the loan as “criticized,” the process of obtaining updated collateral valuation information is usually initiated, unless it is not considered warranted given factors such as the relative size of the loan, the characteristics of the collateral or the age of the last valuation. In those cases where current appraisals may not yet be available, prior appraisals are utilized with adjustments, as deemed necessary, for estimates of subsequent declines in values as determined by line of business and/or loan workout personnel. Those adjustments are reviewed and assessed for reasonableness by the Company’s credit risk personnel. Accordingly, for real estate collateral securing larger nonaccrual commercial loans and commercial real estate loans, estimated collateral values are based on current appraisals and estimates of value. For non-real estate loans, collateral is assigned a discounted estimated liquidation value and, depending on the nature of the collateral, is verified through field exams or other procedures. In assessing collateral, real estate and non-real estate values are reduced by an estimate of selling costs.

4. Loans and leases and the allowance for credit losses, continued

For residential real estate loans, including home equity loans and lines of credit, the excess of the loan balance over the net realizable value of the property collateralizing the loan is charged-off when the loan becomes 150 days delinquent. That charge-off is based on recent indications of value from external parties that are generally obtained shortly after a loan becomes nonaccrual. Loans to consumers that file for bankruptcy are generally charged-off to estimated net collateral value shortly after the Company is notified of such filings. When evaluating individual home equity loans and lines of credit for charge off and for purposes of estimating losses in determining the allowance for credit losses, the Company gives consideration to the required repayment of any first lien positions related to collateral property. Modified loans, including smaller balance homogenous loans, that are considered to be troubled debt restructurings are evaluated for impairment giving consideration to the impact of the modified loan terms on the present value of the loan's expected cash flows.

Changes in the amount of the allowance for credit losses reflect the outcome of the procedures described herein, including the impact of changes in macroeconomic forecasts as compared with previous forecasts, as well as the impact of portfolio concentrations, imprecision in economic forecasts, geopolitical conditions and other risk factors that might influence the loss estimation process.

The Company's reserve for off-balance sheet credit exposures was not material at September 30, 2022 and December 31, 2021.

Information with respect to loans and leases that were considered nonaccrual at the beginning and end of the reporting period and the interest income recognized on such loans for the three months and nine months ended September 30, 2022 and 2021 follows.

	September 30, 2022			June 30, 2022	January 1, 2022	Three Months Ended September 30, 2022	Nine Months Ended September 30, 2022
	Amortized Cost with Allowance	Amortized Cost without Allowance	Total	Amortized Cost	Amortized Cost	Interest Income Recognized	Interest Income Recognized
				(In thousands)			
Commercial, financial, leasing, etc.	$ 207,841	$ 160,325	$ 368,166	$ 442,496	$ 221,022	$ 4,708	$ 20,423
Real estate:							
Commercial	394,502	1,011,698	1,406,200	1,476,658	1,069,280	7,059	14,944
Residential builder and developer	1,930	—	1,930	518	3,005	—	1,687
Other commercial construction	25,235	40,952	66,187	73,046	111,405	22	3,398
Residential	160,704	124,691	285,395	331,376	355,858	8,059	21,397
Residential — limited documentation	61,297	34,085	95,382	112,608	122,888	229	456
Consumer:							
Home equity lines and loans	38,324	39,884	78,208	79,445	70,488	669	3,291
Recreational finance	31,295	7,423	38,718	33,414	27,811	166	488
Automobile	36,075	4,243	40,318	36,266	34,037	35	110
Other	48,741	81	48,822	47,178	44,289	84	268
Total	$ 1,005,944	$ 1,423,382	$ 2,429,326	$ 2,633,005	$ 2,060,083	$ 21,031	$ 66,462

4. Loans and leases and the allowance for credit losses, continued

	September 30, 2021			June 30, 2021	January 1, 2021	Three Months Ended September 30, 2021	Nine Months Ended September 30, 2021
	Amortized Cost with Allowance	Amortized Cost without Allowance	Total	Amortized Cost	Amortized Cost	Interest Income Recognized	Interest Income Recognized
				(In thousands)			
Commercial, financial, leasing, etc.	$ 171,040	$ 109,149	$ 280,189	$ 330,040	$ 306,827	$ 4,646	$ 10,661
Real estate:							
Commercial	332,014	820,856	1,152,870	1,081,546	775,894	2,256	4,518
Residential builder and developer	594	—	594	14,552	1,094	206	239
Other commercial construction	36,750	121,949	158,699	133,758	114,039	255	570
Residential	196,918	156,508	353,426	372,144	365,729	6,809	17,603
Residential — limited documentation	81,538	44,991	126,529	136,683	147,170	100	336
Consumer:							
Home equity lines and loans	38,582	32,892	71,474	76,711	79,392	979	2,924
Recreational finance	18,428	5,479	23,907	23,276	25,519	164	478
Automobile	27,258	3,744	31,002	31,090	39,404	46	143
Other	43,330	243	43,573	42,257	38,231	110	433
Total	$ 946,452	$ 1,295,811	$ 2,242,263	$ 2,242,057	$ 1,893,299	$ 15,571	$ 37,905

4. Loans and leases and the allowance for credit losses, continued

Loan modifications

During the normal course of business, the Company modifies loans to maximize recovery efforts. If the borrower is experiencing financial difficulty and a concession is granted, the Company considers such modifications as troubled debt restructurings and classifies those loans as either nonaccrual loans or renegotiated loans. The types of concessions that the Company grants typically include principal deferrals and interest rate concessions, but may also include other types of concessions.

The tables that follow summarize the Company's loan modification activities that were considered troubled debt restructurings for the three-month and nine-month periods ended September 30, 2022 and 2021:

			Post-modification (a)				
Three Months Ended September 30, 2022	Number	Pre-modification Recorded Investment	Principal Deferral	Interest Rate Reduction	Other	Combination of Concession Types	Total
		(Dollars in thousands)					
Commercial, financial, leasing, etc.	70	$ 32,451	$ 11,237	$ 446	$ 229	$ 21,519	$ 33,431
Real estate:							
Commercial	14	22,951	7,222	—	122	15,543	22,887
Residential	57	14,380	11,094	—	—	3,470	14,564
Residential — limited documentation	2	155	155	—	—	—	155
Consumer:							
Home equity lines and loans	25	1,700	1,504	—	—	196	1,700
Recreational finance	167	6,937	6,937	—	—	—	6,937
Automobile	474	9,755	9,755	—	—	—	9,755
Other	30	371	371	—	—	—	371
Total	839	$ 88,700	$ 48,275	$ 446	$ 351	$ 40,728	$ 89,800
Three Months Ended September 30, 2021							
Commercial, financial, leasing, etc.	62	$ 49,884	$ 6,051	$ —	$ 40,242	$ 3,479	$ 49,772
Real estate:							
Commercial	15	53,198	30,311	—	262	22,599	53,172
Residential	64	14,443	12,281	—	—	1,984	14,265
Residential — limited documentation	4	828	828	—	—	—	828
Consumer:							
Home equity lines and loans	22	1,349	1,246	—	—	103	1,349
Recreational finance	67	2,565	2,565	—	—	—	2,565
Automobile	146	2,711	2,711	—	—	—	2,711
Other	15	123	123	—	—	—	123
Total	395	$ 125,101	$ 56,116	$ —	$ 40,504	$ 28,165	$ 124,785

(a) *Financial effects impacting the recorded investment included principal payments or advances, charge-offs and capitalized escrow arrearages. The present value of interest rate concessions, discounted at the effective rate of the original loan, was not material.*

4. Loans and leases and the allowance for credit losses, continued

	Number	Pre-modification Recorded Investment	Post-modification (a) Principal Deferral	Interest Rate Reduction	Other	Combination of Concession Types	Total
			(Dollars in thousands)				
Nine Months Ended September 30, 2022							
Commercial, financial, leasing, etc.	147	$ 79,437	$ 49,671	$ 455	$ 983	$ 30,262	$ 81,371
Real estate:							
Commercial	44	33,349	13,052	—	2,223	17,728	33,003
Residential	221	56,912	40,821	—	—	18,469	59,290
Residential — limited documentation	7	1,231	1,049	—	—	193	1,242
Consumer:							
Home equity lines and loans	93	6,483	6,089	—	—	461	6,550
Recreational finance	514	19,138	19,131	—	—	—	19,131
Automobile	1,537	29,789	29,759	—	—	—	29,759
Other	128	1,170	1,170	—	—	—	1,170
Total	2,691	$ 227,509	$ 160,742	$ 455	$ 3,206	$ 67,113	$ 231,516
Nine Months Ended September 30, 2021							
Commercial, financial, leasing, etc.	244	$ 174,366	$ 42,143	$ —	$ 40,464	$ 90,770	$ 173,377
Real estate:							
Commercial	83	223,209	48,841	—	30,832	141,456	221,129
Other commercial construction	3	542	532	—	—	—	532
Residential	304	88,067	80,411	—	—	7,391	87,802
Residential — limited documentation	17	2,349	2,292	—	—	—	2,292
Consumer:							
Home equity lines and loans	64	5,034	4,702	—	—	277	4,979
Recreational finance	173	5,896	5,896	—	—	—	5,896
Automobile	516	9,182	9,168	—	—	14	9,182
Other	338	2,393	2,393	—	—	—	2,393
Total	1,742	$ 511,038	$ 196,378	$ —	$ 71,296	$ 239,908	$ 507,582

(a) *Financial effects impacting the recorded investment included principal payments or advances, charge-offs and capitalized escrow arrearages. The present value of interest rate concessions, discounted at the effective rate of the original loan, was not material.*

Troubled debt restructurings are evaluated for impairment giving consideration to the impact of the modified loan terms on the present value of the loan's expected cash flows. Impairment of troubled debt restructurings that have subsequently defaulted may also be measured based on the loan's observable market price or the fair value of collateral if the loan is collateral-dependent. Charge-offs may also be recognized on troubled debt restructurings that have subsequently defaulted. Loans that were modified as troubled debt restructurings during the twelve months ended September 30, 2022 and 2021 and for which there was a subsequent payment default during the nine-month periods ended September 30, 2022 and 2021, respectively, were not material.

The amount of foreclosed residential real estate property held by the Company was $36 million and $24 million at September 30, 2022 and December 31, 2021, respectively. There were $187 million and $151 million at September 30, 2022 and December 31, 2021, respectively, of loans secured by residential real estate that were in the process of foreclosure. Of all loans in the process of foreclosure at September 30, 2022, approximately 46% were government guaranteed.

The Company pledged certain loans to secure outstanding borrowings and available lines of credit. At September 30, 2022, the Company pledged approximately $9.9 billion of commercial loans and leases, $13.9 billion of commercial real estate loans, $18.7 billion of one-to-four family residential real estate loans, $3.1 billion of home equity loans and lines of credit and $10.4 billion of other consumer loans. At December 31, 2021, the Company pledged approximately $9.5 billion of commercial loans and leases, $11.9 billion of commercial real estate loans, $11.5 billion of one-to-four family residential real estate loans, $1.9 billion of homes equity loans and lines of credit and $10.2 billion of other consumer loans.

5. Borrowings

M&T had $535 million of fixed and variable rate junior subordinated deferrable interest debentures ("Junior Subordinated Debentures") outstanding at September 30, 2022 that are held by various trusts that were issued in connection with the issuance by those trusts of preferred capital securities ("Capital Securities") and common securities ("Common Securities"). The proceeds from the issuances of the Capital Securities and the Common Securities were used by the trusts to purchase the Junior Subordinated Debentures. The Common Securities of each of those trusts are wholly owned by M&T and are the only class of each trust's securities possessing general voting powers. The Capital Securities represent preferred undivided interests in the assets of the corresponding trust. Under the Federal Reserve Board's risk-based capital guidelines, the securities are includable in M&T's Tier 2 regulatory capital.

Holders of the Capital Securities receive preferential cumulative cash distributions unless M&T exercises its right to extend the payment of interest on the Junior Subordinated Debentures as allowed by the terms of each such debenture, in which case payment of distributions on the respective Capital Securities will be deferred for comparable periods. During an extended interest period, M&T may not pay dividends or distributions on, or repurchase, redeem or acquire any shares of its capital stock. In general, the agreements governing the Capital Securities, in the aggregate, provide a full, irrevocable and unconditional guarantee by M&T of the payment of distributions on, the redemption of, and any liquidation distribution with respect to the Capital Securities. The obligations under such guarantee and the Capital Securities are subordinate and junior in right of payment to all senior indebtedness of M&T.

The Capital Securities will remain outstanding until the Junior Subordinated Debentures are repaid at maturity, are redeemed prior to maturity or are distributed in liquidation to the trusts. The Capital Securities are mandatorily redeemable in whole, but not in part, upon repayment at the stated maturity dates (ranging from 2027 to 2033) of the Junior Subordinated Debentures or the earlier redemption of the Junior Subordinated Debentures in whole upon the occurrence of one or more events set forth in the indentures relating to the Capital Securities, and in whole or in part at any time after an optional redemption prior to contractual maturity contemporaneously with the optional redemption of the related Junior Subordinated Debentures in whole or in part, subject to possible regulatory approval.

On April 18, 2022, M&T Bank, the principal subsidiary of M&T, redeemed $650 million of fixed rate senior notes that were due to mature on May 18, 2022. In addition, $250 million of variable rate senior notes of M&T Bank matured on May 18, 2022. On August 16, 2022, M&T issued $500 million of 4.553% fixed rate senior notes that mature in August 2028.

Short-term borrowings assumed in the People's United acquisition totaled $895 million and included $503 million of 3.65% fixed-rate unsecured senior notes due to mature in December 2022, $390 million of agreements to repurchase securities which consisted of secured overnight transactions with commercial and municipal customers that subsequently matured and $2 million of Federal Home Loan Bank secured advances accruing interest at fixed-rates ranging from .01% to .75% and maturing at various dates through January 2023. On October 6, 2022, M&T redeemed the fixed rate senior notes assumed in the People's United acquisition.

Long-term borrowings assumed in the People's United acquisition totaled $494 million and included $405 million of 4.0% fixed-rate subordinated notes due to mature in July 2024, $78 million of 5.75% fixed-rate subordinated notes due to mature in October 2024 and $11 million of Federal Home Loan Bank secured advances accruing interest at fixed-rates ranging from .01% to 3.00% and maturing at various dates through 2039.

6. Shareholders' Equity

M&T is authorized to issue 20,000,000 shares of preferred stock with a $1.00 par value per share. Preferred shares outstanding rank senior to common shares both as to dividends and liquidation preference, but have no general voting rights.

Issued and outstanding preferred stock of M&T as of September 30, 2022 and December 31, 2021 is presented below:

	September 30, 2022		December 31, 2021	
	Shares Issued and Outstanding	Carrying Value	Shares Issued and Outstanding	Carrying Value
	(Dollars in thousands)			
Series E (a)				
Fixed-to-Floating Rate Non-cumulative Perpetual Preferred Stock $1,000 liquidation preference per share	350,000	$ 350,000	350,000	$ 350,000
Series F (b)				
Fixed-to-Floating Rate Non-cumulative Perpetual Preferred Stock $10,000 liquidation preference per share	50,000	$ 500,000	50,000	$ 500,000
Series G (c)				
Fixed-Rate Reset Non-cumulative Perpetual Preferred Stock $10,000 liquidation preference per share	40,000	$ 400,000	40,000	$ 400,000
Series H (d)				
Fixed-to-Floating Rate Non-cumulative Perpetual Preferred Stock $25 liquidation preference per share	10,000,000	$ 260,600	—	—
Series I (e)				
Fixed-Rate Reset Non-cumulative Perpetual Preferred Stock $10,000 liquidation preference per share	50,000	$ 500,000	50,000	$ 500,000

(a) *Dividends, if declared, are paid semi-annually at a rate of 6.45% through February 14, 2024 and thereafter will be paid quarterly at a rate of the three-month LIBOR plus 361 basis points. The shares are redeemable in whole or in part on or after February 15, 2024. Notwithstanding M&T's option to redeem the shares, if an event occurs such that the shares no longer qualify as Tier 1 capital, M&T may redeem all of the shares within 90 days following that occurrence.*

(b) *Dividends, if declared, are paid semi-annually at a rate of 5.125% through October 31, 2026 and thereafter will be paid quarterly at a rate of the three-month LIBOR plus 352 basis points. The shares are redeemable in whole or in part on or after November 1, 2026. Notwithstanding M&T's option to redeem the shares, if an event occurs such that the shares no longer qualify as Tier 1 capital, M&T may redeem all of the shares within 90 days following that occurrence.*

(c) *Dividends, if declared, are paid semi-annually at a rate of 5.0% through July 31, 2024 and thereafter will be paid semiannually at a rate of the five-year U.S. Treasury rate plus 3.174%. The shares are redeemable in whole or in part on or after August 1, 2024. Notwithstanding M&T's option to redeem the shares, if an event occurs such that the shares no longer qualify as Tier 1 capital, M&T may redeem all of the shares within 90 days following that occurrence.*

(d) *Dividends, if declared, are paid quarterly at a rate of 5.625% through December 14, 2026 and thereafter will be paid quarterly at a rate of the three-month LIBOR rate plus 4.02%. The shares are redeemable in whole or in part on or after April 1, 2027. Notwithstanding M&T's option to redeem the shares, if an event occurs such that the shares no longer qualify as Tier 1 capital, M&T may redeem all of the shares within 90 days following that occurrence.*

(e) *Dividends, if declared, are paid semi-annually at a rate of 3.5% through August 31, 2026 and thereafter will be paid semiannually at a rate of the five-year U.S. Treasury rate plus 2.679%. The shares are redeemable in whole or in part on or after September 1, 2026. Notwithstanding M&T's option to redeem the shares, if an event occurs such that the shares no longer qualify as Tier 1 capital, M&T may redeem all of the shares within 90 days following that occurrence.*

7. Revenue from contracts with customers

The Company generally charges customer accounts or otherwise bills customers upon completion of its services. Typically the Company's contracts with customers have a duration of one year or less and payment for services is received at least annually, but oftentimes more frequently as services are provided. At September 30, 2022 and December 31, 2021, the Company had $70 million and $68 million, respectively, of amounts receivable related to recognized revenue from the sources in the accompanying tables. Such amounts are classified in accrued interest and other assets in the Company's consolidated balance sheet. In certain situations the Company is paid in advance of providing services and defers the recognition of revenue until its service obligation is satisfied. At September 30, 2022 and December 31, 2021, the Company had deferred revenue of $46 million and $45 million, respectively, related to the sources in the accompanying tables recorded in accrued interest and other liabilities in the consolidated balance sheet.

The following tables summarize sources of the Company's noninterest income during the three-month and nine-month periods ended September 30, 2022 and 2021 that are subject to the revenue recognition accounting guidance.

	Business Banking	Commercial Banking	Commercial Real Estate	Discretionary Portfolio	Residential Mortgage Banking	Retail Banking	All Other	Total
Three Months Ended September 30, 2022				(In thousands)				
Classification in consolidated statement of income								
Service charges on deposit accounts	$ 19,277	30,406	3,683	—	—	61,223	624	$ 115,213
Trust income	—	—	—	—	—	—	186,577	186,577
Brokerage services income	—	—	—	—	—	—	21,086	21,086
Other revenues from operations:								
Merchant discount and credit card fees	16,234	17,731	1,104	—	—	6,874	561	42,504
Other	—	9,878	1,961	904	558	3,980	8,767	26,048
	$ 35,511	58,015	6,748	904	558	72,077	217,615	$ 391,428
Three Months Ended September 30, 2021								
Classification in consolidated statement of income								
Service charges on deposit accounts	$ 14,205	25,054	2,977	—	—	61,696	1,494	$ 105,426
Trust income	—	—	—	—	—	—	156,876	156,876
Brokerage services income	—	—	—	—	—	(20)	20,510	20,490
Other revenues from operations:								
Merchant discount and credit card fees	14,376	14,970	878	—	—	5,912	138	36,274
Other	—	1,879	2,180	283	1,501	5,674	8,311	19,828
	$ 28,581	41,903	6,035	283	1,501	73,262	187,329	$ 338,894

7. Revenue from contracts with customers, continued

Nine Months Ended September 30, 2022	Business Banking	Commercial Banking	Commercial Real Estate	Discretionary Portfolio	Residential Mortgage Banking	Retail Banking	All Other	Total
				(In thousands)				
Classification in consolidated statement of income								
Service charges on deposit accounts	$ 53,581	85,806	10,903	—	—	185,990	4,610	$ 340,890
Trust income	—	—	—	—	—	—	545,874	545,874
Brokerage services income	—	—	—	—	—	—	65,414	65,414
Other revenues from operations:								
Merchant discount and credit card fees	45,874	48,044	2,836	—	—	19,408	946	117,108
Other	—	13,040	8,228	2,468	3,413	16,752	33,416	77,317
	$ 99,455	146,890	21,967	2,468	3,413	222,150	650,260	$ 1,146,603
Nine Months Ended September 30, 2021								
Classification in consolidated statement of income								
Service charges on deposit accounts	$ 39,644	74,304	8,768	—	—	169,734	4,271	$ 296,721
Trust income	—	—	—	—	—	—	475,889	475,889
Brokerage services income	—	—	—	—	—	—	43,868	43,868
Other revenues from operations:								
Merchant discount and credit card fees	37,570	39,812	1,823	—	—	15,741	(207)	94,739
Other	—	3,890	5,197	1,043	4,670	17,493	30,456	62,749
	$ 77,214	118,006	15,788	1,043	4,670	202,968	554,277	$ 973,966

8. Pension plans and other postretirement benefits

The Company provides defined benefit pension and other postretirement benefits (including health care and life insurance benefits) to qualified retired employees. Net periodic defined benefit cost for defined benefit plans consisted of the following:

	Pension Benefits		Other Postretirement Benefits	
	Three Months Ended September 30			
	2022	2021	2022	2021
	(In thousands)			
Service cost	$ 4,423	$ 5,128	$ 689	$ 254
Interest cost on projected benefit obligation	22,060	15,468	581	328
Expected return on plan assets	(50,188)	(35,862)	—	—
Amortization of prior service cost (credit)	129	139	(693)	(1,185)
Amortization of net actuarial loss (gain)	4,974	22,254	(370)	(324)
Net periodic cost (benefit)	$ (18,602)	$ 7,127	$ 207	$ (927)

	Pension Benefits		Other Postretirement Benefits	
	Nine Months Ended September 30			
	2022	2021	2022	2021
	(In thousands)			
Service cost	$ 13,237	$ 15,385	$ 1,914	$ 760
Interest cost on projected benefit obligation	60,407	46,404	1,607	984
Expected return on plan assets	(137,421)	(107,586)	—	—
Amortization of prior service cost (credit)	387	415	(2,079)	(3,554)
Amortization of net actuarial loss (gain)	14,921	66,763	(1,111)	(971)
Net periodic cost (benefit)	$ (48,469)	$ 21,381	$ 331	$ (2,781)

Service cost is reflected in salaries and employee benefits expense in the consolidated statement of income. The other components of net periodic benefit cost are reflected in other costs of operations. Expenses incurred in connection with the Company's defined contribution pension and retirement savings plans totaled $32 million and $23 million for the three months ended September 30, 2022 and 2021, respectively, and $98 million and $81 million for the nine months ended September 30, 2022 and 2021, respectively, and are included in salaries and employee benefits expense.

Prior to 2022, net actuarial losses were generally amortized over the average remaining service periods of active participants in the Company’s defined benefit pension plan. If substantially all of the plan’s participants are inactive, GAAP provides for the average remaining life expectancy of the participants to be used instead of average remaining service period in determining such amortization. Substantially all of the participants in the Company’s defined benefit pension plan were inactive and beginning in 2022 the average remaining life expectancy is now utilized prospectively to amortize the net unrecognized losses. The change increased the amortization period by approximately sixteen years and reduced the amount of amortization of unrecognized losses recorded for the three and nine months ended September 30, 2022 from what would have been recorded without such change in amortization period by $9 million and $27 million, respectively.

9. Earnings per common share

The computations of basic earnings per common share follow:

	Three Months Ended September 30 2022	2021	Nine Months Ended September 30 2022	2021
	(In thousands, except per share)			
Income available to common shareholders:				
Net income	$ 646,596	$ 495,460	$ 1,226,292	$ 1,400,778
Less: Preferred stock dividends	(24,941)	(17,050)	(71,647)	(51,150)
Net income available to common equity	621,655	478,410	1,154,645	1,349,628
Less: Income attributable to unvested stock-based compensation awards	(1,106)	(2,452)	(2,245)	(6,823)
Net income available to common shareholders	$ 620,549	$ 475,958	$ 1,152,400	$ 1,342,805
Weighted-average shares outstanding:				
Common shares outstanding (including common stock issuable) and unvested stock-based compensation awards	174,921	129,580	160,793	129,529
Less: Unvested stock-based compensation awards	(312)	(891)	(319)	(897)
Weighted-average shares outstanding	174,609	128,689	160,474	128,632
Basic earnings per common share	$ 3.55	$ 3.70	$ 7.18	$ 10.44

The computations of diluted earnings per common share follow:

	Three Months Ended September 30 2022	2021	Nine Months Ended September 30 2022	2021
	(In thousands, except per share)			
Net income available to common equity	$ 621,655	$ 478,410	$ 1,154,645	$ 1,349,628
Less: Income attributable to unvested stock-based compensation awards	(1,101)	(2,449)	(2,239)	(6,816)
Net income available to common shareholders	$ 620,554	$ 475,961	$ 1,152,406	$ 1,342,812
Adjusted weighted-average shares outstanding:				
Common and unvested stock-based compensation awards	174,921	129,580	160,793	129,529
Less: Unvested stock-based compensation awards	(312)	(891)	(319)	(897)
Plus: Incremental shares from assumed conversion of stock-based compensation awards and warrants to purchase common stock	1,073	155	821	154
Adjusted weighted-average shares outstanding	175,682	128,844	161,295	128,786
Diluted earnings per common share	$ 3.53	$ 3.69	$ 7.14	$ 10.43

GAAP defines unvested share-based awards that contain nonforfeitable rights to dividends or dividend equivalents (whether paid or unpaid) as participating securities that shall be included in the computation of earnings per common share pursuant to the two-class method. The Company has issued stock-based compensation awards in the form of restricted stock and restricted stock units which, in accordance with GAAP, are considered participating securities.

Stock-based compensation awards to purchase common stock of M&T representing 252,793 common shares and 314,155 common shares during the three-month and nine-month periods ended September 30, 2022, respectively, and 460,710 common shares and 461,792 common shares during the three-month and nine-month periods ended September 30, 2021, respectively, were not included in the computations of diluted earnings per common share because the effect on those periods would have been antidilutive.

10. Comprehensive income

The following tables display the components of other comprehensive income (loss) and amounts reclassified from accumulated other comprehensive income (loss) to net income:

	Investment Securities	Defined Benefit Plans	Other	Total Amount Before Tax		Income Tax	Net
	(In thousands)						
Balance — January 1, 2022	$ 104,691	(360,276)	83,531	$ (172,054)		44,476	$ (127,578)
Other comprehensive income (loss) before reclassifications:							
Unrealized holding losses, net	(576,266)	—	—	(576,266)		149,186	(427,080)
Foreign currency translation adjustment	—	—	(14,564)	(14,564)		3,293	(11,271)
Unrealized losses on cash flow hedges	—	—	(429,310)	(429,310)		111,150	(318,160)
Total other comprehensive income (loss) before reclassifications	(576,266)	—	(443,874)	(1,020,140)		263,629	(756,511)
Amounts reclassified from accumulated other comprehensive income (loss) that (increase) decrease net income:							
Amortization of unrealized holding losses on held-to-maturity securities	1,766	—	—	1,766	(a)	(456)	1,310
Accretion of net gain on terminated cash flow hedges	—	—	(90)	(90)	(c)	24	(66)
Net yield adjustment from cash flow hedges currently in effect	—	—	(35,500)	(35,500)	(a)	9,192	(26,308)
Amortization of prior service credit	—	(1,692)	—	(1,692)	(d)	413	(1,279)
Amortization of actuarial losses	—	13,810	—	13,810	(d)	(3,371)	10,439
Total other comprehensive income (loss)	(574,500)	12,118	(479,464)	(1,041,846)		269,431	(772,415)
Balance — September 30, 2022	$ (469,809)	(348,158)	(395,933)	$ (1,213,900)		313,907	$ (899,993)
Balance — January 1, 2021	$ 195,386	(650,087)	369,558	$ (85,143)		22,111	$ (63,032)
Other comprehensive income (loss) before reclassifications:							
Unrealized holding losses, net	(57,388)	—	—	(57,388)		15,124	(42,264)
Foreign currency translation adjustment	—	—	(1,246)	(1,246)		360	(886)
Unrealized gains on cash flow hedges	—	—	821	821		(214)	607
Total other comprehensive income (loss) before reclassifications	(57,388)	—	(425)	(57,813)		15,270	(42,543)
Amounts reclassified from accumulated other comprehensive income (loss) that (increase) decrease net income:							
Amortization of unrealized holding losses on held-to-maturity securities	3,333	—	—	3,333	(a)	(871)	2,462
Gains realized in net income	(8)	—	—	(8)	(b)	2	(6)
Accretion of net gain on terminated cash flow hedges	—	—	(90)	(90)	(c)	24	(66)
Net yield adjustment from cash flow hedges currently in effect	—	—	(206,713)	(206,713)	(a)	53,997	(152,716)
Amortization of prior service credit	—	(3,139)	—	(3,139)	(d)	860	(2,279)
Amortization of actuarial losses	—	65,792	—	65,792	(d)	(18,031)	47,761
Total other comprehensive income (loss)	(54,063)	62,653	(207,228)	(198,638)		51,251	(147,387)
Balance — September 30, 2021	$ 141,323	(587,434)	162,330	$ (283,781)		73,362	$ (210,419)

(a) *Included in interest income.*
(b) *Included in gain (loss) on bank investment securities.*
(c) *Included in interest expense.*
(d) *Included in other costs of operations.*

Accumulated other comprehensive income (loss), net consisted of the following:

	Investment Securities	Defined Benefit Plans	Other	Total
	(In thousands)			
Balance — December 31, 2021	$ 77,625	$ (267,145)	$ 61,942	$ (127,578)
Net gain (loss) during period	(425,770)	9,160	(355,805)	(772,415)
Balance — September 30, 2022	$ (348,145)	$ (257,985)	$ (293,863)	$ (899,993)

11. Derivative financial instruments

As part of managing interest rate risk, the Company enters into interest rate swap agreements to modify the repricing characteristics of certain portions of the Company's portfolios of earning assets and interest-bearing liabilities. The Company designates interest rate swap agreements utilized in the management of interest rate risk as either fair value hedges or cash flow hedges. Interest rate swap agreements are generally entered into with counterparties that meet established credit standards and most contain master netting, collateral and/or settlement provisions protecting the at-risk party. Based on adherence to the Company's credit standards and the presence of the netting, collateral or settlement provisions, the Company believes that the credit risk inherent in these contracts was not material as of September 30, 2022.

The net effect of interest rate swap agreements was to decrease net interest income by $22 million and to increase net interest income by $50 million during the three-month and nine-month periods ended September 30, 2022, respectively, and to increase net interest income by $67 million and $233 million during the three-month and nine-month periods ended September 30, 2021, respectively.

Information about interest rate swap agreements entered into for interest rate risk management purposes summarized by type of financial instrument the swap agreements were intended to hedge follows:

	Notional Amount (In thousands)	Average Maturity (In years)	Weighted-Average Rate Fixed	Weighted-Average Rate Variable	Estimated Fair Value Gain (Loss) (a) (In thousands)
September 30, 2022					
Fair value hedges:					
Fixed rate long-term borrowings (b)	$ 1,500,000	3.5	2.98 %	3.59 %	$ (2,765)
Cash flow hedges:					
Interest payments on variable rate commercial real estate loans (b)(c)	19,900,000	1.3	1.80 %	3.09 %	(8,730)
Total	$ 21,400,000	1.5			$ (11,495)
December 31, 2021					
Fair value hedges:					
Fixed rate long-term borrowings (b)	$ 1,650,000	2.3	2.86 %	0.74 %	$ 41
Cash flow hedges:					
Interest payments on variable rate commercial real estate loans (b)(d)	21,700,000	0.6	1.24 %	0.09 %	(248)
Total	$ 23,350,000	0.7			$ (207)

(a) *Certain clearinghouse exchanges consider payments by counterparties for variation margin on derivative instruments to be settlements of those positions. The impact of such payments for interest rate swap agreements designated as fair value hedges was a net settlement of losses of $68.7mm at September 30, 2022 and a net settlement of gains of $43.5 at December 31, 2021. The impact of such payments on interest rate swap agreements designated as cash flow hedges was a net settlement of losses of $368.2 million at September 30, 2022 and a net settlement of gains of $88.2 million at December 31, 2021.*

(b) *Under the terms of these agreements, the Company receives settlement amounts at a fixed rate and pays at a variable rate.*

(c) *Includes notional amount and terms of $4.7 billion of forward-starting interest rate swap agreements that become effective in 2023.*

(d) *Includes notional amount and terms of $8.4 billion of forward-starting interest rate swap agreements that become effective in 2022.*

The Company utilizes commitments to sell residential and commercial real estate loans to hedge the exposure to changes in the fair value of real estate loans held for sale. Such commitments have generally been designated as fair value hedges. The Company also utilizes commitments to sell real estate loans to offset the exposure to changes in fair value of certain commitments to originate real estate loans for sale.

Derivative financial instruments not designated as hedging instruments included interest rate contracts, foreign exchange and other option and futures contracts. Interest rate contracts not designated as hedging instruments had notional values of $45.6 billion and $32.6 billion at September 30, 2022 and December 31, 2021, respectively. The notional amounts of foreign exchange and other option and futures contracts not designated as hedging instruments aggregated $1.9 billion and $1.1 billion at September 30, 2022 and December 31, 2021, respectively.

11. Derivative financial instruments, continued

Information about the fair values of derivative instruments in the Company's consolidated balance sheet and consolidated statement of income follows:

	Asset Derivatives Fair Value		Liability Derivatives Fair Value	
	September 30, 2022	December 31, 2021	September 30, 2022	December 31, 2021
	(In thousands)			
Derivatives designated and qualifying as hedging instruments (a)				
Interest rate swap agreements	$ 228	$ 258	$ 11,723	$ 465
Commitments to sell real estate loans	18,364	4,044	4	548
	18,592	4,302	11,727	1,013
Derivatives not designated and qualifying as hedging instruments (a)				
Mortgage banking:				
Mortgage-related commitments to originate real estate loans for sale	843	11,728	49,149	5,288
Commitments to sell real estate loans	56,167	8,137	—	4,108
Other:				
Interest rate contracts (b)	371,834	410,056	1,378,145	76,278
Foreign exchange and other option and futures contracts	44,431	8,230	42,343	7,156
	473,275	438,151	1,469,637	92,830
Total derivatives	$ 491,867	$ 442,453	$ 1,481,364	$ 93,843

(a) *Asset derivatives are reported in other assets and liability derivatives are reported in other liabilities.*

(b) *The impact of variation margin payments at September 30, 2022 and December 31, 2021 was a reduction of the estimated fair value of interest rate contracts not designated as hedging instruments in an asset position of $1.1 billion and $54.4 million, respectively, and in a liability position of $19.6 million and $305.1 million, respectively.*

	Amount of Gain (Loss) Recognized Three Months Ended September 30			
	2022		2021	
	Derivative	Hedged Item	Derivative	Hedged Item
	(In thousands)			
Derivatives in fair value hedging relationships				
Interest rate swap agreements:				
Fixed rate long-term borrowings (a)	$ (50,976)	50,821	$ (9,713)	9,636
Derivatives not designated as hedging instruments				
Interest rate contracts (b)	$ 6,946		$ 2,068	
Foreign exchange and other option and futures contracts (b)	4,462		3,060	
Total	$ 11,408		$ 5,128	

	Amount of Gain (Loss) Recognized Nine Months Ended September 30			
	2022		2021	
	Derivative	Hedged Item	Derivative	Hedged Item
	(In thousands)			
Derivatives in fair value hedging relationships				
Interest rate swap agreements:				
Fixed rate long-term borrowings (a)	$ (114,932)	114,581	$ (42,217)	41,456
Derivatives not designated as hedging instruments				
Interest rate contracts (b)	$ 17,907		$ 8,047	
Foreign exchange and other option and futures contracts (b)	10,701		6,286	
Total	$ 28,608		$ 14,333	

(a) *Reported as an adjustment to interest expense.*

(b) *Reported as trading account and non-hedging derivative gains.*

11. Derivative financial instruments, continued

	Carrying Amount of the Hedged Item		Cumulative Amount of Fair Value Hedging Adjustment Increasing (Decreasing) the Carrying Amount of the Hedged Item	
	September 30, 2022	December 31, 2021	September 30, 2022	December 31, 2021
	(In thousands)			
Location in the Consolidated Balance Sheet of the Hedged Items in Fair Value Hedges				
Long-term debt	$ 1,427,977	$ 1,692,943	$ (70,971)	$ 43,610

The amount of interest income recognized in the consolidated statement of income associated with derivatives designated as cash flow hedges was a decrease of $22 million and an increase of $58 million for the three months ended September 30, 2022 and 2021, respectively, and an increase of $36 million and $207 million for the nine months ended September 30, 2022 and 2021, respectively. As of September 30, 2022 the unrealized net loss recognized in other comprehensive income related to cash flow hedges was $377 million, of which losses of $16 million, $75 million and $286 million related to interest rate swap agreements maturing in 2022, 2023, and 2025, respectively.

The Company also has commitments to sell and commitments to originate residential and commercial real estate loans that are considered derivatives. The Company designates certain of the commitments to sell real estate loans as fair value hedges of real estate loans held for sale. The Company also utilizes commitments to sell real estate loans to offset the exposure to changes in the fair value of certain commitments to originate real estate loans for sale. As a result of these activities, net unrealized pre-tax gains related to hedged loans held for sale, commitments to originate loans for sale and commitments to sell loans were approximately $12 million and $24 million at September 30, 2022 and December 31, 2021, respectively. Changes in unrealized gains and losses are included in mortgage banking revenues and, in general, are realized in subsequent periods as the related loans are sold and commitments satisfied.

The Company does not offset derivative asset and liability positions in its consolidated financial statements. The Company's exposure to credit risk by entering into derivative contracts is mitigated through master netting agreements and collateral posting or settlement requirements. Master netting agreements covering interest rate and foreign exchange contracts with the same party include a right to set-off that becomes enforceable in the event of default, early termination or under other specific conditions.

The aggregate fair value of derivative financial instruments in a liability position and the net liability positions with counterparties which are subject to master netting arrangements was $1 million and $35 million at September 30, 2022 and December 31, 2021, respectively. The Company was required to post collateral for those positions of $33 million at December 31, 2021. No collateral was posted for those positions at September 30, 2022. Certain of the Company's derivative financial instruments contain provisions that require the Company to maintain specific credit ratings from credit rating agencies to avoid higher collateral posting requirements. If the Company's debt rating were to fall below specified ratings, the counterparties of the derivative financial instruments could demand immediate incremental collateralization on those instruments in a net liability position. The aggregate fair value of all derivative financial instruments with such credit risk-related contingent features in a net liability position on September 30, 2022 was not material.

The aggregate fair value of derivative financial instruments in an asset position and the net asset positions with counterparties which are subject to enforceable master netting arrangements was $316 million at September 30, 2022 and $7 million at December 31, 2021. Counterparties posted collateral relating to those positions of $308 million at September 30, 2022 and $6 million at December 31, 2021. Interest rate swap agreements entered into with customers are subject to the Company's credit risk standards and often contain collateral provisions.

11. Derivative financial instruments, continued

In addition to the derivative contracts noted above, the Company clears certain derivative transactions through a clearinghouse, rather than directly with counterparties. Those transactions cleared through a clearinghouse require initial margin collateral and variation margin payments depending on the contracts being in a net asset or liability position. The amount of initial margin collateral posted by the Company was $215 million and $132 million at September 30, 2022 and December 31, 2021, respectively. The fair value asset and liability amounts of derivative contracts have been reduced by variation margin payments treated as settlements as described herein. Variation margin on derivative contracts not treated as settlements continues to represent collateral posted or received by the Company.

12. Variable interest entities and asset securitizations

The Company's securitization activity has consisted of securitizing loans originated for sale into government issued or guaranteed mortgage-backed securities. The Company has not recognized any losses as a result of having securitized assets.

As described in note 5, M&T has issued junior subordinated debentures payable to various trusts that have issued Capital Securities. M&T owns the common securities of those trust entities. The Company is not considered to be the primary beneficiary of those entities and, accordingly, the trusts are not included in the Company's consolidated financial statements. At each of September 30, 2022 and December 31, 2021, the Company included the junior subordinated debentures as "long-term borrowings" in its consolidated balance sheet and recognized $23 million in other assets for its "investment" in the common securities of the trusts that will be concomitantly repaid to M&T by the respective trust from the proceeds of M&T's repayment of the junior subordinated debentures associated with preferred capital securities described in note 5.

The Company has invested as a limited partner in various partnerships that collectively had total assets of approximately $8.5 billion at September 30, 2022 and $3.0 billion at December 31, 2021. Those partnerships generally construct or acquire properties for which the investing partners are eligible to receive certain federal income tax credits in accordance with government guidelines. Such investments may also provide tax deductible losses to the partners. The partnership investments also assist the Company in achieving its community reinvestment initiatives. As a limited partner, there is no recourse to the Company by creditors of the partnerships. However, the tax credits that result from the Company's investments in such partnerships are generally subject to recapture should a partnership fail to comply with the respective government regulations. The Company's carrying amount of its investments in such partnerships was $1.4 billion, including $505 million of unfunded commitments, at September 30, 2022 and $933 million, including $361 million of unfunded commitments, at December 31, 2021. Contingent commitments to provide additional capital contributions to these partnerships were not material at September 30, 2022. The Company has not provided financial or other support to the partnerships that was not contractually required. The Company's maximum exposure to loss from its investments in such partnerships as of September 30, 2022 was $1.6 billion, including possible recapture of certain tax credits. Management currently estimates that no material losses are probable as a result of the Company's involvement with such entities. The Company, in its position as limited partner, does not direct the activities that most significantly impact the economic performance of the partnerships and, therefore, in accordance with the accounting provisions for variable interest entities, the partnership entities are not included in the Company's consolidated financial statements. The Company's investment in qualified affordable housing projects is amortized to income taxes in the consolidated statement of income as tax credits and other tax benefits resulting from deductible losses associated with the projects are received. The Company amortized $37 million and $94 million of its investments in qualified affordable housing projects to income tax expense during the three-month and nine-month periods ended September 30, 2022, respectively, and recognized $44 million and $108 million of tax credits and other tax benefits during those respective periods. Similarly, for the three-month and nine-month periods ended September 30, 2021, the Company amortized $25 million and $63 million of its investments in qualified affordable housing projects to income tax expense, respectively, and recognized $27 million and $70 million of tax credits and other tax benefits during those respective periods.

The Company serves as investment advisor for certain registered money-market funds. The Company has no explicit arrangement to provide support to those funds, but may waive portions of its allowable management fees as a result of market conditions.

13. Fair value measurements

GAAP permits an entity to choose to measure eligible financial instruments and other items at fair value. The Company has not made any fair value elections at September 30, 2022.

Pursuant to GAAP, fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. A three-level hierarchy exists in GAAP for fair value measurements based upon the inputs to the valuation of an asset or liability.

- Level 1 — Valuation is based on quoted prices in active markets for identical assets and liabilities.
- Level 2 — Valuation is determined from quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar instruments in markets that are not active or by model-based techniques in which all significant inputs are observable in the market.
- Level 3 — Valuation is derived from model-based and other techniques in which at least one significant input is unobservable and which may be based on the Company's own estimates about the assumptions that market participants would use to value the asset or liability.

When available, the Company attempts to use quoted market prices in active markets to determine fair value and classifies such items as Level 1 or Level 2. If quoted market prices in active markets are not available, fair value is often determined using model-based techniques incorporating various assumptions including interest rates, prepayment speeds and credit losses. Assets and liabilities valued using model-based techniques are classified as either Level 2 or Level 3, depending on the lowest level classification of an input that is considered significant to the overall valuation. The following is a description of the valuation methodologies used for the Company's assets and liabilities that are measured on a recurring basis at estimated fair value.

Trading account

Mutual funds held in connection with deferred compensation and other arrangements have been classified as Level 1 valuations. Valuations of investments in debt securities can generally be obtained through reference to quoted prices in less active markets for the same or similar securities or through model-based techniques in which all significant inputs are observable and, therefore, such valuations have been classified as Level 2.

Investment securities available for sale and equity securities

The majority of the Company's available-for-sale investment securities have been valued by reference to prices for similar securities or through model-based techniques in which all significant inputs are observable and, therefore, such valuations have been classified as Level 2. Certain investments in mutual funds and equity securities are actively traded and, therefore, have been classified as Level 1 valuations.

Real estate loans held for sale

The Company utilizes commitments to sell real estate loans to hedge the exposure to changes in fair value of real estate loans held for sale. The carrying value of hedged real estate loans held for sale includes changes in estimated fair value during the hedge period. Typically, the Company attempts to hedge real estate loans held for sale from the date of close through the sale date. The fair value of hedged real estate loans held for sale is generally calculated by reference to quoted prices in secondary markets for commitments to sell real estate loans with similar characteristics and, accordingly, such loans have been classified as a Level 2 valuation.

13. Fair value measurements, continued

Commitments to originate real estate loans for sale and commitments to sell real estate loans

The Company enters into various commitments to originate real estate loans for sale and commitments to sell real estate loans. Such commitments are accounted for as derivative financial instruments and, therefore, are carried at estimated fair value on the consolidated balance sheet. The estimated fair values of such commitments were generally calculated by reference to quoted prices in secondary markets for commitments to sell real estate loans to certain government-sponsored entities and other parties. The fair valuations of commitments to sell real estate loans generally result in a Level 2 classification. The estimated fair value of commitments to originate real estate loans for sale are adjusted to reflect the Company's anticipated commitment expirations. The estimated commitment expirations are considered significant unobservable inputs contributing to the Level 3 classification of commitments to originate real estate loans for sale. Significant unobservable inputs used in the determination of estimated fair value of commitments to originate real estate loans for sale are included in the accompanying table of significant unobservable inputs to Level 3 measurements.

Interest rate swap agreements used for interest rate risk management

The Company utilizes interest rate swap agreements as part of the management of interest rate risk to modify the repricing characteristics of certain portions of its portfolios of earning assets and interest-bearing liabilities. The Company generally determines the fair value of its interest rate swap agreements using externally developed pricing models based on market observable inputs and, therefore, classifies such valuations as Level 2. The Company has considered counterparty credit risk in the valuation of its interest rate swap agreement assets and has considered its own credit risk in the valuation of its interest rate swap agreement liabilities.

Non-hedging derivatives

Non-hedging derivatives consist primarily of interest rate contracts and foreign exchange contracts with customers who require such services with offsetting positions with third parties to minimize the Company's risk with respect to such transactions. The Company generally determines the fair value of its non-hedging derivative assets and liabilities using externally developed pricing models based on market observable inputs and, therefore, classifies such valuations as Level 2.

13. Fair value measurements, continued

The following tables present assets and liabilities at September 30, 2022 and December 31, 2021 measured at estimated fair value on a recurring basis:

	Fair Value Measurements	Level 1	Level 2	Level 3
		(In thousands)		
September 30, 2022				
Trading account	$ 129,672	$ 129,672	$ —	$ —
Investment securities available for sale:				
U.S. Treasury and federal agencies	7,658,728	—	7,658,728	—
Mortgage-backed securities:				
Government issued or guaranteed				
Commercial	606,571	—	606,571	—
Residential	2,430,946	—	2,430,946	—
Other debt securities	174,101	—	174,101	—
	10,870,346	—	10,870,346	—
Equity securities	194,537	184,811	9,726	—
Real estate loans held for sale	342,720	—	342,720	—
Other assets (a)	491,867	—	491,024	843
Total assets	$ 12,029,142	$ 314,483	$ 11,713,816	$ 843
Other liabilities (a)	1,481,364	—	1,432,215	49,149
Total liabilities	$ 1,481,364	$ —	$ 1,432,215	$ 49,149
December 31, 2021				
Trading account	$ 49,745	$ 49,545	$ 200	$ —
Investment securities available for sale:				
U.S. Treasury and federal agencies	678,690	—	678,690	—
Mortgage-backed securities:				
Government issued or guaranteed				
Residential	3,155,312	—	3,155,312	—
Other debt securities	121,802	—	121,802	—
	3,955,804	—	3,955,804	—
Equity securities	77,640	68,850	8,790	—
Real estate loans held for sale	899,282	—	899,282	—
Other assets (a)	442,453	—	430,725	11,728
Total assets	$ 5,424,924	$ 118,395	$ 5,294,801	$ 11,728
Other liabilities (a)	93,843	—	88,555	5,288
Total liabilities	$ 93,843	$ —	$ 88,555	$ 5,288

(a) Comprised predominantly of interest rate swap agreements used for interest rate risk management (Level 2), interest rate and foreign exchange contracts not designated as hedging instruments (Level 2), commitments to sell real estate loans (Level 2) and commitments to originate real estate loans to be held for sale (Level 3).

13. Fair value measurements, continued

The changes in Level 3 assets and liabilities measured at estimated fair value on a recurring basis during the three months ended September 30, 2022 and 2021 were as follows:

	Other Assets and Other Liabilities (In thousands)	
2022		
Balance — June 30, 2022	$ (24,181)	
Total gains (losses) realized/unrealized:		
Included in earnings	(9,321)	(a)
Transfers out of Level 3	(14,804)	(b)
Balance — September 30, 2022	$ (48,306)	
Changes in unrealized gains included in earnings related to assets still held at September 30, 2022	$ (17,160)	(a)
2021		
Balance — June 30, 2021	$ 35,666	
Total gains realized/unrealized:		
Included in earnings	44,152	(a)
Transfers out of Level 3	(59,673)	(b)
Balance — September 30, 2021	$ 20,145	
Changes in unrealized gains included in earnings related to assets still held at September 30, 2021	$ 18,196	(a)

(a) *Reported as mortgage banking revenues in the consolidated statement of income and includes the fair value of commitment issuances and expirations.*

(b) *Transfers out of Level 3 consist of interest rate locks transferred to closed loans.*

13. Fair value measurements, continued

The changes in Level 3 assets and liabilities measured at estimated fair value on a recurring basis during the nine months ended September 30, 2022 and 2021 were as follows:

	Investment Securities Available for Sale: Privately Issued Mortgage-Backed Securities	Other Assets and Other Liabilities	
2022	(In thousands)		
Balance — January 1, 2022	$ —	$ 6,440	
Total gains (losses) realized/unrealized:			
Included in earnings	—	(34,630)	(a)
Transfers out of Level 3	—	(20,116)	(b)
Balance — September 30, 2022	$ —	$ (48,306)	
Changes in unrealized gains included in earnings related to assets still held at September 30, 2022	$ —	$ (48,108)	(a)
2021			
Balance — January 1, 2021	$ 16	$ 43,234	
Total gains realized/unrealized:			
Included in earnings	—	102,489	(a)
Settlements	(16)	—	
Transfers out of Level 3	—	(125,578)	(b)
Balance — September 30, 2021	$ —	$ 20,145	
Changes in unrealized gains included in earnings related to assets still held at September 30, 2021	$ —	$ 21,722	(a)

(a) *Reported as mortgage banking revenues in the consolidated statement of income and includes the fair value of commitment issuances and expirations.*

(b) *Transfers out of Level 3 consist of interest rate locks transferred to closed loans.*

13. Fair value measurements, continued

The Company is required, on a nonrecurring basis, to adjust the carrying value of certain assets or provide valuation allowances related to certain assets using fair value measurements. The more significant of those assets follow.

Loans

Loans are generally not recorded at fair value on a recurring basis. Periodically, the Company records nonrecurring adjustments to the carrying value of loans based on fair value measurements for partial charge-offs of the uncollectable portions of those loans. Nonrecurring adjustments also include certain impairment amounts for collateral-dependent loans when establishing the allowance for credit losses. Such amounts are generally based on the fair value of the underlying collateral supporting the loan and, as a result, the carrying value of the loan less the calculated valuation amount does not necessarily represent the fair value of the loan. Real estate collateral is typically valued using appraisals or other indications of value based on recent comparable sales of similar properties or assumptions generally observable in the marketplace and the related nonrecurring fair value measurement adjustments have been classified as Level 2, unless significant adjustments have been made to the valuation that are not readily observable by market participants. Non-real estate collateral supporting commercial loans generally consists of business assets such as receivables, inventory and equipment. Fair value estimations are typically determined by discounting recorded values of those assets to reflect estimated net realizable value considering specific borrower facts and circumstances and the experience of credit personnel in their dealings with similar borrower collateral liquidations. Such discounts were in the range of 15% to 90% with a weighted-average of 37% at September 30, 2022. As these discounts are not readily observable and are considered significant, the valuations have been classified as Level 3. Automobile collateral is typically valued by reference to independent pricing sources based on recent sales transactions of similar vehicles and, accordingly, the related nonrecurring fair value measurement adjustments have been classified as Level 2. Collateral values for other consumer installment loans are generally estimated based on historical recovery rates for similar types of loans which at September 30, 2022 was 66%. As these recovery rates are not readily observable by market participants, such valuation adjustments have been classified as Level 3. Loans subject to nonrecurring fair value measurement were $706 million at September 30, 2022 ($439 million and $267 million of which were classified as Level 2 and Level 3, respectively), $574 million at December 31, 2021 ($340 million and $234 million of which were classified as Level 2 and Level 3, respectively) and $591 million at September 30, 2021 ($330 million and $261 million of which were classified as Level 2 and Level 3, respectively). Changes in fair value recognized for partial charge-offs of loans and loan impairment reserves on loans held by the Company on September 30, 2022 were decreases of $38 million and $128 million for the three-month and nine-month periods ended September 30, 2022, respectively. Changes in fair value recognized for partial charge-offs of loans and loan impairment reserves on loans held by the Company on September 30, 2021 were decreases of $35 million and $125 million for the three-month and nine-month periods ended September 30, 2021, respectively.

13. Fair value measurements, continued

Assets taken in foreclosure of defaulted loans

Assets taken in foreclosure of defaulted loans are primarily comprised of commercial and residential real property and are generally measured at the lower of cost or fair value less costs to sell. The fair value of the real property is generally determined using appraisals or other indications of value based on recent comparable sales of similar properties or assumptions generally observable in the marketplace and the related nonrecurring fair value measurement adjustments have generally been classified as Level 2. Assets taken into foreclosure of defaulted loans subject to nonrecurring fair value measurement were not material at September 30, 2022 and 2021. Changes in fair value recognized for foreclosed assets held by the Company were not material during the three-month and nine-month periods ended September 30, 2022 and 2021.

Capitalized servicing rights

Capitalized servicing rights are initially measured at fair value in the Company's consolidated balance sheet. The Company utilizes the amortization method to subsequently measure its capitalized servicing assets. In accordance with GAAP, the Company must record impairment charges, on a nonrecurring basis, when the carrying value of certain strata exceed their estimated fair value. To estimate the fair value of servicing rights, the Company considers market prices for similar assets, if available, and the present value of expected future cash flows associated with the servicing rights calculated using assumptions that market participants would use in estimating future servicing income and expense. Such assumptions include estimates of the cost of servicing loans, loan default rates, an appropriate discount rate, and prepayment speeds. For purposes of evaluating and measuring impairment of capitalized servicing rights, the Company stratifies such assets based on the predominant risk characteristics of the underlying financial instruments that are expected to have the most impact on projected prepayments, cost of servicing and other factors affecting future cash flows associated with the servicing rights. Such factors may include financial asset or loan type, note rate and term. The amount of impairment recognized is the amount by which the carrying value of the capitalized servicing rights for a stratum exceed estimated fair value. Impairment is recognized through a valuation allowance. The determination of fair value of capitalized servicing rights is considered a Level 3 valuation. Capitalized servicing rights related to residential mortgage loans of $138 million at December 31, 2021 required a valuation allowance of $24 million. Significant unobservable inputs used in this Level 3 valuation included a weighted-average prepayment speed of 14.64% and a weighted-average option-adjusted spread of 900 basis points at December 31, 2021. Changes in fair value recognized for impairment of capitalized servicing rights were decreases in the valuation allowance of $10 million and $24 million, respectively, for the three-month and nine-month periods ended September 30, 2022 and $1 million during the nine-month period ended September 30, 2021.

Significant unobservable inputs to Level 3 measurements

The following table presents quantitative information about significant unobservable inputs used in the fair value measurements for certain Level 3 assets and liabilities at September 30, 2022 and December 31, 2021:

	Fair Value (In thousands)	Valuation Technique	Unobservable Inputs/Assumptions	Range (Weighted-Average)
September 30, 2022				
Recurring fair value measurements				
Net other assets (liabilities) (a)	$ (48,306)	Discounted cash flow	Commitment expirations	0% - 90% (4%)
December 31, 2021				
Recurring fair value measurements				
Net other assets (liabilities) (a)	$ 6,440	Discounted cash flow	Commitment expirations	0% - 80% (10%)

(a) Other Level 3 assets (liabilities) consist of commitments to originate real estate loans.

13. Fair value measurements, continued

Sensitivity of fair value measurements to changes in unobservable inputs

An increase (decrease) in the estimate of expirations for commitments to originate real estate loans would generally result in a lower (higher) fair value measurement. Estimated commitment expirations are derived considering loan type, changes in interest rates and remaining length of time until closing.

Disclosures of fair value of financial instruments

The carrying amounts and estimated fair value for financial instrument assets (liabilities) are presented in the following tables:

	September 30, 2022				
	Carrying Amount	Estimated Fair Value	Level 1	Level 2	Level 3
			(In thousands)		
Financial assets:					
Cash and cash equivalents	$ 2,255,810	2,255,810	2,115,730	140,080	—
Interest-bearing deposits at banks	25,391,528	25,391,528	—	25,391,528	—
Trading account	129,672	129,672	129,672	—	—
Investment securities	24,603,765	23,259,558	184,811	23,021,349	53,398
Loans and leases:					
Commercial loans and leases	38,807,949	38,230,478	—	—	38,230,478
Commercial real estate loans	46,138,665	44,324,720	—	300,373	44,024,347
Residential real estate loans	23,074,280	21,173,522	—	7,262,522	13,911,000
Consumer loans	20,204,693	19,844,173	—	—	19,844,173
Allowance for credit losses	(1,875,591)	—	—	—	—
Loans and leases, net	126,349,996	123,572,893	—	7,562,895	116,009,998
Accrued interest receivable	539,270	539,270	—	539,270	—
Financial liabilities:					
Noninterest-bearing deposits	$ (73,023,271)	(73,023,271)	—	(73,023,271)	—
Savings and interest-checking deposits	(86,015,700)	(86,015,700)	—	(86,015,700)	—
Time deposits	(4,806,417)	(4,797,112)	—	(4,797,112)	—
Short-term borrowings	(917,806)	(917,806)	—	(917,806)	—
Long-term borrowings	(3,459,336)	(3,431,790)	—	(3,431,790)	—
Accrued interest payable	(38,502)	(38,502)	—	(38,502)	—
Other financial instruments:					
Commitments to originate real estate loans for sale	$ (48,306)	(48,306)	—	—	(48,306)
Commitments to sell real estate loans	74,527	74,527	—	74,527	—
Other credit-related commitments	(135,000)	(135,000)	—	—	(135,000)
Interest rate swap agreements used for interest rate risk management	(11,495)	(11,495)	—	(11,495)	—
Interest rate and foreign exchange contracts not designated as hedging instruments	(1,004,223)	(1,004,223)	—	(1,004,223)	—

13. Fair value measurements, continued

	December 31, 2021				
	Carrying Amount	Estimated Fair Value	Level 1	Level 2	Level 3
			(In thousands)		
Financial assets:					
Cash and cash equivalents	$ 1,337,577	1,337,577	1,205,269	132,308	—
Interest-bearing deposits at banks	41,872,304	41,872,304	—	41,872,304	—
Trading account	49,745	49,745	49,545	200	—
Investment securities	7,155,860	7,192,476	68,850	7,066,293	57,333
Loans and leases:					
Commercial loans and leases	23,473,324	23,285,224	—	—	23,285,224
Commercial real estate loans	35,389,730	34,730,191	—	425,010	34,305,181
Residential real estate loans	16,074,445	16,160,799	—	4,524,018	11,636,781
Consumer loans	17,974,953	18,121,363	—	—	18,121,363
Allowance for credit losses	(1,469,226)	—	—	—	—
Loans and leases, net	91,443,226	92,297,577	—	4,949,028	87,348,549
Accrued interest receivable	335,162	335,162	—	335,162	—
Financial liabilities:					
Noninterest-bearing deposits	$ (60,131,480)	(60,131,480)	—	(60,131,480)	—
Savings and interest-checking deposits	(68,603,966)	(68,603,966)	—	(68,603,966)	—
Time deposits	(2,807,963)	(2,810,143)	—	(2,810,143)	—
Short-term borrowings	(47,046)	(47,046)	—	(47,046)	—
Long-term borrowings	(3,485,369)	(3,562,223)	—	(3,562,223)	—
Accrued interest payable	(40,866)	(40,866)	—	(40,866)	—
Other financial instruments:					
Commitments to originate real estate loans for sale	$ 6,440	6,440	—	—	6,440
Commitments to sell real estate loans	7,525	7,525	—	7,525	—
Other credit-related commitments	(123,032)	(123,032)	—	—	(123,032)
Interest rate swap agreements used for interest rate risk management	(207)	(207)	—	(207)	—
Interest rate and foreign exchange contracts not designated as hedging instruments	334,852	334,852	—	334,852	—

With the exception of marketable securities, certain off-balance sheet financial instruments and mortgage loans originated for sale, the Company’s financial instruments are not readily marketable and market prices do not exist. The Company, in attempting to comply with the provisions of GAAP that require disclosures of fair value of financial instruments, has not attempted to market its financial instruments to potential buyers, if any exist. Since negotiated prices in illiquid markets depend greatly upon the then present motivations of the buyer and seller, it is reasonable to assume that actual sales prices could vary widely from any estimate of fair value made without the benefit of negotiations. Additionally, changes in market interest rates can dramatically impact the value of financial instruments in a short period of time.

The Company does not believe that the estimated information presented herein is representative of the earnings power or value of the Company. The preceding analysis, which is inherently limited in depicting fair value, also does not consider any value associated with existing customer relationships nor the ability of the Company to create value through loan origination, deposit gathering or fee generating activities. Many of the estimates presented herein are based upon the use of highly subjective information and assumptions and, accordingly, the results may not be precise. Management believes that fair value estimates may not be comparable between financial institutions due to the wide range of permitted valuation techniques and numerous estimates which must be made. Furthermore, because the disclosed fair value amounts were estimated as of the balance sheet date, the amounts actually realized or paid upon maturity or settlement of the various financial instruments could be significantly different.

14. Commitments and contingencies

In the normal course of business, various commitments and contingent liabilities are outstanding. The following table presents the Company's significant commitments. Certain of these commitments are not included in the Company's consolidated balance sheet.

	September 30, 2022	December 31, 2021
	(In thousands)	
Commitments to extend credit		
Home equity lines of credit	$ 8,317,141	$ 5,693,045
Commercial real estate loans to be sold	401,369	324,943
Other commercial real estate	5,063,155	4,998,631
Residential real estate loans to be sold	57,155	233,257
Other residential real estate	889,013	924,211
Commercial and other	32,089,753	22,145,057
Standby letters of credit	2,393,048	2,151,595
Commercial letters of credit	28,926	31,981
Financial guarantees and indemnification contracts	3,893,455	4,211,797
Commitments to sell real estate loans	783,405	1,367,523

Commitments to extend credit are agreements to lend to customers, generally having fixed expiration dates or other termination clauses that may require payment of a fee. In addition to the amounts in the preceding table, the Company had discretionary funding commitments to commercial customers of $15.2 billion and $10.8 billion at September 30, 2022 and December 31, 2021, respectively, that the Company had the unconditional right to cancel prior to funding. Standby and commercial letters of credit are conditional commitments issued to guarantee the performance of a customer to a third party. Standby letters of credit generally are contingent upon the failure of the customer to perform according to the terms of the underlying contract with the third party, whereas commercial letters of credit are issued to facilitate commerce and typically result in the commitment being funded when the underlying transaction is consummated between the customer and a third party. The credit risk associated with commitments to extend credit and standby and commercial letters of credit is essentially the same as that involved with extending loans to customers and is subject to normal credit policies. Collateral may be obtained based on management's assessment of the customer's creditworthiness.

Financial guarantees and indemnification contracts are predominantly comprised of recourse obligations associated with sold loans and other guarantees and commitments. Included in financial guarantees and indemnification contracts are loan principal amounts sold with recourse in conjunction with the Company's involvement in the Fannie Mae Delegated Underwriting and Servicing program. The Company's maximum credit risk for recourse associated with loans sold under this program totaled approximately $3.7 billion at September 30, 2022 and $4.0 billion at December 31, 2021. There have been no material losses incurred as a result of those credit recourse arrangements.

Since many loan commitments, standby letters of credit, and guarantees and indemnification contracts expire without being funded in whole or in part, the contract amounts are not necessarily indicative of future cash flows.

The Company utilizes commitments to sell real estate loans to hedge exposure to changes in the fair value of real estate loans held for sale. Such commitments are accounted for as derivatives and along with commitments to originate real estate loans to be held for sale are generally recorded in the consolidated balance sheet at estimated fair market value.

14. Commitments and contingencies, continued

The Company is contractually obligated to repurchase previously sold residential real estate loans that do not ultimately meet investor sale criteria related to underwriting procedures or loan documentation. When required to do so, the Company may reimburse loan purchasers for losses incurred or may repurchase certain loans. The Company reduces residential mortgage banking revenues by an estimate for losses related to its obligations to loan purchasers. The amount of those charges is based on the volume of loans sold, the level of reimbursement requests received from loan purchasers and estimates of losses that may be associated with previously sold loans. At September 30, 2022, the Company believes that its obligation to loan purchasers was not material to the Company's consolidated financial position.

M&T and its subsidiaries are subject in the normal course of business to various pending and threatened legal proceedings and matters in which claims for monetary damages are asserted. On an on-going basis management, after consultation with legal counsel, assesses the Company's liabilities and contingencies in connection with such proceedings. For those matters where it is probable that the Company will incur losses and the amounts of the losses can be reasonably estimated, the Company records an expense and corresponding liability in its consolidated financial statements. To the extent pending or threatened litigation could result in exposure in excess of that liability, the amount of such excess is not currently estimable. Although not considered probable, the range of reasonably possible losses for such matters in the aggregate, beyond the existing recorded liability, was between $0 and $25 million as of September 30, 2022. Although the Company does not believe that the outcome of pending legal matters will be material to the Company's consolidated financial position, it cannot rule out the possibility that such outcomes will be material to the consolidated results of operations for a particular reporting period in the future.

15. Segment information

Reportable segments have been determined based upon the Company's internal profitability reporting system, which is organized by strategic business unit. Certain strategic business units have been combined for segment information reporting purposes where the nature of the products and services, the type of customer and the distribution of those products and services are similar. The reportable segments are Business Banking, Commercial Banking, Commercial Real Estate, Discretionary Portfolio, Residential Mortgage Banking and Retail Banking.

The financial information of the Company's segments was compiled utilizing the accounting policies described in note 23 of Notes to Financial Statements in the 2021 Annual Report. The management accounting policies and processes utilized in compiling segment financial information are highly subjective and, unlike financial accounting, are not based on authoritative guidance similar to GAAP. As a result, the financial information of the reported segments is not necessarily comparable with similar information reported by other financial institutions. Furthermore, changes in management structure or allocation methodologies and procedures may result in changes in reported segment financial data. Information about the Company's segments follows.

15. Segment information, continued

	Three Months Ended September 30					
	2022			2021		
	Total Revenues(a)	Inter-segment Revenues	Net Income (Loss)	Total Revenues(a)	Inter-segment Revenues	Net Income (Loss)
	(In thousands)					
Business Banking	$ 241,629	$ 663	$ 94,094	$ 181,873	$ 694	$ 72,017
Commercial Banking	510,549	802	214,063	295,209	1,009	144,367
Commercial Real Estate	234,479	249	94,937	228,317	227	84,663
Discretionary Portfolio	36,622	(23,044)	11,813	112,529	(14,448)	74,666
Residential Mortgage Banking	95,091	35,647	(3,283)	159,213	25,150	46,077
Retail Banking	650,229	(5)	181,639	357,335	(53)	88,004
All Other	473,171	(14,312)	53,333	201,900	(12,579)	(14,334)
Total	$ 2,241,770	$ —	$ 646,596	$ 1,536,376	$ —	$ 495,460

	Nine Months Ended September 30					
	2022			2021		
	Total Revenues(a)	Inter-segment Revenues	Net Income (Loss)	Total Revenues(a)	Inter-segment Revenues	Net Income (Loss)
	(In thousands)					
Business Banking	$ 586,605	$ 2,060	$ 205,741	$ 482,874	$ 2,157	$ 159,895
Commercial Banking (b)	1,239,300	2,605	521,749	865,780	2,830	378,040
Commercial Real Estate	676,176	687	314,284	629,719	679	242,625
Discretionary Portfolio	190,761	(74,952)	103,283	365,380	(34,554)	243,744
Residential Mortgage Banking	346,409	110,986	35,028	459,655	70,208	125,791
Retail Banking (b)	1,523,992	(12)	379,688	1,055,240	500	262,562
All Other (b)	1,106,405	(41,374)	(333,481)	620,694	(41,820)	(11,879)
Total	$ 5,669,648	$ —	$ 1,226,292	$ 4,479,342	$ —	$ 1,400,778

(a) *Total revenues are comprised of net interest income and other income. Net interest income is the difference between taxable-equivalent interest earned on assets and interest paid on liabilities owed by a segment and a funding charge (credit) based on the Company's internal funds transfer and allocation methodology. Segments are charged a cost to fund any assets (e.g. loans) and are paid a funding credit for any funds provided (e.g. deposits). The taxable-equivalent adjustment aggregated $11,827,000 and $3,703,000 for the three-month periods ended September 30, 2022 and 2021, respectively, and $25,787,000 and $11,168,000 for the nine-month periods ended September 30, 2022 and 2021, respectively, and is eliminated in "All Other" total revenues. Intersegment revenues are included in total revenues of the reportable segments. The elimination of intersegment revenues is included in the determination of "All Other" total revenues.*

(b) *During the three months ended September 30, 2022, the Company transferred most financial records and processes associated with People's United to the Company's data systems and processes. Additionally during that period the Company transferred certain acquired operations to the Commercial Banking segment from other segments. Revenues and net income related to those operations were $96.0 million and $32.6 million in the three months ended June 30, 2022 and have been reclassified in the financial data presented herein for the nine months ended September 30, 2022.*

	Average Total Assets		
	Nine Months Ended September 30		Year Ended December 31
	2022	2021	2021
	(In millions)		
Business Banking	$ 7,515	$ 8,386	$ 8,007
Commercial Banking	40,464	29,109	28,559
Commercial Real Estate	28,811	25,913	25,628
Discretionary Portfolio	40,987	22,317	22,262
Residential Mortgage Banking	4,370	6,582	6,463
Retail Banking	20,063	17,701	17,897
All Other	45,185	40,959	43,853
Total	$ 187,395	$ 150,967	$ 152,669

16. Relationship with Bayview Lending Group LLC and Bayview Financial Holdings, L.P.

M&T holds a 20% minority interest in Bayview Lending Group LLC ("BLG"), a privately-held commercial mortgage company. That investment had no remaining carrying value at September 30, 2022 as a result of cumulative losses recognized and cash distributions received in prior years. Cash distributions now received from BLG are recognized as income by M&T and included in other revenues from operations. That income totaled $30 million for the nine-month period ended September 30, 2022. There was no similar cash distribution during the nine-month period ended September 30, 2021 or in the three-month period ended September 30, 2022.

Bayview Financial Holdings, L.P. (together with its affiliates, "Bayview Financial"), a privately-held specialty finance company, is BLG's majority investor. In addition to their common investment in BLG, the Company and Bayview Financial conduct other business activities with each other. The Company has obtained loan servicing rights for mortgage loans from BLG and Bayview Financial having outstanding principal balances of $1.4 billion and $1.6 billion at September 30, 2022 and December 31, 2021, respectively. Revenues from those servicing rights were $3 million and $2 million in the three-month periods ended September 30, 2022 and 2021, respectively, and $7 million for each of the nine-month periods ended September 30, 2022 and 2021. The Company sub-services residential mortgage loans for Bayview Financial having outstanding principal balances of $81.2 billion and $74.7 billion at September 30, 2022 and December 31, 2021, respectively. Revenues earned for sub-servicing loans for Bayview Financial were $33 million and $39 million for the three-month periods ended September 30, 2022 and 2021, respectively, and $119 million and $110 million in the nine-month periods ended September 30, 2022 and 2021, respectively. In addition, the Company held $52 million and $62 million of mortgage-backed securities in its held-to-maturity portfolio at September 30, 2022 and December 31, 2021, respectively, that were securitized by Bayview Financial. At September 30, 2022, the Company held $298 million of Bayview Financial's $2.0 billion syndicated loan facility. The Company held $210 million of Bayview Financial's $1.4 billion syndicated loan facility at December 31, 2021.

17. Recent accounting developments

The following table provides a description of accounting standards that were adopted by the Company in 2022 as well as standards that are not effective that could have an impact to M&T's consolidated financial statements upon adoption.

Standard	Description	Required date of adoption	Effect on consolidated financial statements
Standards Adopted in 2022			
Changes to Accounting for Convertible Instruments and Contracts in an Entity's Own Equity	The amendments reduce the number of accounting models for convertible debt instruments and convertible preferred stock. The amendments also reduce form-over-substance-based guidance for the derivatives scope exception for contracts in an entity's own equity.	January 1, 2022	At January 1, 2022 the Company did not have the types of instruments affected by the amended guidance and, therefore, the adoption had no impact on its consolidated financial statements.
Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options	The amendments clarify and reduce diversity in an issuer's accounting for modifications or exchanges of freestanding equity-classified written call options (for example, warrants) that remain equity classified after modification or exchange.	January 1, 2022	At January 1, 2022 the Company did not have the types of instruments affected by the amended guidance and, therefore, the adoption had no impact on its consolidated financial statements.
Lessor's Accounting for Certain Leases with Variable Lease Payments	The amendments update the classification guidance for lessors. Under the amended guidance lessors should classify and account for a lease with variable lease payments that do not depend on a reference index or a rate as an operating lease if both of the following criteria are met: 1. The lease would have been classified as a sales-type lease or a direct financing lease. 2. The lessor would have otherwise recognized a day-one loss. When a lease is classified as operating, the lessor does not recognize a net investment in the lease, does not derecognize the underlying asset, and, therefore, does not recognize a selling profit or loss.	January 1, 2022	The Company adopted the amended guidance effective January 1, 2022 using a prospective transition method. The adoption did not have a material impact on the Company's consolidated financial statements.

17. Recent accounting developments, continued

Standard	Description	Required date of adoption	Effect on consolidated financial statements
Standards Not Yet Adopted as of September 30, 2022			
Accounting for Contract Assets and Contract Liabilities from Contracts with Customers in a Business Combination	The amendments require that an entity (acquirer) recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with specified revenue recognition guidance. At the acquisition date, an acquirer should account for the related revenue contracts as if it had originated the contracts and may assess how the acquiree applied the revenue guidance to determine what to record for such contracts. The guidance is generally expected to result in an acquirer recognizing and measuring the acquired contract assets and contract liabilities consistent with how they were recognized and measured in the acquiree's financial statements.	January 1, 2023 Early adoption permitted	The amendments should be applied prospectively to business combinations occurring on or after the effective date of the amendments. However, if early adoption is elected, the amendments should be applied (1) retrospectively to all business combinations for which the acquisition date occurs on or after the beginning of the fiscal year that includes the interim period of early application and (2) prospectively to all business combinations that occur on or after the date of initial application. The Company does not expect the guidance will have a material impact on its consolidated financial statements.
Fair Value Hedging of Multiple Hedge Layers under Portfolio Layer Method	The amendments allow multiple hedged layers to be designated for a single closed portfolio of financial assets or one or more beneficial interests secured by a portfolio of financial instruments. If multiple hedged layers are designated, the amendments require an analysis to be performed to support the expectation that the aggregate amount of the hedged layers is anticipated to be outstanding for the designated hedge periods. Only closed portfolios may be hedged under the portfolio layer method (that is, no assets can be added to the closed portfolio once established), however designating new hedging relationships and dedesignating existing hedging relationships associated with the closed portfolio any time after the closed portfolio is established is permitted.	January 1, 2023 Early adoption permitted	The amendments should be applied on a modified retrospective basis by means of a cumulative-effect adjustment to the opening balance of retained earnings on the initial application date. The Company does not expect the guidance will have a material impact on its consolidated financial statements.
Accounting for Troubled Debt Restructurings (TDRs) and Expansion of Vintage Disclosures Applicable to Credit Losses	The amendments (1) eliminate the accounting guidance for TDRs and require enhanced disclosure for certain loan refinancings by creditors when a borrower is experiencing financial difficulty and (2) require disclosure of current-period gross write-offs by year of origination for financing receivables and net investments in leases within credit loss disclosures.	January 1, 2023 Early adoption permitted	The amendments should be applied prospectively, except for the amendments related to the recognition and measurement of TDRs for which an option is permitted to apply a modified retrospective transition method. Under the amended guidance the Company will no longer be required to identify TDRs and apply specialized accounting to such loans. The Company does not expect the guidance will have a material impact on its consolidated financial statements outside of the modified disclosure requirements.
Fair Value Measurement of Equity Securities Subject to Contractual Sale Restrictions	The amendments clarify that a contractual restriction on the sale of an equity security is not considered part of the unit of account of the equity security and, therefore, is not considered in measuring fair value. The amendments also clarify that an entity cannot, as a separate unit of account, recognize and measure a contractual sale restriction. In addition, the amendments require the following disclosures for equity securities subject to contractual sale restrictions: 1. The fair value of equity securities subject to contractual sale restrictions reflected in the balance sheet; 2. The nature and remaining duration of the restriction(s); and 3. The circumstances that could cause a lapse in the restriction(s).	January 1, 2024 Early adoption permitted	The amendments should be applied prospectively with any adjustments from the adoption of the amendments recognized in earnings and disclosed on the date of adoption. The Company does not expect the guidance will have a material impact on its consolidated financial statements.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations.

Overview

M&T Bank Corporation ("M&T") had net income of $647 million in the third quarter of 2022, compared with $495 million in the corresponding quarter of 2021 and $218 million in the second quarter of 2022. Diluted and basic earnings per common share were $3.53 and $3.55, respectively, in the recent quarter, $3.69 and $3.70, respectively, in the third quarter of 2021 and were each $1.08 in the second quarter of 2022. M&T's second and third quarter results each reflect a full-quarter impact of its April 1, 2022 acquisition of People's United Financial, Inc. ("People's United"). The after-tax impact of merger-related expenses was $39 million ($53 million pre-tax) or $.22 of basic and diluted earnings per common share in the recent quarter, $7 million ($9 million pre-tax) or $.05 of basic and diluted earnings per common share in the third quarter of 2021 and $346 million ($465 million pre-tax) or $1.94 of basic and diluted earnings per common share in the second quarter of 2022. Such expenses included professional services and other temporary help fees associated with conversions of systems and/or integration of operations, costs related to terminations of existing contractual arrangements to purchase various services, severance, travel costs and, in the second quarter of 2022, an initial provision for credit losses on loans not deemed to be purchased credit deteriorated ("PCD") on April 1, 2022. Net income aggregated $1.23 billion or $7.14 of diluted and $7.18 of basic earnings per common share in the first nine months of 2022, compared with $1.40 billion or $10.43 of diluted and $10.44 of basic earnings per common share in the corresponding 2021 period. Merger-related expenses were $398 million ($535 million pre-tax) or $2.46 of basic and diluted earnings per common share in the nine months ended September 30, 2022 and $17 million ($23 million pre-tax) or $.13 of basic and diluted earnings per common share in the nine months ended September 30, 2021.

The annualized rate of return on average total assets for M&T and its consolidated subsidiaries ("the Company") in each of the third quarters of 2022 and 2021 was 1.28% compared with .42% in the second quarter of 2022. The annualized rate of return on average common shareholders' equity was 10.43% in the recent quarter, 12.16% in the third quarter of 2021 and 3.21% in the second quarter of 2022. During the nine-month period ended September 30, 2022, the annualized rates of return on average assets and average common shareholders' equity were .87% and 7.24%, respectively, compared with 1.24% and 11.76%, respectively, in the corresponding period of 2021.

On April 1, 2022, the Company closed the acquisition of People's United resulting in the issuance of 50,325,004 common shares. Pursuant to the terms of the merger agreement, People's United shareholders received consideration valued at .118 of an M&T common share in exchange for each common share of People's United. The purchase price totaled approximately $8.4 billion (with the price based on M&T's closing price of $164.66 per share as of April 1, 2022). Additionally, People's United outstanding preferred stock was converted into new shares of Series H preferred stock of M&T.

The People's United transaction has been accounted for using the acquisition method of accounting and, accordingly, assets acquired, liabilities assumed, and consideration exchanged were recorded at estimated fair value on the acquisition date. M&T preliminarily recorded assets acquired of $64.2 billion, including $35.8 billion of loans and leases and $11.6 billion of investment securities, and liabilities assumed totaling $55.5 billion, including $53.0 billion of deposits. The transaction added $8.4 billion to M&T's common shareholders' equity and $261 million to preferred equity. In connection with the acquisition the Company recorded $3.9 billion of goodwill and $261 million of core deposit and other intangible assets. The acquisition of People's United formed a banking franchise with approximately $200 billion in assets serving communities in the Northeast and Mid-Atlantic from Maine to Virginia, including Washington, D.C. M&T completed the transfer of most financial records of People's United to M&T's core operating systems in the recent quarter.

On July 19, 2022 the Company's Board of Directors authorized a program to repurchase up to $3.0 billion of M&T's common stock. The action replaced the previous program under which the repurchases in the second quarter of 2022 were conducted. In accordance with the program and its capital plan, M&T repurchased 3,282,449 shares of its common stock during the recent quarter at an average cost per share of $182.79 resulting in a total cost of $600 million. During the first nine months of 2022, M&T repurchased 6,788,395 shares of its common stock at an average cost per share of $176.77 resulting in a total cost of $1.2 billion.

Supplemental Reporting of Non-GAAP Results of Operations

M&T consistently provides supplemental reporting of its results on a “net operating” or “tangible” basis, from which M&T excludes the after-tax effect of amortization of core deposit and other intangible assets (and the related goodwill, core deposit intangible and other intangible asset balances, net of applicable deferred tax amounts) and gains (when realized) and expenses (when incurred) associated with merging acquired operations into the Company, since such items are considered by management to be “nonoperating” in nature. Although “net operating income” as defined by M&T is not a GAAP measure, M&T’s management believes that this information helps investors understand the effect of acquisition activity in reported results.

Net operating income totaled $700 million in the third quarter of 2022, compared with $504 million in the year-earlier quarter and $578 million in the second 2022 quarter. Diluted net operating earnings per common share in the third quarters of 2022 and 2021 were $3.83 and $3.76, respectively, compared with $3.10 in the second quarter of 2022. For the first nine months of 2022, net operating income and diluted net operating earnings per common share were $1.65 billion and $9.78, respectively, compared with $1.42 billion and $10.61, respectively, in the first nine months of 2021.

Net operating income in the recent quarter expressed as an annualized rate of return on average tangible assets was 1.44%, compared with 1.34% in the third quarter of 2021 and 1.16% in 2022’s second quarter. Net operating income represented an annualized return on average tangible common equity of 17.89% in the third quarter of 2022, 17.54% in the year-earlier quarter and 14.41% in the second quarter of 2022. For the first nine months of 2022, net operating income represented an annualized return on average tangible assets and average tangible common shareholders’ equity of 1.23% and 15.13%, respectively, compared with 1.30% and 17.10%, respectively, in the corresponding 2021 period.

Reconciliations of GAAP amounts with corresponding non-GAAP amounts are provided in table 2.

Taxable-equivalent Net Interest Income

Taxable-equivalent net interest income was $1.69 billion in the third quarter of 2022, 74% higher than $971 million recorded in the year-earlier quarter. That increase reflects the impact of $42.0 billion in additional average earning assets predominantly resulting from the People's United transaction, and a 94 basis point (hundredths of one percent) expansion of the net interest margin, or taxable-equivalent net interest income expressed as an annualized percentage of average earning assets, to 3.68% in the recent quarter from 2.74% in the third quarter of 2021. That increase resulted from higher yields on loans, deposits at the Federal Reserve Bank ("FRB") of New York, and investment securities, partially offset by a 27 basis point increase in the rates paid on interest-bearing liabilities. Taxable-equivalent net interest income in the recent quarter increased $268 million from the second quarter of 2022 reflecting an increase in the net interest margin in the recent quarter from 3.01% in the prior quarter. For the first nine months of 2022, taxable-equivalent net interest income was $4.02 billion, up 39% from $2.90 billion in the corresponding 2021 period. The increase was largely attributable to the higher level of earning assets, including the impact of the People's United transaction, and a 32 basis point widening of the net interest margin to 3.15% in the 2022 period from 2.83% in the year-earlier period. The higher net interest margin in the recent periods is generally reflective of a rising interest rate environment resulting from actions taken by the Federal Reserve to raise interest rates in an attempt to temper inflationary pressures on the U.S. economy.

Average loans and leases totaled $127.5 billion in the third quarter of 2022, up $32.2 billion or 34% from $95.3 billion in the similar quarter of 2021. Included in average loans and leases in the recent quarter were loans obtained in the People's United acquisition. Loans acquired from People's United totaled $35.8 billion on the April 1, 2022 acquisition date and consisted of approximately $13.6 billion of commercial loans and leases, $13.5 billion of commercial real estate loans, $7.1 billion of residential real estate loans and $1.6 billion of consumer loans. Including the impact of the acquired loan balances, commercial loans and leases averaged $38.3 billion in the recent quarter, $14.6 billion or 61% higher than in the year-earlier quarter. Partially offsetting the increase from acquired loans was a reduction in average balances of Paycheck Protection Program (“PPP”) loans, reflecting loan repayments by the Small Business Administration. PPP loans averaged $241 million in the third quarter of 2022, compared with $3.3 billion in the third quarter of 2021. Average commercial real estate loans were $46.3 billion in the recent quarter, up

$8.7 billion or 23% from $37.5 billion in the corresponding quarter of 2021. That increase was predominantly due to the impact of loans obtained in the acquisition of People's United partially offset by a reduction in balances of construction and permanent mortgage loans, reflecting repayments by customers. Average residential real estate loans increased $6.6 billion or 40% to $23.0 billion in the third quarter of 2022 from $16.4 billion in the year-earlier quarter. The growth in residential real estate loans was largely attributable to the acquisition of loans from People's United and the Company's decision in the third quarter of 2021 to retain rather than sell most originated residential mortgage loans. Consumer loans averaged $20.0 billion in the third quarter of 2022, up $2.3 billion or 13% from $17.7 billion in the year-earlier quarter, reflecting the impact of loans obtained in the acquisition of People's United (that consisted predominantly of outstanding balances of home equity lines of credit) and growth in average recreational finance loans (consisting predominantly of loans secured by recreational vehicles and boats).

Average loan and lease balances in the third quarter of 2022 were $127.5 billion, little changed from $127.6 billion in the second quarter of 2022. Commercial loan and lease average balances in the recent quarter increased $504 million from $37.8 billion in the second quarter of 2022. Average commercial real estate loans in the third quarter of 2022 declined $946 million from $47.2 billion in the second quarter of 2022. Average balances of residential real estate loans in the recently completed quarter increased $201 million from $22.8 billion in 2022's second quarter. Average consumer loans in the recent quarter increased $167 million from $19.8 billion in 2022's second quarter. The accompanying table summarizes quarterly changes in the major components of the loan and lease portfolio.

AVERAGE LOANS AND LEASES
(net of unearned discount)

		Percent Increase (Decrease) from	
	Third Quarter 2022	Third Quarter 2021	Second Quarter 2022
	(In millions)		
Commercial, financial, etc.	$ 38,321	61 %	1 %
Real estate — commercial	46,282	23	(2)
Real estate — consumer	22,962	40	1
Consumer			
Recreational finance	8,626	9	4
Automobile	4,379	(4)	(5)
Home equity lines and loans	5,056	38	—
Other	1,899	25	5
Total consumer	19,960	13	1
Total	$ 127,525	34 %	— %

For the first nine months of 2022, average loans and leases totaled $115.9 billion, up 19% from $97.7 billion in the corresponding 2021 period. The impact of loans obtained in the People's United acquisition was the most significant factor for that increase offset, in part, by lower average balances of PPP loans of $549 million and $4.9 billion in the first nine months of 2022 and 2021, respectively.

The investment securities portfolio averaged $23.9 billion in the third quarter of 2022, up $17.9 billion from $6.0 billion in the year-earlier quarter and $1.6 billion higher than the $22.4 billion averaged in the second quarter of 2022. For the first nine months of 2022 and 2021, investment securities averaged $18.1 billion and $6.3 billion, respectively. The higher average balance in the recent periods reflect the acquisition of People's United, which added approximately $11.6 billion to the investment securities portfolio on April 1, 2022, and purchases of approximately $2.7 billion of investment securities during each of the quarters ended September 30, 2022, June 30, 2022 and March 31, 2022. The purchases in the first nine months of 2022 consisted predominantly of U.S. Treasury notes and fixed rate residential mortgage-backed securities. There were no significant sales of investment securities during the first nine months of 2022 or 2021. The Company routinely has increases and decreases in its holdings of capital stock of the Federal Home Loan Bank ("FHLB") of New York and the FRB of New York. Those holdings are accounted for at cost and are adjusted based on amounts of outstanding borrowings and available lines of credit with those entities.

The investment securities portfolio is largely comprised of residential mortgage-backed securities and shorter-term U.S. Treasury notes and, following the acquisition of People's United, municipal securities. When purchasing investment securities, the Company considers its liquidity position and its overall interest-rate risk profile as well as the adequacy of expected returns relative to risks assumed, including prepayments. The Company may occasionally sell investment securities as a result of changes in interest rates and spreads, actual or anticipated prepayments, credit risk associated with a particular security, or as a result of restructuring its investment securities portfolio in connection with a business combination. The amounts of investment securities held by the Company are influenced by such factors as available yield in comparison with alternative investments, demand for loans, which generally yield more than investment securities, ongoing repayments, the levels of deposits, and management of liquidity and balance sheet size and resulting capital ratios.

Fair value changes in equity securities with readily determinable fair values are recognized in the consolidated statement of income. Net unrealized losses on such equity securities were not significant in the third quarter of 2022, the second quarter of 2022 or the third quarter of 2021. Net unrealized losses for the first nine months of 2022 and 2021 were $2 million and $23 million, respectively. Those losses include changes in the value of the Company's holdings of Fannie Mae and Freddie Mac preferred stock.

The Company regularly reviews its debt investment securities for declines in value below amortized cost that might be indicative of credit-related losses. In light of such reviews, there were no credit-related losses on debt investment securities recognized in either of the nine-month periods ended September 30, 2022 or 2021. Based on management's assessment of future cash flows associated with individual investment securities as of September 30, 2022, the Company did not expect to incur any material credit-related losses in its portfolios of debt investment securities. Additional information about the investment securities portfolio is included in notes 3 and 13 of Notes to Financial Statements.

Other earning assets include interest-bearing deposits at the FRB of New York and other banks, trading account assets, federal funds sold and agreements to resell securities. Those other earning assets in the aggregate averaged $30.9 billion in the recently completed quarter, compared with $39.1 billion in the year-earlier quarter and $39.8 billion in the second quarter of 2022. Interest-bearing deposits at banks averaged $30.8 billion, $39.0 billion and $39.4 billion during the three months ended September 30, 2022, September 30, 2021 and June 30, 2022, respectively. The amounts of interest-bearing deposits at banks at the respective dates were predominantly comprised of deposits held at the FRB of New York. The decline in the recent quarter reflects actions taken by the Company including the purchases of investment securities and treasury stock and the management of select deposit relationships designed to reduce the balances of higher-cost deposit accounts. In general, the level of deposits held at the FRB of New York also fluctuates due to changes in deposits of commercial entities, trust-related deposits and additions to or maturities of investment securities or borrowings.

As a result of the changes described herein, average earning assets totaled $182.4 billion in the most recent quarter, compared with $140.4 billion in the third quarter of 2021 and $189.8 billion in the second quarter of 2022. Average earning assets totaled $170.4 billion and $137.3 billion during the first nine months of 2022 and 2021, respectively.

The most significant source of funding for the Company is core deposits. The Company considers noninterest-bearing deposits, interest-bearing transaction accounts, savings deposits and time deposits of $250,000 or less as core deposits. The Company's branch network is its principal source of core deposits, which generally carry lower interest rates than wholesale funds of comparable maturities. Average core deposits totaled $162.8 billion in the third quarter of 2022, up 28% from $127.1 billion in the similar 2021 quarter, but down 4% from $169.6 billion in the second quarter of 2022. The People's United acquisition added approximately $50.8 billion of core deposits on April 1, 2022, including $30.8 billion of savings and interest-checking deposits, $2.6 billion of time deposits and $17.4 billion of noninterest-bearing deposits. The decline in average core deposits in the recent quarter as compared with the second quarter of 2022 is largely reflective of the Company's initiative to reduce certain historically higher-cost deposits as well as customer reactions to the generally rising rate environment. The following table provides an analysis of quarterly changes in the components of average core deposits.

AVERAGE CORE DEPOSITS

	Third Quarter 2022	Percent Increase (Decrease) from Third Quarter 2021	Percent Increase (Decrease) from Second Quarter 2022
	(In millions)		
Savings and interest-checking deposits	$ 85,585	27 %	(6)%
Time deposits	4,313	60	(8)
Noninterest-bearing deposits	72,861	27	(2)
Total	$ 162,759	28 %	(4)%

The Company also receives funding from other deposit sources, including branch-related time deposits over $250,000, brokered deposits and, prior to June 30, 2021, deposits associated with the Company's Cayman Islands office. Time deposits over $250,000 averaged $681 million in the recent quarter, compared with $357 million in the third quarter of 2021 and $808 million in the second quarter of 2022. In the second quarter of 2021, the Company introduced a new interest-bearing sweep product (included in savings and interest-bearing deposits) that replaced the Eurodollar sweep product previously recorded as Cayman Islands office deposits. As a result, there are no longer deposits maintained at the Cayman Islands office and the office is closed. The Company had brokered savings and interest-bearing transaction accounts, which in the aggregate averaged $3.8 billion during each of the recent quarter and the third quarter of 2021 and $4.2 billion during the second quarter of 2022. Total uninsured deposits, including deposits associated with the People's United acquisition, were estimated to be $74.7 billion at September 30, 2022 and $69.1 billion at December 31, 2021.

The accompanying table summarizes average total deposits for the quarters ended September 30, 2022, June 30, 2022 and September 30, 2021.

AVERAGE DEPOSITS

	Retail	Trust	Commercial and Other	Total
	(In millions)			
Three Months Ended September 30, 2022				
Savings and interest-checking deposits	$ 51,196	$ 7,008	$ 31,156	$ 89,360
Time deposits	4,607	12	431	5,050
Noninterest-bearing deposits	14,414	10,927	47,520	72,861
Total	$ 70,217	$ 17,947	$ 79,107	$ 167,271
Three Months Ended June 30, 2022				
Savings and interest-checking deposits	$ 52,750	$ 6,852	$ 35,547	$ 95,149
Time deposits	5,001	17	462	5,480
Noninterest-bearing deposits	14,483	11,691	47,880	74,054
Total	$ 72,234	$ 18,560	$ 83,889	$ 174,683
Three Months Ended September 30, 2021				
Savings and interest-checking deposits	$ 34,344	$ 5,934	$ 30,698	$ 70,976
Time deposits	2,892	12	157	3,061
Noninterest-bearing deposits	8,557	12,022	36,639	57,218
Total	$ 45,793	$ 17,968	$ 67,494	$ 131,255

The Company also uses borrowings from banks, securities dealers, various Federal Home Loan Banks, the FRB of New York and others as sources of funding. Short-term borrowings represent borrowing arrangements that at the time they were entered into or were assumed in an acquisition had a contractual maturity of one year or less. Average short-term borrowings totaled $913 million in the third quarter of 2022, compared with $91 million in the year-earlier quarter and $1.1 billion in the second quarter of 2022. Short-term borrowings assumed in connection with the People's United acquisition totaled $895 million. In October 2022 M&T redeemed $500 million of unsecured senior notes due to mature in December 2022 that had been assumed in the acquisition of People's United and included in short-term borrowings.

Long-term borrowings averaged $3.3 billion in each of the two most recent quarters, compared with $3.4 billion in the third quarter of 2021. Average balances of the Company’s outstanding senior notes were $1.7 billion during each of the three months ended September 30, 2022 and June 30, 2022, compared with $2.4 billion in the third quarter of 2021. In August 2022, M&T issued $500 million of senior notes that mature in August 2028 and pay a fixed rate of 4.553% semi-annually until August 2027 after which the Secured Overnight Financing Rate ("SOFR") plus 1.78% will be paid quarterly until maturity. In April 2022, M&T Bank redeemed $650 million of fixed rate senior notes that were due to mature on May 18, 2022. During May 2022, $250 million of variable rate senior notes of M&T Bank matured. In January 2021, $350 million of variable rate senior notes matured. Subordinated capital notes included in long-term borrowings averaged $982 million in the third quarter of 2022, $500 million in the three-month period ended September 30, 2021 and $983 million in the second quarter of 2022. In March 2021, M&T Bank redeemed $500 million of subordinated capital notes. Junior subordinated debentures associated with trust preferred securities that were included in average long-term borrowings were $534 million, $530 million and $533 million during the third quarters of 2022 and 2021 and the second quarter of 2022, respectively. Additional information regarding junior subordinated debentures is provided in note 5 of Notes to Financial Statements. As of April 1, 2022, long-term borrowings assumed in the People's United acquisition totaled $494 million and included $483 million of fixed-rate subordinated notes and $11 million of FHLB advances.

The Company has utilized interest rate swap agreements to modify the repricing characteristics of certain components of its loans and long-term debt. As of September 30, 2022, interest rate swap agreements were used as fair value hedges of approximately $1.5 billion of outstanding fixed rate long-term borrowings. Additionally, interest rate swap agreements with a notional amount of $15.25 billion were used as cash flow hedges of interest payments associated with variable rate commercial real estate loans. Further information on interest rate swap agreements is provided herein and in note 11 of Notes to Financial Statements.

Changes in the composition of the Company’s earning assets and interest-bearing liabilities, as discussed herein, as well as changes in interest rates and spreads, can impact net interest income. Net interest spread, or the difference between the taxable-equivalent yield on earning assets and the rate paid on interest-bearing liabilities, was 3.49% in the recent quarter, up 81 basis points from 2.68% in the third quarter of 2021. The yield on earning assets during the third quarter of 2022 was 3.90%, up 108 basis points from 2.82% in the similar 2021 period, while the rate paid on interest-bearing liabilities increased 27 basis points to .41% in the recent quarter from .14% in the year-earlier period. In the second quarter of 2022, the net interest spread was 2.92%, the yield on earning assets was 3.12% and the rate paid on interest-bearing liabilities was .20%. The increases in the net interest spread since the third quarter of 2021 reflect the impact of generally rising interest rates that resulted in higher yields on loans and leases, deposits at the FRB of New York and investment securities, partially offset by higher rates on interest-bearing liabilities. For the first nine months of 2022, the net interest spread was 3.03%, up 27 basis points from 2.76% in the year-earlier period. The yield on earning assets and the rate paid on interest-bearing liabilities for the first nine months of 2022 were 3.30% and .27%, respectively, compared with 2.91% and .15%, respectively, in the initial nine months of 2021. The Federal Reserve raised its target Federal funds rate 3.00% since September 30, 2021, including hikes of 1.50% and 1.25% in the third quarter of 2022 and second quarter of 2022, respectively.

Net interest-free funds consist largely of noninterest-bearing demand deposits and shareholders’ equity, partially offset by bank owned life insurance and non-earning assets, including goodwill and core deposit and other intangible assets. Net interest-free funds averaged $83.8 billion in the third quarter of 2022, compared with $62.9 billion in the year-earlier quarter and $84.7 billion in the second quarter of 2022. During the first nine months of 2022 and 2021, average net interest-free funds aggregated $78.0 billion and $59.0 billion, respectively. The increases in average net interest-free funds in the recent quarter and the second quarter of 2022 as compared with third quarter of 2021 reflect higher average balances of noninterest-bearing deposits and shareholders’ equity that include the impact of the acquisition of People's United. Shareholders’ equity averaged $25.7 billion during the three-month period ended September 30, 2022, compared with $17.1 billion during the year-earlier period and $26.1 billion during the three-month period ended June 30, 2022. The higher amounts of shareholders' equity in the two most recent quarters as compared with 2021's third quarter reflect retained earnings and additional equity issued in connection with the People's United acquisition, partially offset by share repurchase activity. M&T issued $8.4 billion of common equity and $261 million of preferred equity in completing the acquisition of People's United on April 1, 2022. M&T also repurchased $600 million of its common stock in each of the third and second quarters of 2022. Goodwill and core deposit and other intangible assets averaged $8.7 billion and $8.8 billion in the third quarter of 2022 and second quarter of 2022, respectively, up from $4.6 billion in the third quarter of 2021. The Company recorded $3.9 billion of goodwill on April 1, 2022 which represents excess consideration over the fair value of net assets acquired in the People's United transaction. As part of the transaction, intangible assets were identified and recorded at fair value, thereby increasing the balance of core deposit and other intangible assets on the Company's balance sheet by $261 million on April 1, 2022. Reflecting the impact of the People's United acquisition, the cash surrender value of bank owned life insurance averaged $2.6 billion in each of the third and second quarters of 2022, compared with $1.9 billion in the third quarter of 2021. Changes in the cash surrender value of bank owned life insurance and benefits received are not included in interest income, but rather are recorded in "other revenues from operations." The contribution of net interest-free funds to net interest margin was .19% in the third quarter of 2022, compared with .06% and .09% in the third quarter of 2021 and the second quarter of 2022, respectively. The increased contribution of net interest-free funds to net interest margin in the most recent quarter as compared with the third quarter of 2021 and second quarter of 2022 reflects the higher rates on interest-bearing liabilities used to value net interest-free funds. The contribution of net interest-free funds to net interest margin in the first nine months of 2022 and 2021 was .12% and .07%, respectively.

Reflecting the changes to the net interest spread and the contribution of net interest-free funds as described herein, the Company's net interest margin was 3.68% in the third quarter of 2022, compared with 2.74% in the year-earlier period and 3.01% in the second quarter of 2022. During the first nine months of 2022 and 2021, the net interest margin was 3.15% and 2.83%, respectively. Future changes in market interest rates or spreads, as well as changes in the composition of the Company's portfolios of earning assets and interest-bearing liabilities that result in changes to spreads, could impact the Company's net interest income and net interest margin. The Federal Open Market Committee has conducted a series of basis point increases in short-term interest rates during the first nine months of 2022. These actions have led to generally higher interest rates overall and, accordingly, have contributed to the Company's higher net interest margin in the recent quarter as compared with the year-earlier quarter and immediately preceding quarter.

Management assesses the potential impact of future changes in interest rates and spreads by projecting net interest income under several interest rate scenarios. In managing interest rate risk, the Company has utilized interest rate swap agreements to modify the repricing characteristics of certain portions of its earning assets and interest-bearing liabilities. Periodic settlement amounts arising from these agreements are reflected in either the yields on earning assets or the rates paid on interest-bearing liabilities. The notional amount of interest rate swap agreements entered into for interest rate risk management purposes was $16.75 billion (excluding $4.65 billion of forward-starting swap agreements) at September 30, 2022, $19.0 billion (excluding $8.35 billion of forward-starting swap agreements) at September 30, 2021 and $15.0 billion (excluding $8.35 billion of forward-starting swap agreements) at December 31, 2021. Under the terms of those interest rate swap agreements, the Company received payments based on the outstanding notional amount at fixed rates and made payments at variable rates. At September 30, 2022 interest rate swap agreements with notional amounts of $15.25 billion were serving as cash flow hedges of interest payments associated with variable rate commercial real estate loans, compared with $17.35 billion at September 30, 2021 and $13.35 billion at December 31, 2021. Interest rate swap agreements with notional amounts of $1.5 billion at September 30, 2022 and $1.65 billion at each of September 30, 2021 and December 31, 2021 were serving as fair value hedges of fixed rate long-term borrowings. The Company enters into forward-starting interest rate swap agreements predominantly to extend the term of its interest rate swap agreements serving as cash flow hedges and provide a hedge against changing interest rates on certain of its variable rate loans.

In a fair value hedge, the fair value of the derivative (the interest rate swap agreement) and changes in the fair value of the hedged item are recorded in the Company's consolidated balance sheet with the corresponding gain or loss recognized in current earnings. The difference between changes in the fair value of the interest rate swap agreements and the hedged items represents hedge ineffectiveness and is recorded as an adjustment to the interest income or interest expense of the respective hedged item. In a cash flow hedge, the derivative's gain or loss is initially reported as a component of other comprehensive income and subsequently reclassified into earnings when the forecasted transaction affects earnings. The amounts of hedge ineffectiveness recognized during each of the quarters ended September 30, 2022, September 30, 2021 and June 30, 2022 were not material to the Company's consolidated results of operations. Information regarding the fair value of interest rate swap agreements and hedge ineffectiveness is presented in note 11 of Notes to Financial Statements. Information regarding the valuation of cash flow hedges included in other comprehensive income is presented in note 10 of Notes to Financial Statements. The changes in the fair values of the interest rate swap agreements and the hedged items primarily result from the effects of changing interest rates and spreads.

The average notional amounts of interest rate swap agreements entered into for interest rate risk management purposes, the related effect on net interest income and margin, and the weighted-average interest rates paid or received on those swap agreements are presented in the accompanying table. Additional information about the Company's use of interest rate swap agreements and other derivatives is included in note 11 of Notes to Financial Statements.

INTEREST RATE SWAP AGREEMENTS

	Three Months Ended September 30			
	2022		2021	
		Rate(a)	Amount	Rate(a)
	(Dollars in thousands)			
Increase (decrease) in:				
Interest income	$ (22,466)	.(05) %	$ 58,058	.16 %
Interest expense	(651)	—	(8,731)	.(04)
Net interest income/margin	$ (21,815)	.(05) %	$ 66,789	.19 %
Average notional amount (c)	$ 16,472,826		$ 18,923,913	
Rate received (b)		2.06 %		1.53 %
Rate paid (b)		2.57 %		.15 %

	Nine Months Ended September 30,			
	2022		2021	
	Amount	Rate(a)	Amount	Rate(a)
	(Dollars in thousands)			
Increase (decrease) in:				
Interest income	$ 35,500	.03 %	$ 206,713	.20 %
Interest expense	(14,436)	.(02)	(26,084)	.(04)
Net interest income/margin	$ 49,936	.04 %	$ 232,797	.23 %
Average notional amount (c)	$ 15,452,015		$ 18,915,751	
Rate received (b)		1.67 %		1.79 %
Rate paid (b)		1.25 %		.17 %

(a) Computed as an annualized percentage of average earning assets or interest-bearing liabilities.
(b) Weighted-average rate paid or received on interest rate swap agreements in effect during the period.
(c) Excludes forward-starting interest rate swap agreements not in effect during the period.

As a financial intermediary, the Company is exposed to various risks, including liquidity and market risk. Liquidity refers to the Company's ability to ensure that sufficient cash flow and liquid assets are available to satisfy current and future obligations, including demands for loans and deposit withdrawals, funding operating costs and other corporate purposes. Liquidity risk arises whenever the maturities of financial instruments included in assets and liabilities differ.

The most significant source of funding for the Company is core deposits, which are generated from a large base of consumer, corporate and institutional customers. That customer base has, over the past several years, become more geographically diverse as a result of expansion of the Company's businesses. Nevertheless, the Company faces competition in offering products and services from a large array of financial market participants, including banks, thrifts, mutual funds, securities dealers and others. The Company supplements funding provided through deposits with various short-term and long-term wholesale borrowings, including overnight federal funds purchased, short-term advances from the FHLB of New York, brokered deposits, and longer-term borrowings. M&T Bank has access to additional funding sources through borrowings from the FHLB of New York, lines of credit with the FRB of New York, M&T Bank's Bank Note Program, and other available borrowing facilities. The Bank Note Program enables M&T Bank to offer unsecured senior and subordinated notes. The Company has, from time to time, also issued subordinated capital notes and junior subordinated debentures associated with trust preferred securities to provide liquidity and enhance regulatory capital ratios. The Company's junior subordinated debentures associated with trust preferred securities and other subordinated capital notes are considered Tier 2 capital and are includable in total regulatory capital. At each of September 30, 2022 and December 31, 2021, long-term borrowings aggregated $3.5 billion.

Cayman Islands office deposits had been used by some customers of the Company as an alternative to other deposit and investment products. During the second quarter of 2021, the Company introduced a new interest-bearing sweep product (included in savings and interest-checking deposits) that replaced the Eurodollar sweep product previously recorded as Cayman Islands office deposits. As a result, the Cayman Islands office has been closed and there were no Cayman Islands office deposits outstanding as of September 30, 2022 and December 31, 2021. The Company has benefited from the placement of brokered deposits. The Company had brokered savings and interest-checking deposit accounts which aggregated approximately $3.3 billion at September 30, 2022, $3.2 billion at December 31, 2021 and $3.4 billion at September 30, 2021. Brokered time deposits were not a significant source of funding as of those dates.

The Company's ability to obtain funding from these sources could be negatively impacted should the Company experience a substantial deterioration in its financial condition or its debt ratings, or should the availability of funding become restricted due to a disruption in the financial markets. The Company attempts to quantify such credit-event risk by modeling scenarios that estimate the liquidity impact resulting from a short-term ratings downgrade over various grading levels. Such impact is estimated by attempting to measure the effect on available unsecured lines of credit, available capacity from secured borrowing sources and securitizable assets. In addition to deposits and borrowings, other sources of liquidity include maturities of investment securities and other earning assets, repayments of loans and investment securities, and cash generated from operations, such as fees collected for services.

Certain customers of the Company obtain financing through the issuance of variable rate demand bonds ("VRDBs"). The VRDBs are generally enhanced by letters of credit provided by M&T Bank. M&T Bank oftentimes acts as remarketing agent for the VRDBs and, at its discretion, may from time-to-time own some of the VRDBs while such instruments are remarketed. When this occurs, the VRDBs are classified as trading account assets in the Company's consolidated balance sheet. Nevertheless, M&T Bank is not contractually obligated to purchase the VRDBs. The value of VRDBs in the Company's trading account was not material at September 30, 2022 or December 31, 2021. The total amounts of VRDBs outstanding backed by M&T Bank letters of credit were $633 million at September 30, 2022, $662 million at December 31, 2021 and $683 million at September 30, 2021. M&T Bank also serves as remarketing agent for most of those bonds.

The Company enters into contractual obligations in the normal course of business that require future cash payments. Such obligations include, among others, payments related to deposits, borrowings, leases and other contractual commitments. Off-balance sheet commitments to customers may impact liquidity, including commitments to extend credit, standby letters of credit, commercial letters of credit, financial guarantees and indemnification contracts, and commitments to sell real estate loans. Because many of these commitments or contracts expire without being funded in whole or in part, the contract amounts are not necessarily indicative of future cash flows. Further discussion of these commitments is provided in note 14 of Notes to Financial Statements.

M&T's primary source of funds to pay for operating expenses, shareholder dividends and treasury stock repurchases has historically been the receipt of dividends from its bank subsidiaries, which are subject to various regulatory limitations. Dividends from any bank subsidiary to M&T are limited by the amount of earnings of the subsidiary in the current year and the two preceding years. For purposes of that test, at September 30, 2022 approximately $937 million was available for payment of dividends to M&T from bank subsidiaries. M&T also may obtain funding through long-term borrowings. Outstanding senior notes of M&T at September 30, 2022 and December 31, 2021 were $1.22 billion and $766 million, respectively. M&T assumed $503 million of short-term borrowings and $78 million of long-term borrowings in the acquisition of People's United. In October 2022, M&T redeemed the short-term borrowings obtained in the acquisition of People's United. Junior subordinated debentures of M&T associated with trust preferred securities outstanding at September 30, 2022 and December 31, 2021 totaled $535 million and $532 million, respectively.

Management closely monitors the Company’s liquidity position on an ongoing basis for compliance with internal policies and believes that available sources of liquidity are adequate to meet funding needs anticipated in the ordinary course of business. Management does not anticipate engaging in any activities, either currently or in the long-term, for which adequate funding would not be available and would therefore result in a significant strain on liquidity at either M&T or its subsidiary banks.

Market risk is the risk of loss from adverse changes in the market prices and/or interest rates of the Company’s financial instruments. The primary market risk the Company is exposed to is interest rate risk. Interest rate risk arises from the Company’s core banking activities of lending and deposit-taking, because assets and liabilities reprice at different times and by different amounts as interest rates change. As a result, net interest income earned by the Company is subject to the effects of changing interest rates. The Company measures interest rate risk by calculating the variability of net interest income in future periods under various interest rate scenarios using projected balances for earning assets, interest-bearing liabilities and derivatives used to manage interest rate risk. Management’s philosophy toward interest rate risk management is to limit the variability of net interest income. The balances of financial instruments used in the projections are based on expected growth from forecasted business opportunities, anticipated prepayments of loans and investment securities, and expected maturities of investment securities, loans and deposits. Management uses a “value of equity” model to supplement the modeling technique described above. Those supplemental analyses are based on discounted cash flows associated with on- and off-balance sheet financial instruments. Such analyses are modeled to reflect changes in interest rates and provide management with a long-term interest rate risk metric. The Company has entered into interest rate swap agreements to help manage exposure to interest rate risk. At September 30, 2022, the aggregate notional amount of interest rate swap agreements entered into for interest rate risk management purposes that were currently in effect was $16.75 billion. In addition, the Company has entered into $4.65 billion of forward-starting interest rate swap agreements.

The Company’s Asset-Liability Committee, which includes members of senior management, monitors the sensitivity of the Company’s net interest income to changes in interest rates with the aid of a computer model that forecasts net interest income under different interest rate scenarios. In modeling changing interest rates, the Company considers different yield curve shapes that consider both parallel (that is, simultaneous changes in interest rates at each point on the yield curve) and non-parallel (that is, allowing interest rates at points on the yield curve to vary by different amounts) shifts in the yield curve. In utilizing the model, market-implied forward interest rates over the subsequent twelve months are generally used to determine a base interest rate scenario for the net interest income simulation. That calculated base net interest income is then compared to the income calculated under the varying interest rate scenarios. The model considers the impact of ongoing lending and deposit-gathering activities, as well as interrelationships in the magnitude and timing of the repricing of financial instruments, including the effect of changing interest rates on expected prepayments and maturities. When deemed prudent, management has taken actions to mitigate exposure to interest rate risk through the use of on- or off-balance sheet financial instruments and intends to do so in the future. Possible actions include, but are not limited to, changes in the pricing of loan and deposit products, modifying the composition of earning assets and interest-bearing liabilities, and adding to, modifying or terminating existing interest rate swap agreements or other financial instruments used for interest rate risk management purposes.

The accompanying table as of September 30, 2022 and December 31, 2021 displays the estimated impact on net interest income in the base scenario described above resulting from parallel changes in interest rates across repricing categories during the first modeling year.

SENSITIVITY OF NET INTEREST INCOME
TO CHANGES IN INTEREST RATES

Changes in interest rates	Calculated Increase (Decrease) in Projected Net Interest Income	
	September 30, 2022	December 31, 2021
	(In thousands)	
+200 basis points	$ 251,494	533,317
+100 basis points	179,848	297,573
-100 basis points	(248,760)	(204,760)
-200 basis points	(520,661)	— (a)

(a) The Company did not analyze this scenario as of December 31, 2021

The Company utilized many assumptions to calculate the impact that changes in interest rates may have on net interest income. The more significant of those assumptions included the rate of prepayments of mortgage-related assets, cash flows from derivative and other financial instruments, loan and deposit volumes and pricing, and deposit maturities. In the scenarios presented, the Company also assumed gradual changes in interest rates during a twelve-month period as compared with the base scenario. In the declining rate scenario, the rate changes may be limited to lesser amounts such that interest rates remain at or above zero on all points of the yield curve. Changes in amounts presented since December 31, 2021 reflect higher balances of earnings assets obtained in the People's United acquisition, changes in portfolio composition, the level of market-implied forward interest rates and hedging actions taken by the Company. The assumptions used in interest rate sensitivity modeling are inherently uncertain and, as a result, the Company cannot precisely predict the impact of changes in interest rates on net interest income. Actual results may differ significantly from those presented due to the timing, magnitude and frequency of changes in interest rates and changes in market conditions and interest rate differentials (spreads) between maturity/repricing categories, as well as any actions, such as those previously described, which management may take to counter such changes.

A significant amount of the Company’s interest-earning assets, interest-bearing liabilities, preferred equity instruments and interest rate swap agreements have contractual repricing terms that reference the London Interbank Offered Rate (“LIBOR”). Various regulatory bodies have encouraged banks to transition away from LIBOR as soon as practicable, generally cease entering new contracts that use LIBOR as a reference rate no later than December 31, 2021, and for new contracts entered into before December 31, 2021 to utilize a reference rate other than LIBOR or include robust language that includes a clearly defined alternative reference rate after LIBOR’s discontinuation. Publication of certain tenors of LIBOR has already ceased and complete cessation of LIBOR publication is expected by June 30, 2023. Effective December 31, 2021, the Company essentially discontinued entering into new LIBOR-based contracts.

At September 30, 2022 the Company had LIBOR-based commercial loans and leases and commercial real estate loans of $36.6 billion and residential mortgage and consumer loans of $4.3 billion outstanding. Approximately 70% of the loans either mature before June 30, 2023 or have been amended to include appropriate alternative language to be effective upon cessation of LIBOR publication. Approximately $731 million of borrowings and $1.1 billion of preferred equity instruments reference LIBOR as of September 30, 2022. The Company’s interest rate swap agreements primarily reference LIBOR. In October 2020, the International Swaps and Derivatives Association, Inc. published the IBOR Fallbacks Supplement (“Supplement”) and the IBOR Fallback Protocol (“Protocol”). The Protocol enables market participants to incorporate certain revisions into their legacy non-cleared derivative trades with other counterparties that also choose to adhere to the Protocol. M&T adhered to the Protocol in November 2020 and is in the process of remediating its interest rate swap transactions with its end-user customers. With respect to the Company’s cleared interest rate swap agreements that reference LIBOR, clearinghouses have adopted the same relevant Secured Overnight Financing Rate (“SOFR”) benchmark alternatives of the Supplement and Protocol.

As loans mature and new originations occur a larger percentage of the Company’s variable-rate loans are expected to reference SOFR or other indexes, including the Bloomberg Short Term Bank Yield Index (“BSBY”). At September 30, 2022 the Company had approximately $21.3 billion and $274 million of outstanding loan balances that reference SOFR and BSBY, respectively. Additionally, as of September 30, 2022, the Company had $15.6 billion of notional amount of interest rate swap agreements designated as cash flow hedges of commercial real estate loans, including $4.7 billion of forward-starting interest rate swap agreements that become effective in 2023, and notional amounts of $4.3 billion of non-hedging derivative interest rate contracts that are referenced to SOFR. The Company’s usage of interest rate swap agreements referenced to SOFR or BSBY is expected to increase in response to the discontinuation of LIBOR. The Company continues to work with its customers and other counterparties to remediate LIBOR-based agreements which expire after June 30, 2023 by incorporating alternative language, negotiating new agreements, or other means. The discontinuation of LIBOR and uncertainty relating to the emergence of one or more alternative benchmark indexes to replace LIBOR could materially impact the Company’s interest rate risk profile and its management thereof.

Changes in fair value of the Company’s financial instruments can also result from a lack of trading activity for similar instruments in the financial markets. That impact is most notable on the values assigned to some of the Company’s investment securities. Information about the fair valuation of investment securities is presented in notes 3 and 13 of Notes to Financial Statements.

The Company enters into interest rate and foreign exchange contracts to meet the financial needs of customers that it includes in its financial statements as non-hedging derivatives within other assets and other liabilities. Financial instruments utilized for such activities consist predominantly of interest rate swap agreements and forward and futures contracts related to foreign currencies. The Company generally mitigates the foreign currency and interest rate risk associated with customer activities by entering into offsetting positions with third parties that are also included in other assets and other liabilities. The fair values of non-hedging derivative positions associated with interest rate contracts and foreign currency and other option and futures contracts are presented in note 11 of Notes to Financial Statements. As with any non-government guaranteed financial instrument, the Company is exposed to credit risk associated with counterparties to the Company’s non-hedging derivative activities. Although the notional amounts of these contracts are not recorded in the consolidated balance sheet, the unsettled fair values of such financial instruments are recorded in the consolidated balance sheet. The fair values of such non-hedging derivative assets and liabilities recognized on the balance sheet were $416 million and $1.42 billion, respectively, at September 30, 2022 and $418 million and $83 million, respectively, at December 31, 2021. The fair value asset and liability amounts at September 30, 2022 have been reduced by contractual settlements of $1.15 billion and $20 million, respectively, and at December 31, 2021 have been reduced by contractual settlements of $54 million and $305 million, respectively. The values associated with the Company's non-hedging derivative activities at September 30, 2022 as compared with December 31, 2021 reflect changes in values associated with interest rate swap agreements entered into with commercial customers that are not subject to periodic variation margin settlement payments.

Trading account assets were $130 million at September 30, 2022, $50 million at December 31, 2021 and $51 million at September 30, 2021. Included in trading account assets were assets related to deferred compensation plans aggregating $23 million at September 30, 2022, compared with $21 million at each of September 30, 2021 and December 31, 2021. Changes in the fair values of such assets are recorded as “trading account and non-hedging derivative gains” in the consolidated statement of income. Included in “other liabilities” in the consolidated balance sheet at September 30, 2022 was $29 million of liabilities related to deferred compensation plans, compared with $25 million at September 30, 2021 and $24 million at December 31, 2021. Changes in the balances of such liabilities due to the valuation of allocated investment options to which the liabilities are indexed are recorded in “other costs of operations” in the consolidated statement of income. Also included in trading account assets were investments in mutual funds and other assets that the Company was required to hold under terms of certain non-qualified supplemental retirement and other benefit plans that were assumed by the Company in various acquisitions. Those assets totaled $107 million at September 30, 2022 and $29 million at each of September 30, 2021 and December 31, 2021. The increase at September 30, 2022 as compared with the prior dates reflects assets obtained in the acquisition of the People's United non-qualified supplemental retirement and other benefit plans.

Given the Company’s policies and positions, management believes that the potential loss exposure to the Company resulting from market risk associated with trading account and non-hedging derivative activities was not material, however, as previously noted, the Company is exposed to credit risk associated with counterparties to transactions related to the Company’s actions to mitigate foreign currency and interest rate risk associated with customer activities. Additional information about the Company’s use of derivative financial instruments is included in note 11 of Notes to Financial Statements.

Provision for Credit Losses

A provision for credit losses is recorded to adjust the level of the allowance to reflect expected credit losses that are based on economic forecasts as of each reporting date. Provisions for credit losses of $115 million and $302 million were recorded in the third and second quarters of 2022, respectively, compared with a credit loss recapture of $20 million in the third quarter of 2021. The provision recorded in the second quarter of 2022 included $242 million on loans obtained in the acquisition of People's United not deemed to be PCD. GAAP requires a provision for credit losses to be recorded beyond the recognition of the fair value of the loans at the acquisition date. In addition to the recorded provision, the allowance for credit losses was also increased by $99 million in the second quarter of 2022 to reflect the expected credit losses on loans obtained in the acquisition of People's United deemed to be PCD. That addition represents an increase of the carrying values of loans identified as PCD at the time of the acquisition. The Company's estimates of expected credit losses at September 30, 2022 reflect anticipated increases in unemployment spurred by Federal Reserve initiatives to curb high rates of inflation that could lead to overall deterioration of economic conditions and, thus, credit quality during an eight-quarter forecast period. Risks considered included inflation, a projected rise in unemployment, reduction of economic growth projections, decreasing residential real estate prices as compared with the immediately preceding quarter and continued concerns about commercial real estate values in the hospitality and office building sectors. Macroeconomic assumptions used to estimate credit losses on loans acquired from People's United at the April 1, 2022 acquisition date were consistent with those used by the Company to estimate credit losses at March 31, 2022.

Net charge-offs of loans were $63 million in the recent quarter, compared with net charge-offs of $40 million in the third quarter of 2021 and $50 million in the second quarter of 2022. Net charge-offs as an annualized percentage of average loans and leases were .20% in the third quarter of 2022, .17% in the year-earlier quarter and .16% in the second quarter of 2022. As an annualized percentage by loan type, net charge-offs (recoveries) for the third quarter of 2022, third quarter of 2021 and the second quarter of 2022 were .16%, .38% and .31% for commercial loans and leases, .30%, .13% and .06% for commercial real estate loans and .25%, .12% and .26% for consumer loans, respectively. Net charge-offs of residential real estate loans as an annualized percentage of average loan balances were less than .01% for each of the three quarters noted herein. Net charge-offs for the nine-month periods ended September 30, 2022 and 2021 were $120 million and $161 million, respectively, representing an annualized .14% and .22%, respectively, of average loans and leases. A summary of net charge-offs by loan type is presented in the table that follows.

NET CHARGE-OFFS (RECOVERIES)
BY LOAN/LEASE TYPE

	2022			
	First Quarter	Second Quarter (a)	Third Quarter	Year-to-date (a)
	(In thousands)			
Commercial, financial, leasing, etc.	$ 5,569	29,502	15,374	50,445
Real estate:				
Commercial	(13,143)	7,140	34,812	28,809
Residential	865	256	338	1,459
Consumer	13,576	12,671	12,675	38,922
	$ 6,867	49,569	63,199	119,635

	2021			
	First Quarter	Second Quarter	Third Quarter	Year-to-date
	(In thousands)			
Commercial, financial, leasing, etc.	$ 4,434	29,242	22,813	56,489
Real estate:				
Commercial	54,092	11,330	11,880	77,302
Residential	366	(149)	22	239
Consumer	16,289	5,655	5,389	27,333
	$ 75,181	46,078	40,104	161,363

(a) *For the quarter ended June 30, 2022 and nine months ended September 30, 2022, net charge-offs do not reflect $33 million of charge-offs related to PCD acquired loans.*

The net charge-offs of commercial loans in the third quarter of 2022 reflect a $23 million charge-off of a loan to a paper distribution company partially offset by recoveries of previously charged-off loan balances. Net charge-offs of commercial loans in the second quarter of 2022 include a $23 million charge-off of a loan to a consumer products manufacturer. The net charge-offs of commercial real estate loans in the third quarter of 2022 reflect a $20 million charge-off of a loan to a healthcare provider and a $7 million charge-off of a loan to a residential leasing company. Included in net charge-offs of consumer loans were: net recoveries of automobile loans of less than $1 million in the recent quarter, $2 million in the year-earlier quarter and $1 million in the second quarter of 2022; net charge-offs of recreational finance loans of $5 million in the third quarter of 2022, $1 million in the year-earlier quarter and $7 million in the second 2022 quarter; and net recoveries of home equity loans and lines of credit secured by one-to-four family residential properties of less than $1 million in each of the recent quarter, the third quarter of 2021 and the second quarter of 2022. Net charge-offs associated with other consumer loans including credit cards and installment loans totaled $8 million in each of the recent quarter and the second quarter of 2022, compared with $7 million in the third quarter of 2021.

Nonaccrual loans aggregated $2.43 billion or 1.89% of total loans and leases outstanding at September 30, 2022, compared with $2.24 billion or 2.40% at September 30, 2021, $2.06 billion or 2.22% at December 31, 2021 and $2.63 billion or 2.05% at June 30, 2022. Loans obtained in the acquisition of People's United that have been classified as nonaccrual totaled $581 million at September 30, 2022 and $545 million at June 30, 2022. The level of nonaccrual loans reflects the continuing impact of economic conditions on borrowers' abilities to make contractual payments on their loans, most notably commercial real estate loans in the hospitality, office, retail and health care-related sectors.

Accruing loans past due 90 days or more were $477 million or .37% of loans and leases at September 30, 2022, compared with $1.03 billion or 1.10% at September 30, 2021, $963 million or 1.04% at December 31, 2021 and $524 million or .41% at June 30, 2022. Accruing loans past due 90 days or more were predominantly residential real estate loans and included loans guaranteed by government-related entities of $423 million, $947 million, $928 million and $468 million at September 30, 2022, September 30, 2021, December 31, 2021 and June 30, 2022, respectively. The lower balance at September 30, 2022 and June 30, 2022 compared with the 2021 dates reflects residential real estate loans guaranteed by government-related entities receiving payment deferrals during the COVID-19 pandemic, but ineligible for treatment under the CARES act, that exited these arrangements and complied with modified terms to become current. Guaranteed loans included one-to-four family residential mortgage loans serviced by the Company that were purchased to reduce associated servicing costs, including a requirement to advance principal and interest payments that had not been received from individual mortgagors. Despite the loans being purchased by the Company, the insurance or guarantee by the applicable government-related entity remains in force. The outstanding principal balances of those purchased loans that are guaranteed by government-related entities totaled $366 million at September 30, 2022, $919 million a year earlier, $889 million at December 31, 2021 and $435 million at June 30, 2022. The remaining accruing loans past due 90 days or more not guaranteed by government-related entities were loans considered to be with creditworthy borrowers that were in the process of collection or renewal.

The direct and indirect effects of the COVID-19 pandemic resulted in a dramatic reduction in 2020 in economic activity that severely hampered the ability of some businesses and consumers to meet their repayment obligations. Information regarding the Company's treatment of loan modifications subject to applicable regulatory guidance issued during the pandemic, including the CARES Act, can be found in Management's Discussion and Analysis of Financial Condition and Results of Operations within Form 10-K for the year ended December 31, 2021. COVID-19 related modifications with payment deferrals at September 30, 2022 were not material.

The Company also modified the terms of select loans in an effort to assist borrowers that were not related to the COVID-19 pandemic. If the borrower was experiencing financial difficulty and a concession was granted, the Company considered such modifications as troubled debt restructurings. Loan modifications included such actions as the extension of loan maturity dates and the lowering of interest rates and monthly payments. The objective of the modifications was to increase loan repayments by customers and thereby reduce net charge-offs. Information about modifications of loans that are considered troubled debt restructurings is included in note 4 of Notes to Financial Statements.

Residential real estate loans modified under specified loss mitigation programs prescribed by government guarantors that were not related to the COVID-19 pandemic have not been included in renegotiated loans because the loan guarantee remains in full force and, accordingly, the Company has not granted a concession with respect to the ultimate collection of the original loan balance. Such loans aggregated $382 million at September 30, 2022, $425 million at each of September 30, 2021 and December 31, 2021, and $356 million at June 30, 2022.

Commercial loans and leases classified as nonaccrual totaled $368 million, $280 million, $221 million and $442 million at September 30, 2022, September 30, 2021, December 31, 2021 and June 30, 2022, respectively. Commercial real estate loans in nonaccrual status aggregated $1.47 billion, $1.31 billion, $1.18 billion, and $1.55 billion September 30, 2022, September 30, 2021, December 31, 2021 and June 30, 2022, respectively. Commercial real estate loans in nonaccrual status were largely reflective of loans in the hospitality, office, retail and health care-related sectors. Commercial loans and leases and commercial real estate loans acquired from People's United and classified as nonaccrual totaled $136 million and $416 million, respectively, at September 30, 2022 and $188 million and $312 million, respectively, at June 30, 2022.

Nonaccrual residential real estate loans totaled $381 million at September 30, 2022, compared with $480 million at September 30, 2021, $479 million at December 31, 2021 and $444 million at June 30, 2022. The decreases since September 30, 2021 largely reflect borrower repayment performance since that date partially offset by $17 million of residential real estate loans acquired from People's United and classified as nonaccrual at September 30, 2022. Included in residential real estate loans classified as nonaccrual were limited documentation first mortgage loans of $95 million at September 30, 2022, compared with $127 million at September 30, 2021, $123 million at December 31, 2021 and $113 million at June 30, 2022. Limited documentation first mortgage loans represent loans secured by residential real estate that at origination typically included some form of limited borrower documentation requirements as compared with more traditional loans. The Company no longer originates limited documentation loans. Residential real estate loans past due 90 days or more and accruing interest aggregated $412 million at September 30, 2022, compared with $945 million at September 30, 2021, $920 million at December 31, 2021 and $474 million at June 30, 2022. Those amounts related predominantly to government-guaranteed loans as previously noted. The lower balances at the two most recent quarter-ends also reflect improved borrower repayment performance. Information about the location of nonaccrual and charged-off residential real estate loans as of and for the quarter ended September 30, 2022 is presented in the accompanying table.

Nonaccrual consumer loans were $206 million at September 30, 2022, $170 million at September 30, 2021, $177 million at December 31, 2021 and $196 million at June 30, 2022. Included in nonaccrual consumer loans at September 30, 2022, September 30, 2021, December 31, 2021 and June 30, 2022 were: automobile loans of $40 million, $31 million, $34 million and $36 million, respectively; recreational finance loans of $39 million, $24 million, $28 million and $33 million, respectively; and outstanding balances of home equity loans and lines of credit of $78 million, $71 million, $70 million and $79 million, respectively. Consumer loans acquired from People's United and classified as nonaccrual at September 30, 2022 totaled $12 million and consisted predominantly of home equity loans and lines of credit. Information about the location of nonaccrual and charged-off home equity loans and lines of credit as of and for the quarter ended September 30, 2022 is presented in the accompanying table.

Information about past due and nonaccrual loans as of September 30, 2022 and December 31, 2021 is also included in note 4 of Notes to Financial Statements.

SELECTED RESIDENTIAL REAL ESTATE-RELATED LOAN DATA

	September 30, 2022			Quarter Ended September 30, 2022	
		Nonaccrual		Net Charge-offs (Recoveries)	
	Outstanding Balances	Balances	Percent of Outstanding Balances	Balances	Percent of Average Outstanding Balances
	(Dollars in thousands)				
Residential mortgages:					
New York	$ 6,553,820	$ 111,080	1.69 %	$ 1,383	.09 %
Mid-Atlantic (a)	6,549,714	104,464	1.59	(185)	.(01)
New England (b)	6,187,859	49,177	.79	(124)	.(01)
Other	2,631,196	19,086	.73	(216)	.(03)
Total	$ 21,922,589	$ 283,807	1.29 %	$ 858	.02 %
Residential construction loans:					
New York	$ 21,563	$ 375	1.74 %	$ —	— %
Mid-Atlantic (a)	21,688	336	1.55	—	—
New England (b)	18,439	877	4.76	—	—
Other	2,566	—	—	—	—
Total	$ 64,256	$ 1,588	2.47 %	$ —	— %
Limited documentation first lien mortgages:					
New York	$ 501,679	$ 40,427	8.06 %	$ 45	.03 %
Mid-Atlantic (a)	442,905	34,664	7.83	—	—
New England (b)	99,097	15,358	15.50	—	—
Other	43,754	4,933	11.27	(565)	(4.94)
Total	$ 1,087,435	$ 95,382	8.77 %	$ (520)	.(18 %)
First lien home equity loans and lines of credit:					
New York	$ 969,253	$ 16,728	1.73 %	$ 274	.17 %
Mid-Atlantic (a)	1,110,862	21,961	1.98	(18)	.(01)
New England (b)	704,555	2,551	.36	—	—
Other	20,620	1,010	4.90	(20)	.(01)
Total	$ 2,805,290	$ 42,250	1.51 %	$ 236	.03 %
Junior lien home equity loans and lines of credit:					
New York	$ 768,949	$ 16,106	2.09 %	$ (479)	.(41 %)
Mid-Atlantic (a)	929,851	16,674	1.79	(539)	.(45)
New England (b)	538,721	2,802	.52	376	.36
Other	20,612	376	1.82	—	—
Total	$ 2,258,133	$ 35,958	1.59 %	$ (642)	.(11 %)

(a) *Includes Delaware, Maryland, New Jersey, Pennsylvania, Virginia, West Virginia and the District of Columbia.*

(b) *Includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont.*

Real estate and other foreclosed assets totaled $37 million at September 30, 2022, compared with $25 million at September 30, 2021, $24 million at December 31, 2021 and $29 million at June 30, 2022. Net gains or losses associated with real estate and other foreclosed assets were not material during the three months and nine months ended September 30, 2022 and 2021. At September 30, 2022, foreclosed assets are comprised predominantly of residential real estate-related properties.

A comparative summary of nonperforming assets and certain past due, renegotiated and impaired loan data and credit quality ratios is presented in the accompanying table.

NONPERFORMING ASSET AND PAST DUE, RENEGOTIATED AND IMPAIRED LOAN DATA

	2022 Quarters			2021 Quarters	
	Third	Second	First	Fourth	Third
			(Dollars in thousands)		
Nonaccrual loans	$ 2,429,326	2,633,005	2,134,231	2,060,083	2,242,263
Real estate and other foreclosed assets	37,031	28,692	23,524	23,901	24,786
Total nonperforming assets	$ 2,466,357	2,661,697	2,157,755	2,083,984	2,267,049
Accruing loans past due 90 days or more(a)	$ 476,503	523,662	776,751	963,399	1,026,080
Government guaranteed loans included in totals above:					
Nonaccrual loans	$ 44,797	46,937	46,151	51,429	47,358
Accruing loans past due 90 days or more(a)	423,371	467,834	689,831	927,788	947,091
Renegotiated loans	$ 356,797	276,584	242,108	230,408	242,955
Nonaccrual loans to total loans and leases, net of unearned discount	1.89%	2.05%	2.32%	2.22%	2.40%
Nonperforming assets to total net loans and leases and real estate and other foreclosed assets	1.92%	2.07%	2.35%	2.24%	2.42%
Accruing loans past due 90 days or more(a) to total loans and leases, net of unearned discount	.37%	.41%	.85%	1.04%	1.10%

(a) *Predominantly residential real estate loans.*

Management determines the allowance for credit losses under accounting guidance that requires estimating the amount of current expected credit losses over the remaining contractual term of the loan and lease portfolio. A description of the methodologies used by the Company to estimate its allowance for credit losses can be found in note 4 of Notes to Financial Statements.

In establishing the allowance for credit losses, the Company estimates losses attributable to specific troubled credits identified through both normal and targeted credit review processes and also estimates losses for other loans and leases with similar risk characteristics on a collective basis. For purposes of determining the level of the allowance for credit losses, the Company evaluates its loan and lease portfolio by type. At the time of the Company's analysis regarding the determination of the allowance for credit losses as of September 30, 2022, concerns existed about the somewhat incomplete recovery evident in some sectors of the economy; elevated levels of inflation; fears of a slowing economy and possible recession in coming quarters; the volatile nature of global markets and international economic conditions that could impact the U.S. economy; Federal Reserve positioning of monetary policy; ongoing supply chain issues and wage pressures impacting commercial borrowers; the extent to which borrowers, in particular commercial real estate borrowers, may be negatively affected by pandemic-related and general economic conditions; and continued stagnant population and economic growth in the upstate New York and central Pennsylvania regions (approximately 37% of the Company's loans and leases are to customers in New York State and Pennsylvania) that historically lag other regions of the country. The Company utilizes a loan grading system to differentiate risk amongst its commercial loans and commercial real estate loans. Loans with a lower expectation of default are assigned one of ten possible "pass" loan grades while specific loans determined to have an elevated level of credit risk are classified as "criticized." A criticized loan may be classified as "nonaccrual" if the Company no longer expects to collect all amounts according to the contractual terms of the loan agreement or the loan is delinquent 90 days or more. Criticized commercial loans and commercial real estate loans totaled $10.9 billion, including $2.8 billion of loans acquired from People's United, at September 30, 2022, compared with $9.6 billion at September 30, 2021, $9.0 billion at December 31, 2021 and $11.6 billion at June 30, 2022, including $2.8 billion of loans acquired from People's United. The level of criticized loans remains reflective of the impact of current conditions on many borrowers, particularly those with investor-owned commercial real estate loans in the hotel, office and healthcare sectors. Investor-owned commercial real estate loans comprised $8.0 billion or 74% of total criticized loans at September 30, 2022. The weighted-average loan-to-value ("LTV") ratio for investor-owned commercial real estate properties was approximately 60%. Criticized loans secured by investor-owned commercial real estate had a weighted-average LTV ratio of approximately 65%.

Line of business personnel in different geographic locations with support from and review by the Company's credit risk personnel review and reassign loan grades based on their detailed knowledge of individual borrowers and their judgment of the impact on such borrowers resulting from changing conditions in their respective regions. The Company's policy is that, at least annually, updated financial information is obtained from commercial borrowers associated with pass grade loans and additional analysis performed. On a quarterly basis, the Company's centralized credit risk department reviews all criticized commercial loans and commercial real estate loans greater than $1 million to determine the appropriateness of the assigned loan grade, including whether the loan should be reported as accruing or nonaccruing. For criticized nonaccrual loans, additional meetings are held with loan officers and their managers, workout specialists and senior management to discuss each of the relationships. In analyzing criticized loans, borrower-specific information is reviewed, including operating results, future cash flows, recent developments and the borrower's outlook, and other pertinent data. The timing and extent of potential losses, considering collateral valuation and other factors, and the Company's potential courses of action are contemplated.

With regard to residential real estate loans, the Company's loss identification and estimation techniques make reference to loan performance and house price data in specific areas of the country where collateral securing the Company's residential real estate loans is located. For residential real estate-related loans, including home equity loans and lines of credit, the excess of the loan balance over the net realizable value of the property collateralizing the loan is charged-off when the loan becomes 150 days delinquent. That charge-off is based on recent indications of value from external parties that are generally obtained shortly after a loan becomes nonaccrual. Loans to consumers that file for bankruptcy are generally charged off to estimated net collateral value shortly after the Company is notified of such filings. At September 30, 2022, approximately 55% of the Company's home equity portfolio consisted of first lien loans and lines of credit and 45% were junior liens. With respect to junior lien loans, to the extent known by the Company, if a related senior lien loan would be on nonaccrual status because of payment delinquency, even if such senior lien loan was not owned by the Company, the junior lien loan or line that is owned by the Company is placed on nonaccrual status. In monitoring the credit quality of its home equity portfolio for purposes of determining the allowance for credit losses, the Company reviews delinquency and nonaccrual information and considers recent charge-off experience. When evaluating individual home equity loans and lines of credit for charge off and for purposes of determining the allowance for credit losses, the Company gives consideration to the required repayment of any first lien positions related to collateral property. Home equity line of credit terms vary but such lines are generally originated with an open draw period of ten years followed by an amortization period of up to twenty years. At September 30, 2022 approximately 86% of all outstanding balances of home equity lines of credit related to lines that were still in the draw period, the weighted-average remaining draw periods were approximately five years, and approximately 18% were making contractually allowed payments that do not include any repayment of principal.

Factors that influence the Company's credit loss experience include overall economic conditions affecting businesses and consumers, generally, but also residential and commercial real estate valuations, in particular, given the size of the Company's real estate loan portfolios. Commercial real estate valuations can be highly subjective, as they are based upon many assumptions. Such valuations can be significantly affected over relatively short periods of time by changes in business climate, economic conditions, interest rates and, in many cases, the results of operations of businesses and other occupants of the real property. Similarly, residential real estate valuations can be impacted by housing trends, the availability of financing at reasonable interest rates and general economic conditions affecting consumers.

The Company generally estimates current expected credit losses on loans with similar risk characteristics on a collective basis. To estimate expected losses, the Company utilizes statistically developed models to project principal balances over the remaining contractual lives of the loan portfolios and determine estimated credit losses through a reasonable and supportable forecast period. The Company's approach for estimating current expected credit losses for loans and leases at September 30, 2022, September 30, 2021 and December 31, 2021 included utilizing macroeconomic assumptions to project losses over a two-year reasonable and supportable forecast period. Subsequent to the forecast period, the Company reverted to longer-term historical loss experience, over a period of one year, to estimate expected credit losses over the remaining contractual life. Forward-looking estimates of certain macroeconomic variables are determined by the M&T Scenario Development Group, which is comprised of senior management business leaders and economists. Events posing emerging risks to the macroeconomic environment, such as international conflicts and other events, inflation and supply chain issues, are considered when developing economic forecasts even if the events do not directly and materially impact the Company's financial results. Supply chain disruptions, inflationary pressures or other peripheral impacts of global events may alter economic forecasts and the Company monitors this activity as part of its risk management procedures in assessing the allowance for credit losses. Among the assumptions utilized as of September 30, 2022 was that the national unemployment rate will average 3.9% through the reasonable and supportable forecast period. The forecast also assumed gross domestic product grows at a 1.5% average rate during the first year of the reasonable and supportable forecast period and at a 2.7% average rate in the second year. Commercial real estate prices were assumed to cumulatively grow 6.5% and residential real estate prices were assumed to contract 4.4% over the two-year reasonable and supportable forecast period. As of June 30, 2022 the national unemployment rate was assumed to average 3.4% through the reasonable and supportable period. The forecast also assumed gross domestic product would grow during the first year of the reasonable and supportable period at a 2.4% average annual rate and at a 2.9% average rate in the second year. Commercial real estate and residential real estate prices were assumed to cumulatively grow 11.6% and 0.4%, respectively, over the two-year reasonable and supportable forecast period. As of December 31, 2021 the forecast assumed that national unemployment would average 4.6% through the first year of the reasonable and supportable forecast period before gradually improving to 3.7% in the latter half of 2023. The forecast also assumed gross domestic product would grow during 2022 at a 3.1% average annual rate and during 2023 at a 2.7% annual rate. Commercial and residential real estate prices were assumed to cumulatively grow 11.1% and 5.9%, respectively, over the two-year reasonable and supportable forecast period. Among the assumptions utilized as of September 30, 2021 was that the national unemployment rate would continue to be at then elevated levels, on average 4.6%, through the remainder of 2021, followed by a gradual improvement reaching 3.5% within the reasonable and supportable forecast period. The forecast also assumed gross domestic product would grow at an average annualized rate of 3.3% during the eight-quarter forecast period. The commercial real estate price index was assumed to be down modestly in 2021, but improving in 2022 and 2023. Residential real estate prices were not assumed to fluctuate significantly. The assumptions utilized were based on the information available to the Company at or near September 30, 2022, June 30, 2022, December 31, 2021 and September 30, 2021 (at the time the Company was preparing its estimate of expected credit losses as of those dates).

In establishing the allowance for credit losses the Company also considers the impact of portfolio concentrations, imprecision in economic forecasts, geopolitical conditions and other risk factors that might influence the loss estimation process. With respect to economic forecasts the Company assessed the likelihood of alternative economic scenarios during the two-year reasonable and supportable time period. Generally, an increase in unemployment rate or a decrease in any of the rate of change in gross domestic product, commercial real estate prices or home prices could have an adverse impact on expected credit losses and may result in an increase to the allowance for credit losses. Forward looking economic forecasts are subject to inherent imprecision and future events may differ materially from forecasted events. In consideration of such uncertainty, the following alternative economic scenarios were considered to estimate the possible impact on modeled credit losses.

A potential downside economic scenario assumed the unemployment rate averages 7.1% in the reasonable and supportable forecast period. The scenario also assumed gross domestic product contracts 2.4% in the first year of the reasonable and supportable forecast period before recovering to 2.2% growth in the second year and commercial real estate and residential real estate prices cumulatively decline 18.4% and 11.4%, respectively, by the end of the reasonable and supportable forecast period.

A potential upside economic scenario assumed the unemployment rate declines to approximately 3.4% for the duration of the reasonable and supportable forecast period. The scenario also assumes gross domestic product grows 5.2% in the initial year of the reasonable and supportable forecast period and 2.0% in the second year while commercial real estate and residential real estate prices cumulatively rise 8.9% and 1.4%, respectively, over the two-year reasonable and supportable forecast period.

The scenario analyses resulted in an additional $370 million of modeled credit losses under the assumptions of the downside economic scenario, whereas under the assumptions of the upside economic scenario a $161 million reduction in modeled credit losses could occur. These examples are only a few of the numerous possible economic scenarios that could be utilized in assessing the sensitivity of expected credit losses. The estimated impacts on credit losses in such scenarios pertain only to modeled credit losses and do not include consideration of other factors the Company may evaluate when determining its allowance for credit losses.

As a result, it is possible that the Company may, at another point in time, reach different conclusions regarding credit loss estimates. The Company's process for determining the allowance for credit losses undergoes quarterly and periodic evaluations by independent risk management personnel, which among many other considerations, evaluate the reasonableness of management's methodology and significant assumptions. Further information about the Company's methodology to estimate expected credit losses is included in note 4 of Notes to Financial Statements.

Management believes that the allowance for credit losses at September 30, 2022 appropriately reflected expected credit losses inherent in the portfolio as of that date. The allowance for credit losses totaled $1.88 billion at September 30, 2022, compared with $1.52 billion at September 30, 2021, $1.47 billion at December 31, 2021 and $1.82 billion at June 30, 2022. As a percentage of loans outstanding, the allowance was 1.46% at September 30, 2022, 1.62% at September 30, 2021, 1.58% at December 31, 2021 and 1.42% at June 30, 2022. Using the same methodology described herein, the Company added $341 million to the allowance for credit losses related to the $35.8 billion of loans and leases obtained in the acquisition of People's United on April 1, 2022. The combined Company allowance for credit losses at April 1, 2022 as a percentage of loans outstanding was 1.42%. The level of the allowance reflects management's evaluation of the loan and lease portfolio using the methodology and considering the factors as described herein. Should the various economic forecasts and credit factors considered by management in establishing the allowance for credit losses change and should management's assessment of losses in the loan portfolio also change, the level of the allowance as a percentage of loans could increase or decrease in future periods. The reported level of the allowance reflects management's evaluation of the loan and lease portfolio as of each respective date.

The ratio of the allowance for credit losses to total nonaccrual loans at September 30, 2022 and December 31, 2021 was 77% and 71%, respectively. Given the Company's general position as a secured lender and its practice of charging off loan balances when collection is deemed doubtful, that ratio and changes in the ratio are generally not an indicative measure of the adequacy of the Company's allowance for credit losses, nor does management rely upon that ratio in assessing the adequacy of the Company's allowance for credit losses.

Other Income

Other income totaled $563 million in the third quarter of 2022, compared with $569 million in the year-earlier quarter. Trust income, service charges on deposit accounts and credit-related fees all increased reflecting the acquisition of People's United, but were offset by a decline in mortgage banking revenues resulting from the Company's decision to retain the substantial majority of recently originated mortgage loans in portfolio rather than sell such loans. Other income was $571 million in the second quarter of 2022. The modest decline in the recent quarter resulted from lower service charges on deposit accounts and trust income, offset by higher credit-related fees.

Mortgage banking revenues were $83 million in each of the third quarter and second quarter of 2022, compared with $160 million in the third quarter of 2021. Mortgage banking revenues are comprised of both residential and commercial mortgage banking activities. The Company's involvement in commercial mortgage banking activities includes the origination, sales and servicing of loans under the multi-family loan programs of Fannie Mae, Freddie Mac and the U.S. Department of Housing and Urban Development.

Residential mortgage banking revenues, consisting of realized gains and losses from sales of residential real estate loans and loan servicing rights, unrealized gains and losses on residential real estate loans held for sale and related commitments, residential real estate loan servicing fees, and other residential real estate loan-related fees and income, were $55 million in the third quarter of 2022, $110 million in the similar quarter of 2021 and $50 million in the second quarter of 2022. As compared with the third quarter of 2021, lower residential mortgage banking revenues in the recent quarter resulted from decreased gains associated with loans held for sale and related commitments, reflecting the Company's decision late in the third quarter of 2021 to retain most originated mortgage loans in portfolio rather than sell such loans. Residential mortgage banking revenues were $5 million lower in the second quarter of 2022 as compared with the recent quarter as a result of the Company recognizing a loss on lower-yielding repurchased mortgage loans in the second quarter of 2022.

New commitments to originate residential real estate loans to be sold were approximately $47 million in the third quarter of 2022, compared with $1.1 billion in the year-earlier quarter and $78 million in the second quarter of 2022. Realized gains and losses from sales of residential real estate loans and loan servicing rights and recognized net unrealized gains or losses attributable to residential real estate loans held for sale, commitments to originate loans for sale and commitments to sell loans totaled gains of $1 million in the third quarter of 2022 and $49 million in the corresponding period of 2021, compared with losses of $17 million in 2022’s second quarter.

Loans held for sale that were secured by residential real estate aggregated $43 million at September 30, 2022, $279 million at September 30, 2021 and $474 million at December 31, 2021. Commitments to sell residential real estate loans and commitments to originate residential real estate loans for sale at pre-determined rates totaled $80 million and $57 million, respectively, at September 30, 2022, compared with $795 million and $751 million, respectively, at September 30, 2021 and $617 million and $233 million, respectively, at December 31, 2021. Net recognized unrealized gains on residential real estate loans held for sale, commitments to sell loans, and commitments to originate loans for sale were $1 million at September 30, 2022, $22 million at September 30, 2021 and $10 million at December 31, 2021. Changes in net unrealized gains or losses are recorded in mortgage banking revenues and resulted in a net increase in revenues of $1 million in the recent quarter and $10 million in the third quarter of 2021, compared with a net decrease of $5 million in the second quarter of 2022.

Revenues from servicing residential real estate loans for others were $54 million during the quarter ended September 30, 2022, compared with $61 million and $67 million during the three months ended September 30, 2021 and June 30, 2022, respectively. Residential real estate loans serviced for others totaled $104.0 billion at September 30, 2022, $97.1 billion at September 30, 2021, $97.9 billion at December 31, 2021 and $102.5 billion at June 30, 2022. Reflected in residential real estate loans serviced for others were loans sub-serviced for others of $81.2 billion, $73.2 billion, $74.7 billion and $79.0 billion at September 30, 2022, September 30, 2021, December 31, 2021 and June 30, 2022, respectively. Revenues earned for sub-servicing loans totaled $33 million during the recent quarter, $39 million in the third quarter of 2021 and $44 million in the second quarter of 2022. The decrease in sub-servicing fees in the recent quarter reflects lower fees associated with modifying and selling reperforming loans previously repurchased by the holder of the contractual servicing rights. The contractual servicing rights associated with loans sub-serviced by the Company were predominantly held by affiliates of Bayview Lending Group LLC ("BLG"). Information about the Company’s relationship with BLG and its affiliates is included in note 16 of Notes to Financial Statements. Capitalized residential mortgage servicing assets totaled $208 million at September 30, 2022, $218 million at September 30, 2021, $217 million at December 31, 2021 and $215 million at June 30, 2022.

Commercial mortgage banking revenues totaled $28 million in the third quarter of 2022 compared to $50 million in the third quarter of 2021 and $33 million in the second quarter of 2022. Included in such amounts were revenues from loan origination and sales activities of $12 million and $24 million in the third quarters of 2022 and 2021, respectively, compared with $14 million in the second quarter of 2022. Commercial real estate loans originated for sale to other investors were $906 million in the recent quarter, compared with $1.7 billion in the third quarter of 2021 and $692 million in the second quarter of 2022. Loan servicing revenues totaled $16 million and $26 million in the third quarters of 2022 and 2021, respectively, compared with $19 million in the second quarter of 2022. Capitalized commercial mortgage servicing assets were $129 million and $131 million at September 30, 2022 and September 30, 2021, respectively, and $133 million at December 31, 2021. Commercial real estate loans serviced for other investors totaled $25.1 billion at September 30, 2022, $23.1 billion at September 30, 2021 and $23.7 billion at December 31, 2021. Those servicing amounts included $3.7 billion at September 30, 2022, $3.9 billion at September 30, 2021 and $4.0 billion at December 31, 2021 of loan balances for which investors had recourse to the Company if such balances are ultimately uncollectable. Included in commercial real estate loans serviced for others were loans sub-serviced for others of $3.7 billion at September 30, 2022, $3.4 billion at September 30, 2021 and $3.5 billion at December 31, 2021. Commitments to sell commercial real estate loans and commitments to originate commercial real estate loans for sale were $703 million and $401 million, respectively, at September 30, 2022, $993 million and $434 million, respectively, at September 30, 2021 and $751 million and $325 million, respectively, at December 31, 2021. Commercial real estate loans held for sale at September 30, 2022, September 30, 2021 and December 31, 2021 were $300 million, $559 million and $425 million, respectively.

Service charges on deposit accounts were $115 million and $105 million in the third quarters of 2022 and 2021, respectively, compared with $124 million in the second quarter of 2022. The People's United acquisition contributed $20 million to the service charges on deposit accounts total in the most recent quarter and $33 million in the second quarter of 2022. The lower fees associated with People's United reflect waivers of certain fees in September following conversion of customer deposit accounts to the Company's deposit servicing system. The Company is waiving additional fees and reimbursing select customers in the fourth quarter. The Company does not expect those amounts to ultimately be material to its consolidated financial position or results of operations. Excluding the contribution associated with the People's United acquisition, the decrease in the recent quarter as compared with the year-earlier quarter, reflected the Company's planned elimination, announced in February 2022, of certain non-sufficient funds fees and overdraft protection transfer charges from linked deposit accounts.

Trust income includes fees related to two significant businesses. The Institutional Client Services (“ICS”) business provides a variety of trustee, agency, investment management and administrative services for corporations and institutions, investment bankers, corporate tax, finance and legal executives, and other institutional clients who: (i) use capital markets financing structures; (ii) use independent trustees to hold retirement plan and other assets; and (iii) need investment and cash management services. The Wealth Advisory Services (“WAS”) business offers personal trust, planning, fiduciary, asset management, family office and other services designed to help high net worth individuals and families grow, preserve and transfer wealth. Trust income aggregated $187 million in the third quarter of 2022, compared with $157 million in the year-earlier quarter and $190 million in the second quarter of 2022. Trust income contributed from the acquisition of People's United totaled approximately $11 million in the recent quarter and $14 million in the second quarter of 2022. Revenues associated with the ICS business were $114 million during the quarter ended September 30, 2022 and $109 million during the quarter ended June 30, 2022, each inclusive of $2 million of People's United-related revenue, compared with $94 million during the quarter ended September 30, 2021. The higher revenues in the recent quarter as compared with the prior year third quarter were largely attributable to reduced fee waivers of $13 million resulting from higher rates on money market fund accounts and incremental fees from sales. Relative to the second quarter of 2022, the higher level of ICS revenues resulted from lower money market fund account fee waivers and higher collective fund fees. Revenues attributable to WAS, including $8 million of People's United-related fees, totaled approximately $71 million in the three-month period ended September 30, 2022, compared with $78 million, including $10 million of People's United-related fees, during the quarter ended June 30, 2022 and $63 million during the quarter ended September 30, 2021. The decline in WAS revenues in the recent quarter as compared with the second quarter of 2022 was largely reflective of annual tax service fees of $4 million recognized in the second quarter of 2022. Trust assets under management were $153.5 billion, $152.2 billion, $165.6 billion and $151.8 billion at September 30, 2022, September 30, 2021, December 31, 2021 and June 30, 2022, respectively. Trust assets under management include the Company’s proprietary mutual funds’ assets of $12.7 billion, $13.0 billion, $13.2 billion and $11.9 billion at September 30, 2022, September 30, 2021, December 31, 2021 and June 30, 2022, respectively. Additional trust income from investment management activities comprised of fees earned from retail customer investment accounts was $2 million in the third quarter of 2022, less than $1 million in the third quarter of 2021 and $3 million in the second quarter of 2022.

Brokerage services income, which includes revenues from the sale of mutual funds and annuities and securities brokerage fees, and, since June 2021, sales of select investment products of LPL Financial, totaled $21 million in the third quarter of 2022, $20 million in the third quarter of 2021 and $24 million in the second quarter of 2022. The acquisition of People's United contributed approximately $2 million and $3 million to brokerage services income in the third and second quarters of 2022, respectively. Trading account and non-hedging derivative gains were $5 million, $6 million and $2 million during the quarters ended September 30, 2022, September 30, 2021 and June 30, 2022, respectively. Information about the notional amount of interest rate, foreign exchange and other contracts entered into by the Company is included in note 11 of Notes to Financial Statements and herein under the heading “Taxable-equivalent Net Interest Income.”

Other revenues from operations were $153 million in the third quarter of 2022, compared with $120 million in the corresponding 2021 period and $148 million in the second quarter of 2022. Other revenues from operations associated with the People's United acquisition totaled $28 million and $29 million in the third and second quarters of 2022, respectively. Included in other revenues from operations were the following significant components. Letter of credit and other credit-related fees aggregated $54 million in the recent quarter, compared with $36 million in the year-earlier quarter and $38 million in the second quarter of 2022. As compared with the second quarter of 2022, the higher credit-related fees in 2022's third quarter resulted from an increase in loan syndication fees. The increase in letter of credit and other credit-related fees in the recent quarter as compared with the year-earlier quarter reflects both higher loan syndication fees and the impact resulting from the acquisition of People's United. Reflecting increased customer activity and incremental revenues associated with the People's United acquisition, revenues from merchant discount and credit card fees were $45 million in each of the recent quarter and second quarter of 2022, compared with $39 million in the year-earlier quarter. Tax-exempt income from bank owned life insurance, which includes changes in the cash surrender value of life insurance policies and benefits received, totaled $12 million in the third quarter of 2022, $11 million in the third quarter of 2021 and $14 million in the second quarter of 2022. The Company owns both general account and separate account policies. To the extent market conditions change such that the market value of assets in a separate account bank owned life insurance policy becomes less than the previously recorded cash surrender value, an adjustment is recorded as a reduction to "other revenues from operations." The increase in interest rates during 2022 has led to reductions of the market values of assets in some separate account bank owned life insurance policies below previously recorded cash surrender value. While the resultant reductions in recognized cash surrender value have not been material, a continued rise in interest rates could result in additional adjustments. Insurance-related sales commissions and other revenues totaled $13 million in the quarter ended September 30, 2022, compared with $10 million in the third quarter of 2021 and $14 million in the second quarter of 2022.

Other income totaled $1.68 billion during the first nine months of 2022, compared with $1.59 billion during the year-earlier period. Higher trust income, service charges on deposit accounts, brokerage services income, income resulting from a distribution received from the Company's investment in BLG in 2022, a reduction in unrealized losses on investment securities, and an increase in credit-related and merchant discount and credit card fees were partially offset by lower mortgage banking revenues. The acquisition of People's United contributed approximately $140 million to other income in the second and third quarters of 2022.

Mortgage banking revenues totaled $275 million during the first nine months of 2022, compared with $432 million during the similar period in 2021. Residential mortgage banking revenues aggregated $181 million and $315 million during the nine-month periods ended September 30, 2022 and 2021, respectively. New commitments to originate residential real estate loans to be sold aggregated $286 million and $3.7 billion in the initial nine months of 2022 and 2021, respectively. Realized gains from sales of residential real estate loans and loan servicing rights and recognized unrealized gains and losses on residential real estate loans held for sale, commitments to originate loans for sale and commitments to sell loans aggregated to losses of $2 million in the first nine months of 2022, compared with gains of $138 million in the first nine months of 2021. The reductions in volume and revenues reflect the Company’s decision to retain the substantial majority of recently originated mortgage loans in portfolio rather than sell such loans. Revenues from servicing residential real estate loans for others were $183 million in the first nine months of 2022 and $177 million in the corresponding 2021 period. Included in servicing revenues were sub-servicing revenues aggregating $119 million and $110 million in the first nine months of 2022 and 2021, respectively. For the nine months ended September 30, commercial mortgage banking revenues were $94 million and $117 million in 2022 and 2021, respectively. Commercial real estate loans originated for sale to other investors totaled $2.2 billion and $2.7 billion during the nine-month periods ended September 30, 2022 and 2021, respectively. The decline in commercial mortgage banking revenues is predominantly reflective of the origination volumes.

Service charges on deposit accounts aggregated $341 million during the first nine months of 2022, compared with $297 million in the year-earlier period. The increase can be attributed to the acquisition of People's United and increased consumer activity, partially offset by reductions resulting from the Company's planned elimination of certain fees and charges beginning in the second quarter of 2022. Trust income totaled $546 million and $476 million during the first nine months of 2022 and 2021, respectively. The increase in trust income in 2022 as compared with 2021 was largely due to higher revenues from the ICS business, reflecting lower money market fund fee waivers, increased sales activities and higher retirement services income from growth in collective fund balances, as well as WAS revenues associated with the People's United acquisition. Brokerage services income totaled $65 million in the first nine months of 2022, compared with $44 million in the nine-month period ended September 30, 2021. That increase reflects a change in June 2021 in product delivery to retail brokerage and certain trust customers related to the LPL Financial relationship. Revenues associated with the sale of investment products of LPL Financial, an independent financial services broker, are included in "brokerage services income." Prior to the transition to LPL Financial's product platform, revenues earned from providing those customers with proprietary trust products managed by the Company were reported as trust income.

Net unrealized losses on investment securities, including investments of Fannie Mae and Freddie Mac preferred stock, totaling $2 million were recognized during the first nine months of 2022, compared with net unrealized losses of $23 million in the corresponding 2021 period.

Other revenues from operations totaled $437 million (including approximately $55 million associated with the acquisition of People's United) in the first nine months of 2022, compared with $344 million in the year-earlier period. Other revenues from operations include the following significant components. Letter of credit and other credit-related fees aggregated $119 million (including $21 million associated with the acquisition of People's United) and $96 million in 2022 and 2021, respectively. Merchant discount and credit card fees were $124 million (including $5 million associated with the acquisition of People's United) and $101 million in the first nine months of 2022 and 2021, respectively. Income from bank owned life insurance totaled $36 million in the first nine months of 2022, compared with $34 million in the corresponding 2021 period. Insurance-related commissions and other revenues aggregated $42 million and $35 million in the first nine months of 2022 and 2021, respectively. M&T's investment in BLG resulted in income of $30 million in the first nine months of 2022; there was no similar income in the first nine months of 2021.

Other Expense

Other expense totaled $1.28 billion in the third quarter of 2022, compared with $899 million in the year-earlier quarter and $1.40 billion in the second quarter of 2022. Included in those amounts are expenses considered to be "nonoperating" in nature consisting of amortization of core deposit and other intangible assets of $18 million in each of the second and third quarter of 2022 and $3 million in the third quarter of 2021, and merger-related expenses of $53 million, $9 million and $223 million in the recent quarter, third quarter of 2021 and second quarter of 2022, respectively. Exclusive of those nonoperating expenses, noninterest operating expenses were $1.21 billion in the recent quarter, compared with $888 million in the year-earlier quarter and $1.16 billion in the second quarter of 2022. Operations acquired from People's United were the largest contributor to the rise in noninterest operating expenses in the third and second quarters of 2022 as compared with the third quarter of 2021. Factors contributing to the higher level of operating expenses in 2022's third quarter as compared with the year-earlier quarter, in addition to People's United-related noninterest operating expenses, were higher costs for salaries and employee benefits and outside data processing and software, offset by lower defined benefit pension-related expenses included in other costs of operations. As compared with the second quarter of 2022, the increase in the recent quarter was predominantly attributed to higher salaries and benefits expenses resulting from an additional pay day and M&T's continued investment in its talent base through salaries and incentive compensation. Table 2 provides a reconciliation of other expense to noninterest operating expense.

Other expense for the first nine months of 2022 totaled $3.64 billion, compared with $2.68 billion in the year-earlier period. Included in those amounts are expenses considered to be "nonoperating" in nature consisting of amortization of core deposit and other intangible assets of $38 million and $8 million in the nine-month periods ended September 30, 2022 and 2021, respectively, and merger-related expenses of $293 million and $23 million during the same respective periods. Exclusive of those nonoperating expenses, noninterest operating expenses for the first nine months of 2022 were $3.31 billion, compared with $2.65 billion in the first nine months of 2021. Approximately three-fourths of that increase can be attributed to operating expenses associated with the People's United acquisition. In addition, the year-over-year increase reflects higher costs for salaries and employee benefits, outside data processing and software, equipment and net occupancy and professional services expenses partially offset by lower defined benefit pension-related expenses included in other costs of operations.

Salaries and employee benefits expense totaled $736 million in the third quarter of 2022, compared with $510 million in the year-earlier quarter and $776 million in the second quarter of 2022. Excluding the nonoperating expense items described earlier, salaries and employee benefits expense totaled $723 million and $691 million in the third and second quarters of 2022, respectively. The higher operating expense in the recent quarter as compared with the third quarter of 2021 reflects higher employee staffing levels, including employees retained from the acquisition of People's United, and higher salaries from merit increases and incentive compensation. Comparing the recent quarter with the second quarter of 2022, the increase reflected an additional pay day in the recent quarter and M&T's continued investment in its talent base through salaries and incentive compensation. During the first nine months of 2022 and 2021, salaries and employee benefits expense aggregated $2.09 billion and $1.53 billion, respectively. Excluding nonoperating expenses described herein, salaries and employee benefits expense in the first nine months of 2022 totaled $1.99 billion. The higher operating expense level in 2022 largely reflects increased staffing levels, including the addition of People's United employees at the beginning of the second quarter, higher salaries resulting from merit increases and a rise in incentive compensation. The Company, in accordance with GAAP, has accelerated the recognition of compensation costs for stock-based awards granted to retirement-eligible employees and employees who will become retirement-eligible prior to full vesting of the award. Salaries and employee benefits expense included stock-based compensation of $21 million, $12 million and $23 million, in the three-month periods ended September 30, 2022, September 30, 2021 and June 30, 2022, respectively, and $94 million and $74 million during the nine-month periods ended September 30, 2022 and September 30, 2021, respectively. The number of full-time equivalent employees was 22,879 at September 30, 2022, compared with 17,103 and 22,680 at September 30, 2021 and June 30, 2022, respectively. The increase in staffing levels since September 30, 2021 was predominantly the result of the acquisition of People's United.

Excluding the nonoperating expense items described earlier from each quarter, non-personnel operating expenses were $485 million, $377 million and $471 million in the quarters ended September 30, 2022, September 30, 2021 and June 30, 2022, respectively. On that same basis, such expenses were $1.32 billion and $1.12 billion in the nine-month periods ended September 30, 2022 and 2021, respectively. The increase in non-personnel operating expenses in 2022’s third quarter as compared with 2022’s second quarter reflects higher FDIC assessments and professional services expenses. The higher non-personnel operating expenses in the 2022 periods as compared with the corresponding 2021 periods is predominantly attributable to the impact of the People's United acquisition. In addition to those expenses, higher costs for outside data processing and software, professional services and equipment and net occupancy were offset by reduced defined benefit pension-related expenses. Components of pension expense included in other costs of operations reflect the amortization of net unrecognized losses included in accumulated other comprehensive income. Such net unrecognized losses had been amortized over the average remaining service periods of active participants in the plan. If all or substantially all of the plan’s participants are inactive, GAAP provides for the average remaining life expectancy of the participants to be used instead of average remaining service period. Substantially all of the participants in the Company’s qualified defined benefit pension plan were inactive and beginning in 2022 the average remaining life expectancy was utilized prospectively to amortize the net unrecognized gains and losses of the Plan existent at each measurement date. The change increased the amortization period by approximately sixteen years and reduced the amount of quarterly amortization of unrecognized losses recorded in 2022 from what would have been recorded without such change in the amortization period by $9 million.

The efficiency ratio measures the relationship of noninterest operating expenses to revenues. The Company’s efficiency ratio was 53.6% during the recent quarter, compared with 57.7% and 58.3% in the third quarter of 2021 and second quarter of 2022, respectively. The efficiency ratios for the nine-month periods ended September 30, 2022 and 2021 were 58.1% and 58.8%, respectively. The calculation of the efficiency ratio is presented in Table 2.

Income Taxes

Income tax expense was $201 million in the third quarter of 2022, compared with $162 million in the year-earlier quarter and $60 million in the second quarter of 2022. For the nine-month periods ended September 30, 2022 and 2021, income tax expense was $374 million and $454 million, respectively. The effective tax rates were 23.7%, 24.6% and 21.7% for the quarters ended September 30, 2022, September 30, 2021 and June 30, 2022, respectively, and 23.4% and 24.5% for the nine-month periods ended September 30, 2022 and 2021, respectively.

The effective tax rate is affected by the level of income earned that is exempt from tax relative to the overall level of pre-tax income, the level of income allocated to the various state and local jurisdictions where the Company operates, because tax rates differ among such jurisdictions, and the impact of any large discrete or infrequently occurring items. The Company's effective tax rate in future periods will also be affected by any change in income tax laws or regulations and interpretations of income tax regulations that differ from the Company's interpretations by any of various tax authorities that may examine tax returns filed by M&T or any of its subsidiaries.

Capital

Shareholders' equity was $25.3 billion at September 30, 2022, representing 12.76% of total assets, compared with $17.5 billion or 11.54% a year earlier and $17.9 billion or 11.54% at December 31, 2021. The increase in shareholders' equity reflects the issuance of 50,325,004 M&T common shares and other common equity consideration totaling $8.4 billion for the acquisition of People's United and the conversion of People's United preferred stock into 10,000,000 shares of Series H Perpetual Fixed-to-Floating Rate Non-cumulative Preferred Stock of M&T ("Series H Preferred Stock") amounting to $261 million.

Included in shareholders' equity was preferred stock with financial statement carrying values of $2.01 billion at September 30, 2022, compared with $1.75 billion at each of September 30, 2021 and December 31, 2021. On April 1, 2022, the Company closed the acquisition of People's United resulting in the issuance of 10,000,000 shares of Series H Preferred Stock, par value $1.00 per share and liquidation preference of $25.00 per share, valued at $261 million. Through December 14, 2026, holders of the Series H Preferred Stock are entitled to receive, only when, as and if declared by M&T's Board of Directors, non-cumulative cash dividends at an annual rate of 5.625%, payable quarterly in arrears. Subsequent to December 14, 2026, holders will be entitled to receive, only when, as and if declared by M&T's Board of Directors, non-cumulative cash dividends at an annual rate of the three-month LIBOR plus 402 basis points. The Series H preferred stock may be redeemed at M&T's option, in whole or in part, from time to time, on or after April 1, 2027 or, in whole but not in part, at any time within 90 days following a regulatory capital treatment event whereby the full liquidation value of the shares no longer qualifies as "additional Tier 1 capital". The Series H Preferred Stock is listed on the NYSE under the symbol MTPrH.

Common shareholders' equity was $23.2 billion, or $134.45 per share, at September 30, 2022, compared with $15.8 billion, or $122.60 per share, a year earlier and $16.2 billion, or $125.51 per share, at December 31, 2021. Tangible equity per common share, which excludes goodwill and core deposit and other intangible assets and applicable deferred tax balances, was $84.28 at the end of the recent quarter, compared with $86.88 at September 30, 2021 and $89.80 at December 31, 2021. The Company's ratio of tangible common equity to tangible assets was 7.70% at September 30, 2022, compared with 7.59% a year earlier and 7.68% at December 31, 2021. Reconciliations of total common shareholders' equity and tangible common equity and total assets and tangible assets as of each of those dates are presented in table 2.

Shareholders' equity reflects accumulated other comprehensive income or loss, which includes the net after-tax impact of unrealized gains or losses on investment securities classified as available for sale, remaining unrealized losses on held-to-maturity securities transferred from available for sale that have not yet been amortized, gains or losses associated with interest rate swap agreements designated as cash flow hedges, foreign currency translation adjustments and adjustments to reflect the funded status of defined benefit pension and other postretirement plans. Net unrealized losses on investment securities reflected in shareholders' equity, net of applicable tax effect, were $348 million or $2.01 per common share, at September 30, 2022 compared with net unrealized gains of $105 million, or $.81 per common share, at September 30, 2021 and $78 million, or $.60 per common share, at December 31, 2021. Changes in unrealized gains and losses on investment securities are predominantly reflective of the impact of changes in interest rates on the values of such securities. Information about unrealized gains and losses as of September 30, 2022 and December 31, 2021 is included in note 3 of Notes to Financial Statements.

Reflected in the carrying amount of available-for-sale investment securities at September 30, 2022 were pre-tax effect unrealized gains of $1 million on securities with an amortized cost of $261 million and pre-tax effect unrealized losses of $471 million on securities with an amortized cost of $11.1 billion. Information concerning the Company's fair valuations of investment securities is provided in notes 3 and 13 of Notes to Financial Statements.

Each reporting period the Company reviews its available-for-sale investment securities for declines in value that might be indicative of credit-related losses through an analysis of the creditworthiness of the issuer or the credit performance of the underlying collateral supporting the bond. If the Company does not expect to recover the entire amortized cost basis of a debt security a credit loss is recognized in the consolidated statement of income. A loss is also recognized if the Company intends to sell a bond or it more likely than not will be required to sell a bond before recovery of the amortized cost basis.

As of September 30, 2022, based on a review of each of the securities in the available-for-sale investment securities portfolio, the Company concluded that it expected to realize the amortized cost basis of each security. As of September 30, 2022, the Company did not intend to sell nor is it anticipated that it would be required to sell any securities for which fair value was less than the amortized cost basis of the security. The Company intends to continue to closely monitor the performance of its securities because changes in their underlying credit performance or other events could cause the amortized cost basis of those securities to become uncollectable.

Accounting guidance requires investment securities held to maturity to be presented at their net carrying value that is expected to be collected over their contractual term. The Company estimated no material credit losses for its investment securities classified as held-to-maturity at September 30, 2022 and December 31, 2021. The amortized cost basis of obligations of states and political subdivisions in the held-to-maturity portfolio totaled $2.7 billion at September 30, 2022 and less than $1 million at December 31, 2021. The increase reflected municipal securities obtained in the acquisition of People's United. At September 30, 2022 and December 31, 2021, the Company had in its held-to-maturity portfolio privately issued mortgage-backed securities with an amortized cost basis of $52 million and $62 million, respectively, and a fair value of $53 million and $57 million, respectively. At September 30, 2022, 83% of those mortgage-backed securities were in the most senior tranche of the securitization structure. The mortgage-backed securities are generally collateralized by residential and small-balance commercial real estate loans originated between 2004 and 2008. After considering the repayment structure and estimated future collateral cash flows of each individual bond, the Company concluded that as of September 30, 2022, it expected to recover the amortized cost basis of those privately issued mortgage-backed securities. Nevertheless, it is possible that adverse changes in the estimated future performance of mortgage loan collateral underlying such securities could impact the Company’s conclusions.

Adjustments to reflect the funded status of defined benefit pension and other postretirement plans, net of applicable tax effect, reduced accumulated other comprehensive income by $258 million, or $1.49 per common share, at September 30, 2022, $436 million or $3.38 per common share, at September 30, 2021 and $267 million or $2.08 per common share, at December 31, 2021.

In January 2021 M&T’s Board of Directors authorized a plan to repurchase up to $800 million of shares of M&T’s common stock subject to all applicable regulatory limitations. In February 2022, the Board reaffirmed that plan. M&T repurchased 3,505,946 shares of its common stock for $600 million in the second quarter of 2022. There were no repurchases pursuant to that repurchase plan during 2021. On July 19, 2022, M&T's Board of Directors authorized a new stock purchase program to repurchase up to $3.0 billion of common shares subject to all applicable regulatory reporting limitations. The new plan authorized in July 2022 replaced the previous plan. M&T repurchased 3,282,449 shares of its common stock for $600 million under the new program in the third quarter of 2022.

Cash dividends declared on M&T's common stock totaled $210 million in the recent quarter, compared with $143 million and $215 million in the quarters ended September 30, 2021 and June 30, 2022, respectively. During the fourth quarter of 2021, M&T's Board of Directors authorized an increase in the quarterly common stock dividend to $1.20 per common share from the previous rate of $1.10 per common share. Common stock cash dividends declared during the nine-month periods ended September 30, 2022 and 2021 were $581 million and $428 million, respectively. Cash dividends declared on preferred stock aggregated $25 million in both the recent quarter and second quarter of 2022 compared with $17 million in the third quarter of 2021. Preferred stock dividends totaled $72 million and $51 million during the first nine months of 2022 and 2021, respectively.

M&T and its subsidiary banks are required to comply with applicable capital adequacy standards established by the federal banking agencies. Pursuant to those regulations, the minimum capital ratios are as follows:

- 4.5% Common Equity Tier 1 (“CET1”) to risk-weighted assets (each as defined in the capital regulations);

- 6.0% Tier 1 capital (that is, CET1 plus Additional Tier 1 capital) to risk-weighted assets (each as defined in the capital regulations);
- 8.0% Total capital (that is, Tier 1 capital plus Tier 2 capital) to risk-weighted assets (each as defined in the capital regulations); and
- 4.0% Tier 1 capital to average consolidated assets as reported on consolidated financial statements (known as the “leverage ratio”), as defined in the capital regulations.

Capital regulations require buffers in addition to the minimum risk-based capital ratios noted above. M&T is subject to a stress capital buffer requirement that is determined through the Federal Reserve’s supervisory stress tests and M&T’s bank subsidiaries are subject to a capital conservation buffer requirement. The buffer requirement must be composed entirely of CET1 and for each entity was 2.5% of risk-weighted assets at September 30, 2022. In June 2022, the Federal Reserve released the results of its most recent supervisory stress tests. Based on those results, on October 1, 2022, M&T's stress capital buffer of 4.7% became effective.

The federal bank regulatory agencies have issued rules that allow banks and bank holding companies to phase-in the impact of adopting the expected credit loss accounting model on regulatory capital. Those rules allow banks and bank holding companies to delay for two years the day one impact on retained earnings of adopting the expected loss accounting standard and 25% of the cumulative change in the reported allowance for credit losses subsequent to the initial adoption through the end of 2021, followed by a three-year transition period. M&T and its subsidiary banks adopted these rules and the impact is reflected in the regulatory capital ratios presented herein.

The regulatory capital ratios of the Company and its bank subsidiaries, M&T Bank and Wilmington Trust, N.A., as of September 30, 2022 are presented in the accompanying table.

REGULATORY CAPITAL RATIOS
September 30, 2022

	M&T (Consolidated)	**M&T Bank**	**Wilmington Trust, N.A.**
Common equity Tier 1	10.75%	11.37%	257.25%
Tier 1 capital	12.13%	11.37%	257.25%
Total capital	13.96%	12.87%	257.76%
Tier 1 leverage	9.13%	8.56%	83.96%

The Company is subject to the comprehensive regulatory framework applicable to bank and financial holding companies and their subsidiaries, which includes examinations by a number of regulators. Regulation of financial institutions such as M&T and its subsidiaries is intended primarily for the protection of depositors, the Deposit Insurance Fund of the FDIC and the banking and financial system as a whole, and generally is not intended for the protection of shareholders, investors or creditors other than insured depositors. Changes in laws, regulations and regulatory policies applicable to the Company’s operations can increase or decrease the cost of doing business, limit or expand permissible activities or affect the competitive environment in which the Company operates, all of which could have a material effect on the business, financial condition or results of operations of the Company and in M&T’s ability to pay dividends. For additional information concerning this comprehensive regulatory framework, refer to Part I, Item 1 of M&T’s Form 10-K for the year ended December 31, 2021.

Segment Information

The Company's reportable segments have been determined based upon its internal profitability reporting system, which is organized by strategic business unit. Financial information about the Company's segments is presented in note 15 of Notes to Financial Statements. The reportable segments are Business Banking, Commercial Banking, Commercial Real Estate, Discretionary Portfolio, Residential Mortgage Banking and Retail Banking.

The Business Banking segment contributed net income of $94 million in the third quarter of 2022, up from $72 million in the third quarter of 2021 and $71 million in the second quarter of 2022. As compared with 2021’s third quarter, the recent quarter's higher net income primarily reflected a rise in net interest income of $54 million and higher service charges on deposit accounts of $5 million partially offset by a $20 million increase in centrally-allocated costs associated with data processing, risk management and other support services provided to the Business Banking segment and higher personnel-related costs of $6 million (each reflecting the impact of the People's United acquisition). The increase in net interest income resulted largely from a widening of the net interest margin on deposits of 126 basis points and higher average deposit balances of $7.1 billion, which was offset, in part, by a narrowing of the net interest margin on loans. The growth in net income in the recent quarter as compared with the second quarter of 2022 reflected a $40 million increase in net interest income, resulting largely from an 80 basis point widening of the net interest margin on deposits. Partially offsetting that increase in net interest income was a $7 million rise in centrally-allocated costs associated with data processing, risk management and other support services provided to the Business Banking segment. Net income for the Business Banking segment totaled $206 million during the first nine months of 2022, compared with $160 million in the corresponding 2021 period. The 29% year-over-year increase reflected a six-month impact of the People's United acquisition and was predominantly attributable to higher net interest income of $82 million, an increase in service charges on deposit accounts of $14 million and higher merchant discount and credit card fees of $8 million, partially offset by a rise in centrally-allocated costs associated with data processing, risk management and other support services provided to the Business Banking segment of $32 million and higher personnel-related costs of $6 million. The higher net interest income reflected a widening of the net interest margin on deposits of 59 basis points and higher average balances of deposits of $5.5 billion, partially offset by a narrowing of the net interest margin on loans of 67 basis points.

Net income earned by the Commercial Banking segment totaled $214 million during the recent quarter, up from $144 million in the year-earlier quarter and $163 million in the second quarter of 2022. As compared with the third quarter of 2021, the recent quarter included a $178 million increase in net interest income reflecting a 140 basis point widening of the net interest margin on deposits and an increase in average outstanding loan and deposit balances of $18.8 billion and $3.2 billion, respectively, and higher credit-related fees each reflecting the impact of the People's United acquisition. Partially offsetting that higher net interest income was a $58 million increase in centrally-allocated costs associated with data processing, risk management and other support services provided to the Commercial Banking segment, higher personnel-related costs of $28 million and a $27 million increase in the provision for credit losses. The 31% rise in net income in the recent quarter as compared with the second quarter of 2022 was primarily due to a $57 million increase in net interest income, driven by a 94 basis point widening of the net interest margin on deposits and higher credit-related fees of $13 million. Through the first nine months of the year, net income for the Commercial Banking segment totaled $522 million in 2022, compared with $378 million in the corresponding 2021 period. That rise in net income was predominantly due to an increase in net interest income of $305 million, reflecting a widening of the net interest margin on deposits of 98 basis points and higher average outstanding balances in loans of $11.1 billion (including the six-month impact of the People's United acquisition), an increase of $35 million in letter of credit and other credit-related fees, and higher deposit service charges. Those favorable factors were offset, in part, by increases in centrally-allocated costs associated with data processing, risk management and other support services provided to the Commercial Banking segment, personnel-related expenses and other costs of operations (all largely reflecting the six-month impact of the People's United acquisition).

The Commercial Real Estate segment recorded net income of $95 million in the third quarter of 2022, compared with $85 million in the similar 2021 period and $122 million in the second quarter of 2022. The higher net income as compared with the year-earlier quarter reflected an $18 million increase in net interest income, a $19 million decrease in the provision for credit losses and a $6 million decline in other costs of operations. The higher net interest income predominantly resulted from a 129 basis point widening of the net interest margin on deposits and higher loan balances of $5.1 billion, partially offset by a reduction in the net interest margin on loans of 56 basis points. A decrease in commercial mortgage banking revenues and a rise in centrally-allocated costs associated with data processing, risk management and other support services provided to the Commercial Real Estate segment largely offset those favorable factors. The decline in commercial mortgage banking revenues reflects reduced origination volume and lower servicing revenues. The $27 million decrease in the recent quarter's net income as compared with the immediately preceding quarter was largely the result of a $9 million increase in each of centrally-allocated costs associated with data processing, risk management and other support services provided to the Commercial Real Estate segment and the provision for credit losses, and a decline in commercial mortgage banking revenues mainly resulting from lower servicing revenues. Net income for the Commercial Real Estate segment was $314 million during the nine-month period ended September 30, 2022, up 30% from $243 million in the corresponding 2021 period. That rise reflects a $72 million decrease in the provision for credit losses and higher revenues of $46 million that includes an increase in net interest income of $45 million. Higher credit-related and other fees were offset by a decline in commercial mortgage banking revenues. The impact of those overall improvements was reduced by higher centrally-allocated costs associated with data processing, risk management and other support services provided to the Commercial Real Estate segment. The increase in net interest income reflected a widening of the net interest margin on deposits of 56 basis points and higher average outstanding balances of loans and deposits of $2.7 billion and $2.0 billion, respectively, partially offset by a narrowing of the net interest margin on loans of 24 basis points.

Net income recorded by the Discretionary Portfolio segment aggregated $12 million during the three-month period ended September 30, 2022, compared with $75 million in the year-earlier period and $56 million earned in the second quarter of 2022. The decline in the recent quarter's net income as compared with the third quarter of 2021 was due primarily to a $63 million decrease in net interest income. The lower net interest income was mainly driven by a decline in average outstanding deposit balances of $4.0 billion and reduced income from interest rate swap agreements entered into for interest rate risk management purposes, partially offset by an increase in average balances of investment securities and loans of $17.8 billion and $7.9 billion, respectively, reflecting balances obtained in the acquisition of People's United and the purchase of investment securities during 2022. The lower net income in the recent quarter as compared with the 2022's second quarter reflected decreases in net interest income of $57 million. The decline in net interest income was primarily due to reduced income from interest rate swap agreements entered into for interest rate risk management purposes. Net income for this segment for the first nine months totaled $103 million in 2022 and $244 million in 2021. The decline in net income can be attributed to lower net interest income due to reduced income from interest rate swap agreements entered into for interest rate risk management purposes. Intersegment fees paid to the Residential Mortgage Banking segment during the first nine months of 2022 increased $40 million. Partially offsetting those unfavorable factors was a $22 million reduction of valuation losses on investment securities as compared with the corresponding 2021 period.

The Residential Mortgage Banking segment recorded a net loss of $3 million in the recent quarter, compared with net income of $46 million in the third quarter of 2021 and $9 million in the second quarter of 2022. The decline in the recent quarter from the third quarter of 2021 predominantly resulted from a $38 million decrease in revenues (including intersegment revenues) associated with lower mortgage origination and sales activities, lower net interest income and a rise in centrally-allocated costs associated with data processing, risk management and other support services provided to the Residential Mortgage Banking segment. As compared with the net income in the second quarter of 2022, the net loss in the recent quarter reflected lower mortgage banking revenues of $13 million, predominantly associated with servicing residential real estate loans (including intersegment revenues) and a decline in net interest income of $11 million, partially offset by higher revenues of $7 million (including intersegment revenues) associated with mortgage origination and sales activities. The Residential Mortgage Banking segment earned $35 million in the first nine months of 2022, compared with $126 million in the similar period of 2021. The decline compared with the corresponding 2021 period was largely due to a decrease in revenues of $95 million (including intersegment revenues) resulting from lower mortgage origination and sales activities, lower net interest income of $31 million and a $19 million rise in centrally-allocated costs associated with data processing, risk management and other support services provided to the Residential Mortgage Banking segment, partially offset by an increase of $20 million in revenues associated with servicing residential real estate loans (including intersegment revenues). The decline in net interest income was driven by a decline in average outstanding balances in loans and deposits of $1.7 billion and $1.4 billion, respectively.

Net income for the Retail Banking segment totaled $182 million in the third quarter of 2022, compared with $88 million in the corresponding quarter of 2021 and $114 million in the second quarter of 2022. The rise in net income in the recent quarter as compared with the year-earlier quarter reflected a $291 million increase in net interest income, largely driven by a widening of the net interest margin earned on deposits of 119 basis points and higher average outstanding deposit and loan balances of $24.4 billion and $2.2 billion, respectively (reflecting the impact of the People's United acquisition). Those favorable factors were partially offset by higher expenses, also reflecting the impact of the People's United acquisition, including higher personnel-related costs of $73 million, a rise in centrally-allocated expenses associated with support services provided to the Retail Banking segment of $32 million, an increase in equipment and net occupancy costs of $28 million, higher other costs of operations of $21 million and an increase in the provision for credit losses of $7 million. The 59% improvement in net income in the current quarter as compared with the second quarter of 2022 reflected an increase in net interest income of $137 million, which was offset, in part, by lower service charges on deposit accounts of $5 million, higher personnel-related costs of $20 million and increases in other operating expenses of $26 million. The increase in net interest income reflected a widening of the net interest margin on deposits of 81 basis points, partially offset by lower average deposit balances of $2.0 billion. The Retail Banking segment recorded net income of $380 million and $263 million in the first nine months of 2022 and 2021, respectively. The improvement from the 2021 period reflected higher net interest income of $449 million and higher consumer service charges on deposit accounts of $16 million. Those favorable factors were partially offset by higher personnel-related costs of $122 million, a rise in centrally-allocated expenses associated with support services provided to the Retail Banking segment of $104 million, an increase in equipment and net occupancy costs of $49 million, higher professional services expense of $20 million, and an increase in the provision for credit losses of $6 million (all reflecting a six-month impact of the People’s United acquisition). The increase in net interest income reflected a 54 basis point widening of the net interest margin on deposits and higher average outstanding deposit and loan balances of $18.2 billion and $2.1 billion, respectively, partially offset by a 25 basis point narrowing of the net interest margin on loans.

The “All Other” category reflects other activities of the Company that are not directly attributable to the reported segments. Reflected in this category are the amortization of core deposit and other intangible assets resulting from the acquisitions of financial institutions, distributed income from BLG, merger-related expenses resulting from acquisitions (when incurred) and the net impact of the Company’s allocation methodologies for internal transfers for funding charges and credits associated with the earning assets and interest-bearing liabilities of the Company’s reportable segments and the provision for credit losses. The “All Other” category also includes trust income of the Company that reflects the ICS and WAS business activities. The various components of the “All Other” category reported net income totaling $53 million for the quarter ended September 30, 2022 as compared with net losses of $14 million and $317 million in the year-earlier quarter and second quarter of 2022, respectively. The “All Other” category had net losses of $333 million and $12 million for the nine-month periods ended September 30, 2022 and 2021, respectively. As compared with the respective 2021 periods the recent quarter and first nine months of 2022 each reflected higher net interest income and trust income, as well as the favorable impact from the Company’s allocation methodologies for internal transfers for funding charges and credits associated with earning assets and interest-bearing liabilities of the Company’s reportable segments. Those favorable factors were offset by increases in the provision for credit losses and expenses resulting from the acquisition of People’s United (inclusive of merger-related expenses). The net loss recorded in the second quarter of 2022 reflected an increased provision for credit losses and merger-related expenses associated with the acquisition of People's United.

Recent Accounting Developments

A discussion of recent accounting developments is included in note 17 of Notes to Financial Statements.

Forward-Looking Statements

Management's Discussion and Analysis of Financial Condition and Results of Operations and other sections of this quarterly report contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and the rules and regulations of the SEC. Any statement that does not describe historical or current facts is a forward-looking statement, including statements based on current expectations, estimates and projections about the Company's business, and management's beliefs and assumptions.

Statements regarding the potential effects of events or factors specific to the Company and/or the financial industry as a whole, as well as national and global events generally, on the Company's business, financial condition, liquidity and results of operations may constitute forward-looking statements and are subject to the risk that the actual effects may differ, possibly materially, from what is reflected in those forward-looking statements due to factors and future developments that are uncertain, unpredictable and in many cases beyond the Company's control. As described further below, statements regarding M&T's expectations or predictions regarding the acquisition of People's United are also forward-looking statements, including statements regarding the expected financial results, prospects, targets, goals and outlook.

Forward-looking statements are typically identified by words such as "believe," "expect," "anticipate," "intend," "target," "estimate," "continue," or "potential," by future conditional verbs such as "will," "would," "should," "could," or "may," or by variations of such words or by similar expressions. These statements are not guarantees of future performance and involve certain risks, uncertainties and assumptions ("future factors") which are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or forecasted in such forward-looking statements.

Examples of future factors include: the impact of the People's United transaction (as described in the next paragraph); economic conditions including inflation and supply chain issues; the impact of international conflicts and other events; the impact of the COVID-19 pandemic; changes in interest rates, spreads on earning assets and interest-bearing liabilities, and interest rate sensitivity; prepayment speeds, loan originations, credit losses and market values on loans, collateral securing loans, and other assets; sources of liquidity; common shares outstanding; common stock price volatility; fair value of and number of stock-based compensation awards to be issued in future periods; the impact of changes in market values on trust-related revenues; legislation and/or regulations affecting the financial services industry and/or M&T and its subsidiaries individually or collectively, including tax policy; regulatory supervision and oversight, including monetary policy and capital requirements; governmental and public policy changes; the outcome of pending and future litigation and governmental proceedings, including tax-related examinations and other matters; changes in accounting policies or procedures as may be required by the Financial Accounting Standards Board, regulatory agencies or legislation; increasing price, product and service competition by competitors, including new entrants; rapid technological developments and changes; the ability to continue to introduce competitive new products and services on a timely, cost-effective basis; the mix of products and services; containing costs and expenses; protection and validity of intellectual property rights; reliance on large customers; technological, implementation and cost/financial risks in large, multi-year contracts; continued availability of financing; financial resources in the amounts, at the times and on the terms required to support M&T and its subsidiaries' future businesses; and material differences in the actual financial results of merger, acquisition and investment activities compared with M&T's initial expectations, including the full realization of anticipated cost savings and revenue enhancements.

In addition, future factors related to the acquisition of People's United include, among others: the outcome of any legal proceedings that may be instituted against M&T or its subsidiaries; the possibility that the anticipated benefits of the transaction will not be realized when expected or at all, including as a result of the impact of, or problems arising from, the integration of the two companies or as a result of the strength of the economy and competitive factors in the areas where the Company does business; diversion of management's attention from ongoing business operations and opportunities; potential adverse reactions or changes to business or employee relationships; the Company's success in executing its business plans and strategies and managing the risks involved in the foregoing; the business, economic and political conditions in the markets in which the Company operates; and other factors that may affect future results of the Company.

Future factors related to the acquisition also include risks, such as, among others: that there could be an adverse effect on the Company's ability to retain customers and retain or hire key personnel and maintain relationships with customers; that integration efforts may be more difficult or time-consuming than anticipated, including in areas such as sales force, cost containment, asset realization, systems integration and other key strategies; that profitability following the combination may be lower than expected including for possible reasons such as lower than expected revenues or higher or unexpected costs, charges or expenses resulting from the transaction; unforeseen risks that may exist; and other factors that may affect future results of the Company.

These are representative of the future factors that could affect the outcome of the forward-looking statements. In addition, such statements could be affected by general industry and market conditions and growth rates, general economic and political conditions, either nationally or in the states in which M&T and its subsidiaries do business, including interest rate and currency exchange rate fluctuations, changes and trends in the securities markets, and other future factors.

M&T provides further detail regarding these risks and uncertainties in its Form 10-K for the year ended December 31, 2021, including in the Risk Factors section of such report, as well as in other SEC filings. Forward-looking statements speak only as of the date made, and M&T does not assume any duty and does not undertake to update forward-looking statements.

Table 1

QUARTERLY TRENDS

	2022 Quarters			2021 Quarters			
	Third	Second	First	Fourth	Third	Second	First
Earnings and dividends							
Amounts in thousands, except per share							
Interest income (taxable-equivalent basis)	$ 1,793,340	$ 1,475,868	931,490	962,081	996,649	974,090	1,020,695
Interest expense	102,822	53,425	24,082	24,725	25,696	28,018	35,567
Net interest income	1,690,518	1,422,443	907,408	937,356	970,953	946,072	985,128
Less: provision for credit losses	115,000	302,000	10,000	(15,000)	(20,000)	(15,000)	(25,000)
Other income	563,079	571,100	540,887	578,637	569,126	513,633	505,598
Less: other expense	1,279,253	1,403,154	959,741	927,500	899,334	865,345	919,444
Income before income taxes	859,344	288,389	478,554	603,493	660,745	609,360	596,282
Applicable income taxes	200,921	60,141	113,146	141,962	161,582	147,559	145,300
Taxable-equivalent adjustment	11,827	10,726	3,234	3,563	3,703	3,732	3,733
Net income	$ 646,596	$ 217,522	362,174	457,968	495,460	458,069	447,249
Net income available to common shareholders-diluted	$ 620,554	$ 192,236	339,590	434,171	475,961	438,759	428,093
Per common share data							
Basic earnings	$ 3.55	$ 1.08	2.63	3.37	3.70	3.41	3.33
Diluted earnings	3.53	1.08	2.62	3.37	3.69	3.41	3.33
Cash dividends	$ 1.20	$ 1.20	1.20	1.20	1.10	1.10	1.10
Average common shares outstanding							
Basic	174,609	177,367	128,945	128,698	128,689	128,671	128,537
Diluted	175,682	178,277	129,416	128,888	128,844	128,842	128,669
Performance ratios, annualized							
Return on							
Average assets	1.28 %	.42 %	.97 %	1.15 %	1.28 %	1.22 %	1.22 %
Average common shareholders' equity	10.43 %	3.21 %	8.55 %	10.91 %	12.16 %	11.55 %	11.57 %
Net interest margin on average earning assets (taxable-equivalent basis)	3.68 %	3.01 %	2.65 %	2.58 %	2.74 %	2.77 %	2.97 %
Nonaccrual loans to total loans and leases, net of unearned discount	1.89 %	2.05 %	2.32 %	2.22 %	2.40 %	2.31 %	1.97 %
Net operating (tangible) results (a)							
Net operating income (in thousands)	$ 700,030	$ 577,622	375,999	475,477	504,030	462,959	457,372
Diluted net operating income per common share	$ 3.83	$ 3.10	2.73	3.50	3.76	3.45	3.41
Annualized return on							
Average tangible assets	1.44 %	1.16 %	1.04 %	1.23 %	1.34 %	1.27 %	1.29 %
Average tangible common shareholders' equity	17.89 %	14.41 %	12.44 %	15.98 %	17.54 %	16.68 %	17.05 %
Efficiency ratio (b)	53.6 %	58.3 %	64.9 %	59.7 %	57.7 %	58.4 %	60.3 %
Balance sheet data							
In millions, except per share							
Average balances							
Total assets (c)	$ 201,131	$ 208,865	151,648	157,722	154,037	150,641	148,157
Total tangible assets (c)	192,450	200,170	147,053	153,125	149,439	146,041	143,554
Earning assets	182,382	189,755	138,624	144,420	140,420	136,951	134,355
Investment securities	23,945	22,384	7,724	6,804	6,019	6,211	6,605
Loans and leases, net of unearned discount	127,525	127,599	92,159	93,250	95,314	98,610	99,356
Deposits	167,271	174,683	128,055	134,444	131,255	128,413	125,733
Common shareholders' equity (c)	23,654	24,079	16,144	15,863	15,614	15,321	15,077
Tangible common shareholders' equity (c)	14,973	15,384	11,549	11,266	11,016	10,721	10,474
At end of quarter							
Total assets (c)	$ 197,955	$ 204,033	149,864	155,107	151,901	150,623	150,481
Total tangible assets (c)	189,281	195,344	145,269	150,511	147,304	146,023	145,879
Earning assets	178,351	185,109	137,237	141,990	138,527	137,171	137,367
Investment securities	24,604	22,802	9,357	7,156	6,448	6,143	6,611
Loans and leases, net of unearned discount	128,226	128,486	91,808	92,912	93,583	97,113	99,299
Deposits	163,845	170,358	126,319	131,543	128,701	128,269	128,476
Common shareholders' equity (c)	23,245	23,784	16,126	16,153	15,779	15,470	15,197
Tangible common shareholders' equity (c)	14,571	15,095	11,531	11,557	11,182	10,870	10,595
Equity per common share	134.45	135.16	124.93	125.51	122.60	120.22	118.12
Tangible equity per common share	84.28	85.78	89.33	89.80	86.88	84.47	82.35

(a) *Excludes amortization and balances related to goodwill and core deposit and other intangible assets and merger-related expenses which, except in the calculation of the efficiency ratio, are net of applicable income tax effects. A reconciliation of net income and net operating income appears in Table 2.*

(b) *Excludes impact of merger-related expenses and net securities transactions.*

(c) *The difference between total assets and total tangible assets, and common shareholders' equity and tangible common shareholders' equity, represents goodwill, core deposit and other intangible assets, net of applicable deferred tax balances. A reconciliation of such balances appears in Table 2.*

Table 2

RECONCILIATION OF QUARTERLY GAAP TO NON-GAAP MEASURES

	2022 Quarters			2021 Quarters			
	Third	**Second**	**First**	**Fourth**	**Third**	**Second**	**First**
Income statement data (in thousands, except per share)							
Net income							
Net income	646,596	$ 217,522	362,174	457,968	495,460	458,069	447,249
Amortization of core deposit and other intangible assets (a)	14,141	14,138	933	1,447	2,028	2,023	2,034
Merger-related expenses (a)	39,293	345,962	12,892	16,062	6,542	2,867	8,089
Net operating income	700,030	$ 577,622	375,999	475,477	504,030	462,959	457,372
Earnings per common share							
Diluted earnings per common share	3.53	$ 1.08	2.62	3.37	3.69	3.41	3.33
Amortization of core deposit and other intangible assets (a)	.08	.08	.01	.01	.02	.02	.02
Merger-related expenses (a)	.22	1.94	.10	.12	.05	.02	.06
Diluted net operating earnings per common share	3.83	$ 3.10	2.73	3.50	3.76	3.45	3.41
Other expense							
Other expense	1,279,253	$ 1,403,154	959,741	927,500	899,334	865,345	919,444
Amortization of core deposit and other intangible assets	(18,384)	(18,384)	(1,256)	(1,954)	(2,738)	(2,737)	(2,738)
Merger-related expenses	(53,027)	(222,809)	(17,372)	(21,190)	(8,826)	(3,893)	(9,951)
Noninterest operating expense	1,207,842	$ 1,161,961	941,113	904,356	887,770	858,715	906,755
Merger-related expenses							
Salaries and employee benefits	13,094	$ 85,299	87	112	60	4	—
Equipment and net occupancy	2,106	502	1,807	340	1	—	—
Outside data processing and software	2,277	716	252	250	625	244	—
Advertising and marketing	2,177	1,199	628	337	505	24	—
Printing, postage and supplies	651	2,460	722	186	730	2,049	—
Other costs of operations	32,722	132,633	13,876	19,965	6,905	1,572	9,951
Other expense	53,027	222,809	17,372	21,190	8,826	3,893	9,951
Provision for credit losses	—	242,000	—	—	—	—	—
Total	53,027	$ 464,809	$ 17,372	$ 21,190	$ 8,826	$ 3,893	$ 9,951
Efficiency ratio							
Noninterest operating expense (numerator)	1,207,842	$ 1,161,961	941,113	904,356	887,770	858,715	906,755
Taxable-equivalent net interest income	1,690,518	$ 1,422,443	907,408	937,356	970,953	946,072	985,128
Other income	563,079	571,100	540,887	578,637	569,126	513,633	505,598
Less: Gain (loss) on bank investment securities	(1,108)	(62)	(743)	1,426	291	(10,655)	(12,282)
Denominator	2,254,705	$ 1,993,605	1,449,038	1,514,567	1,539,788	1,470,360	1,503,008
Efficiency ratio	53.6 %	58.3 %	64.9 %	59.7 %	57.7 %	58.4 %	60.3 %
Balance sheet data (in millions)							
Average assets							
Average assets	201,131	$ 208,865	151,648	157,722	154,037	150,641	148,157
Goodwill	(8,501)	(8,501)	(4,593)	(4,593)	(4,593)	(4,593)	(4,593)
Core deposit and other intangible assets	(236)	(254)	(3)	(5)	(7)	(10)	(13)
Deferred taxes	56	60	1	1	2	3	3
Average tangible assets	192,450	$ 200,170	147,053	153,125	149,439	146,041	143,554
Average common equity							
Average total equity	25,665	$ 26,090	17,894	17,613	17,109	16,571	16,327
Preferred stock	(2,011)	(2,011)	(1,750)	(1,750)	(1,495)	(1,250)	(1,250)
Average common equity	23,654	24,079	16,144	15,863	15,614	15,321	15,077
Goodwill	(8,501)	(8,501)	(4,593)	(4,593)	(4,593)	(4,593)	(4,593)
Core deposit and other intangible assets	(236)	(254)	(3)	(5)	(7)	(10)	(13)
Deferred taxes	56	60	1	1	2	3	3
Average tangible common equity	14,973	$ 15,384	11,549	11,266	11,016	10,721	10,474
At end of quarter							
Total assets							
Total assets	197,955	$ 204,033	149,864	155,107	151,901	150,623	150,481
Goodwill	(8,501)	(8,501)	(4,593)	(4,593)	(4,593)	(4,593)	(4,593)
Core deposit and other intangible assets	(227)	(245)	(3)	(4)	(6)	(9)	(12)
Deferred taxes	54	57	1	1	2	2	3
Total tangible assets	189,281	$ 195,344	145,269	150,511	147,304	146,023	145,879
Total common equity							
Total equity	25,256	$ 25,795	17,876	17,903	17,529	16,720	16,447
Preferred stock	(2,011)	(2,011)	(1,750)	(1,750)	(1,750)	(1,250)	(1,250)
Common equity	23,245	23,784	16,126	16,153	15,779	15,470	15,197
Goodwill	(8,501)	(8,501)	(4,593)	(4,593)	(4,593)	(4,593)	(4,593)
Core deposit and other intangible assets	(227)	(245)	(3)	(4)	(6)	(9)	(12)
Deferred taxes	54	57	1	1	2	2	3
Total tangible common equity	14,571	$ 15,095	11,531	11,557	11,182	10,870	10,595

(a) After any related tax effect.

Table 3

AVERAGE BALANCE SHEETS AND ANNUALIZED TAXABLE-EQUIVALENT RATES

	2022 Third Quarter			2022 Second Quarter			2022 First Quarter		
	Average Balance	**Interest**	**Average Rate**	**Average Balance**	**Interest**	**Average Rate**	**Average Balance**	**Interest**	**Average Rate**
Average balance in millions; interest in thousands									
Assets									
Earning assets									
Loans and leases, net of unearned discount (a)									
Commercial, financial, etc.	$ 38,321	$ 470,738	4.87 %	$ 37,818	$ 373,543	3.96 %	$ 23,305	$ 207,715	3.61 %
Real estate – commercial	46,282	531,225	4.49	47,227	461,594	3.87	34,957	337,100	3.86
Real estate – consumer	22,962	220,464	3.84	22,761	207,080	3.64	15,870	141,001	3.55
Consumer	19,960	239,471	4.76	19,793	210,290	4.26	18,027	188,017	4.23
Total loans and leases, net	127,525	1,461,898	4.55	127,599	1,252,507	3.94	92,159	873,833	3.85
Interest-bearing deposits at banks	30,752	172,956	2.23	39,386	80,773	.82	38,693	18,280	.19
Federal funds sold and agreements to resell securities	29	41	.55	250	253	.41	—	—	.71
Trading account	131	583	1.78	136	199	.59	48	194	1.61
Investment securities (b)									
U.S. Treasury and federal agencies	20,227	124,084	2.43	18,644	109,755	2.36	7,077	35,911	2.06
Obligations of states and political subdivisions	2,688	23,626	3.49	2,768	23,344	3.38	—	3	6.99
Other	1,030	10,152	3.91	972	9,037	3.73	647	3,269	2.05
Total investment securities	23,945	157,862	2.62	22,384	142,136	2.55	7,724	39,183	2.06
Total earning assets	182,382	1,793,340	3.90	189,755	1,475,868	3.12	138,624	931,490	2.72
Allowance for credit losses	(1,822)			(1,814)			(1,475)		
Cash and due from banks	1,962			1,690			1,448		
Other assets	18,609			19,234			13,051		
Total assets	$ 201,131			$ 208,865			$ 151,648		
Liabilities and shareholders' equity									
Interest-bearing liabilities									
Interest-bearing deposits									
Savings and interest-checking deposits	$ 89,360	$ 68,690	.31	$ 95,149	$ 27,907	.12	$ 67,267	$ 6,747	.04
Time deposits	5,050	1,124	.09	5,480	1,227	.09	2,647	1,397	.21
Total interest-bearing deposits	94,410	69,814	.29	100,629	29,134	.12	69,914	8,144	.05
Short-term borrowings	913	2,670	1.16	1,126	3,419	1.22	56	1	.01
Long-term borrowings	3,281	30,338	3.67	3,282	20,872	2.55	3,442	15,937	1.88
Total interest-bearing liabilities	98,604	102,822	.41	105,037	53,425	.20	73,412	24,082	.13
Noninterest-bearing deposits	72,861			74,054			58,141		
Other liabilities	4,001			3,684			2,201		
Total liabilities	175,466			182,775			133,754		
Shareholders' equity	25,665			26,090			17,894		
Total liabilities and shareholders' equity	$ 201,131			$ 208,865			$ 151,648		
Net interest spread			3.49			2.92			2.59
Contribution of interest-free funds			.19			.09			.06
Net interest income/margin on earning assets		$ 1,690,518	3.68 %		$ 1,422,443	3.01 %		$ 907,408	2.65 %

(a) Includes nonaccrual loans.
(b) Includes available-for-sale securities at amortized cost.

(continued)

Table 3 (continued)

AVERAGE BALANCE SHEETS AND ANNUALIZED TAXABLE-EQUIVALENT RATES (continued)

	2021 Fourth Quarter			2021 Third Quarter		
Average balance in millions; interest in thousands	Average Balance	Interest	Average Rate	Average Balance	Interest	Average Rate
Assets						
Earning assets						
Loans and leases, net of unearned discount (a)						
Commercial, financial, etc.	$ 22,330	$ 205,491	3.65 %	$ 23,730	$ 236,820	3.96 %
Real estate – commercial	36,717	364,795	3.89	37,547	371,150	3.87
Real estate – consumer	16,290	143,675	3.53	16,379	146,898	3.59
Consumer	17,913	194,619	4.31	17,658	193,256	4.34
Total loans and leases, net	93,250	908,580	3.87	95,314	948,124	3.95
Interest-bearing deposits at banks	44,316	16,984	.15	39,036	14,922	.15
Federal funds sold and agreements to resell securities	—	—	.47	—	—	—
Trading account	50	202	1.62	51	345	2.71
Investment securities (b)						
U.S. Treasury and federal agencies	6,150	32,516	2.10	5,352	30,362	2.25
Obligations of states and political subdivisions	—	3	6.82	—	3	6.44
Other	654	3,796	2.30	667	2,893	1.72
Total investment securities	6,804	36,315	2.12	6,019	33,258	2.19
Total earning assets	144,420	962,081	2.64	140,420	996,649	2.82
Allowance for credit losses	(1,521)			(1,577)		
Cash and due from banks	1,483			1,480		
Other assets	13,340			13,714		
Total assets	$ 157,722			$ 154,037		
Liabilities and shareholders' equity						
Interest-bearing liabilities						
Interest-bearing deposits						
Savings and interest-checking deposits	$ 70,518	$ 6,443	.04	$ 70,976	$ 7,000	.04
Time deposits	2,914	2,968	.40	3,061	3,573	.46
Total interest-bearing deposits	73,432	9,411	.05	74,037	10,573	.06
Short-term borrowings	58	—	.01	91	2	.01
Long-term borrowings	3,441	15,314	1.77	3,431	15,121	1.75
Total interest-bearing liabilities	76,931	24,725	.12	77,559	25,696	.14
Noninterest-bearing deposits	61,012			57,218		
Other liabilities	2,166			2,151		
Total liabilities	140,109			136,928		
Shareholders' equity	17,613			17,109		
Total liabilities and shareholders' equity	$ 157,722			$ 154,037		
Net interest spread			2.52			2.68
Contribution of interest-free funds			.06			.06
Net interest income/margin on earning assets		$ 937,356	2.58 %		$ 970,953	2.74 %

(a) *Includes nonaccrual loans.*
(b) *Includes available-for-sale securities at amortized cost.*

Item 3. Quantitative and Qualitative Disclosures About Market Risk.

Incorporated by reference to the discussion contained under the caption “Taxable-equivalent Net Interest Income” in Part I, Item 2, “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

Item 4. Controls and Procedures.

(a) Evaluation of disclosure controls and procedures. Based upon their evaluation of the effectiveness of M&T’s disclosure controls and procedures (as defined in Exchange Act rules 13a-15(e) and 15d-15(e)), René F. Jones, Chairman of the Board and Chief Executive Officer, and Darren J. King, Senior Executive Vice President and Chief Financial Officer, concluded that M&T’s disclosure controls and procedures were effective as of September 30, 2022.

(b) Changes in internal control over financial reporting. M&T regularly assesses the adequacy of its internal control over financial reporting and enhances its controls in response to internal control assessments and internal and external audit and regulatory recommendations. No changes in internal control over financial reporting have been identified in connection with the evaluation of disclosure controls and procedures during the quarter ended September 30, 2022 that have materially affected, or are reasonably likely to materially affect, M&T’s internal control over financial reporting. Management has excluded processes and controls of People’s United from its assessment of internal control over financial reporting for the quarter ended September 30, 2022. Assets and liabilities associated with the People's United transaction that have not yet been converted to M&T's systems or processes as of September 30, 2022 include loans and leases of $5.5 billion, other assets of $106 million and other liabilities of $170 million. Approximately $94 million and $182 million of total revenues for the three and six months ended September 30, 2022, respectively, was contributed from business activities of People's United that have not yet been converted to M&T's systems or processes.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings.

M&T and its subsidiaries are subject in the normal course of business to various pending and threatened legal proceedings and other matters in which claims for monetary damages are asserted. On an on-going basis management, after consultation with legal counsel, assesses the Company's liabilities and contingencies in connection with such proceedings. For those matters where it is probable that the Company will incur losses and the amounts of the losses can be reasonably estimated, the Company records an expense and corresponding liability in its consolidated financial statements. To the extent the pending or threatened litigation could result in exposure in excess of that liability, the amount of such excess is not currently estimable. Although not considered probable, the range of reasonably possible losses for such matters in the aggregate, beyond the existing recorded liability, was between $0 and $25 million as of September 30, 2022. Although the Company does not believe that the outcome of pending legal matters will be material to the Company's consolidated financial position, it cannot rule out the possibility that such outcomes will be material to the consolidated results of operations for a particular reporting period in the future.

Item 1A. Risk Factors.

There have been no material changes in risk factors relating to M&T to those disclosed in response to Item 1A. to Part I of Form 10-K for the year ended December 31, 2021.

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

(a) – (b) Not applicable.

(c)

	Issuer Purchases of Equity Securities			
Period	**(a)Total Number of Shares (or Units) Purchased (1)**	**(b)Average Price Paid per Share (or Unit)**	**(c)Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs**	**(d)Maximum Number (or Approximate Dollar Value) of Shares (or Units) that may yet be Purchased Under the Plans or Programs (2)**
July 1 - July 31, 2022	275,689	$ 172.00	275,000	$ 2,952,688,995
August 1 - August 31, 2022	1,754,105	183.75	1,750,000	2,631,148,585
September 1 - September 30, 2022	1,265,647	183.80	1,257,449	2,400,000,142
Total	3,295,441	$ 182.78	3,282,449	

(1) *The total number of shares purchased during the periods indicated includes shares purchased as part of publicly announced programs and/or shares deemed to have been received from employees who exercised stock options by attesting to previously acquired common shares in satisfaction of the exercise price or shares received from employees upon the vesting of restricted stock awards in satisfaction of applicable tax withholding obligations, as is permitted under M&T's stock-based compensation plans.*

(2) *In July 2022, M&T's Board of Directors authorized a program under which $3.0 billion of common shares may be repurchased with the exact number, timing, price and terms of such repurchases to be determined at the discretion of management and subject to all regulatory limitations. That authorization replaces the previous program.*

Item 3. Defaults Upon Senior Securities.

(None.)

Item 4. Mine Safety Disclosures.

(Not applicable.)

Item 5. Other Information.

(None.)

Item 6. Exhibits.

The following exhibits are filed as a part of this report.

Exhibit No.	
31.1	Certification of Chief Executive Officer under Section 302 of the Sarbanes-Oxley Act of 2002. Filed herewith.
31.2	Certification of Chief Financial Officer under Section 302 of the Sarbanes-Oxley Act of 2002. Filed herewith.
32.1	Certification of Chief Executive Officer under 18 U.S.C. §1350 pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. Filed herewith.
32.2	Certification of Chief Financial Officer under 18 U.S.C. §1350 pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. Filed herewith.
101.INS	Inline XBRL Instance Document. Filed herewith.
101.SCH	Inline XBRL Taxonomy Extension Schema. Filed herewith.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase. Filed herewith.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase. Filed herewith.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase. Filed herewith.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase. Filed herewith.
104	The cover page from M&T Bank Corporation's Quarterly Report on Form 10-Q for the quarter ended September 30, 2022 has been formatted in Inline XBRL.

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.

M&T BANK CORPORATION

Date: November 7, 2022	By:	/s/ Darren J. King
		Darren J. King
		Senior Executive Vice President and Chief Financial Officer

CERTIFICATIONS

I, René F. Jones, certify that:

1. I have reviewed this quarterly report on Form 10-Q of M&T Bank Corporation;

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

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

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

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

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

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

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

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

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

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

Date: November 7, 2022

By: /s/ René F. Jones
René F. Jones
Chairman of the Board and
Chief Executive Officer

EXHIBIT 31.2

CERTIFICATIONS

I, Darren J. King, certify that:

1. I have reviewed this quarterly report on Form 10-Q of M&T Bank Corporation;

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

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

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

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

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

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

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

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

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

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

Date: November 7, 2022

By: /s/ Darren J. King
Darren J. King
Senior Executive Vice President
and Chief Financial Officer

EXHIBIT 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER UNDER 18 U.S.C. §1350

I, René F. Jones, Chairman of the Board and Chief Executive Officer of M&T Bank Corporation, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

(1) the Quarterly Report on Form 10-Q of M&T Bank Corporation for the quarterly period ended September 30, 2022 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of M&T Bank Corporation.

The foregoing certification is being furnished solely pursuant to 18 U.S.C. §1350 and is not being filed as part of the Report or as a separate disclosure document.

/s/ René F. Jones

René F. Jones

November 7, 2022

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to M&T Bank Corporation and will be retained by M&T Bank Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

EXHIBIT 32.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER UNDER 18 U.S.C. §1350

I, Darren J. King, Senior Executive Vice President and Chief Financial Officer of M&T Bank Corporation, certify, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, 18 U.S.C. Section 1350, that:

(1) the Quarterly Report on Form 10-Q of M&T Bank Corporation for the quarterly period ended September 30, 2022 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of M&T Bank Corporation.

The foregoing certification is being furnished solely pursuant to 18 U.S.C. §1350 and is not being filed as part of the Report or as a separate disclosure document.

/s/ Darren J. King
Darren J. King

November 7, 2022

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to M&T Bank Corporation and will be retained by M&T Bank Corporation and furnished to the Securities and Exchange Commission or its staff upon request.