

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K**

(Mark One)

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

For the fiscal year ended December 31, 2022

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

For the transition period from _____ to _____
Commission File Number 1-11277

VALLEY NATIONAL BANCORP

(Exact name of registrant as specified in its charter)

New Jersey
(State or other jurisdiction of
Incorporation or Organization)

One Penn Plaza
New York, NY
(Address of principal executive office)

22-2477875
(I.R.S. Employer
Identification Number)

10119
(Zip code)

973-305-8800
(Registrant's telephone number, including area code)

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

<u>Title of each class</u>	<u>Trading Symbols</u>	<u>Name of exchange on which registered</u>
Common Stock, no par value	VLY	The Nasdaq Stock Market LLC
Non-Cumulative Perpetual Preferred Stock, Series A, no par value	VLYPP	The Nasdaq Stock Market LLC
Non-Cumulative Perpetual Preferred Stock, Series B, no par value	VLYPO	The Nasdaq Stock Market LLC

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

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

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

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

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

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

Large accelerated filer	☒	Accelerated filer	☐	Smaller reporting company	☐
Non-accelerated filer	☐		☐	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 has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes ☒ No ☐

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

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

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

The aggregate market value of the voting stock held by non-affiliates of the registrant was approximately \$5.2 billion on June 30, 2022.

There were 507,748,997 shares of Common Stock outstanding at February 27, 2023.

Documents incorporated by reference:

Certain portions of the registrant's Definitive Proxy Statement (the "2023 Proxy Statement") for the 2023 Annual Meeting of Shareholders to be held April 24, 2023 will be incorporated by reference in Part III. The 2023 Proxy Statement will be filed within 120 days of December 31, 2022.

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PART I

Item 1. Business

The disclosures set forth in this item are qualified by Item 1A.—Risk Factors and the section captioned “Cautionary Statement Concerning Forward-Looking Statements” in Item 7.—Management’s Discussion and Analysis of Financial Condition and Results of Operations (MD&A) of this Annual Report on Form 10-K (referred to as this “report”) and other cautionary statements set forth elsewhere in this report.

General

Valley National Bancorp, headquartered in Wayne, New Jersey, is a New Jersey corporation organized in 1983 and is registered as a bank holding company and a financial holding company with the Board of Governors of the Federal Reserve System (the “Federal Reserve”) under the Bank Holding Company Act of 1956, as amended (BHC Act). The words “Valley,” “the Company,” “we,” “our” and “us” refer to Valley National Bancorp and its subsidiaries, unless we indicate otherwise. At December 31, 2022, Valley had consolidated total assets of \$57.5 billion, total net loans of \$46.5 billion, total deposits of \$47.6 billion and total shareholders’ equity of \$6.4 billion.

Valley advertises and identifies itself under the trade names “Valley Bank” and “Valley”.

Valley’s principal subsidiary, Valley National Bank (commonly referred to as the “Bank” in this report), has been chartered as a national banking association under the laws of the United States since 1927. Valley and the Bank offer a full suite of national and regional banking solutions through various commercial, private banking, retail, insurance and wealth management financial services products. Valley provides personalized service and customized solutions to assist its customers with their financial service needs. Our solutions include, but are not limited to, traditional consumer and commercial deposit and lending products, commercial real estate financing, asset-based loans, small business loans, equipment financing, insurance and wealth management solutions, and personal financing solutions, such as residential mortgages, home equity loans and automobile financing. Valley also offers niche financial services, including loan and deposit products for homeowners associations, insurance premium financing, cannabis-related business banking and venture banking, which we offer nationally.

The Bank also provides convenient account access to customers through a number of account management services, including access to more than 200 branch locations across New Jersey, New York, Florida, Alabama, California and Illinois; online, mobile and telephone banking; drive-in and night deposit services; ATMs; remote deposit capture; and safe deposit facilities. In addition, certain international banking services are available to customers, including standby letters of credit, documentary letters of credit and related products, and certain ancillary services, such as foreign exchange transactions, documentary collections, and foreign wire transfers.

Valley’s consolidated subsidiaries include the Bank, as well as subsidiaries with the following primary functions: an insurance agency offering property and casualty, life and health insurance; asset management advisers that are registered investment advisers with the Securities and Exchange Commission (SEC); registered securities broker-dealers with the SEC and members of the Financial Industry Regulatory Authority (FINRA); a title insurance agency in New York which also provides services in New Jersey; an advisory firm specializing in the investment and management of tax credits; and a subsidiary which specializes in health care equipment lending and other commercial equipment leases.

Recent Acquisitions

Bank Leumi Le-Israel Corporation. On April 1, 2022, Valley completed its acquisition of Bank Leumi Le-Israel Corporation, the U.S. subsidiary of Bank Leumi Le-Israel B.M., and parent company of Bank Leumi USA, collectively referred to as “Bank Leumi USA”. Bank Leumi USA maintained its headquarters in New York City with commercial banking offices in Chicago, Los Angeles, Palo Alto, and Aventura, Florida. The common shareholders of Bank Leumi USA received 3.8025 shares of Valley common stock and \$5.08 in cash for each Bank Leumi USA common share that they owned. As a result, Valley issued approximately 85 million shares of common stock and paid \$113.4 million in cash in the transaction. Based on Valley’s closing stock price on March 31, 2022, the transaction was valued at \$1.2 billion, inclusive of the value of options. As a result of the acquisition, Bank Leumi Le-Israel B.M. owned approximately 14 percent of Valley’s common stock as of April 1, 2022.

The Westchester Bank Holding Corporation. On December 1, 2021, Valley completed its acquisition of The Westchester Bank Holding Corporation (Westchester) and its principal subsidiary, The Westchester Bank, which was headquartered in White Plains, New York. As of December 1, 2021, Westchester had approximately \$1.4 billion in assets, \$915.0 million in loans, and \$1.2 billion in deposits, after purchase accounting adjustments, and a branch network of seven locations in Westchester County, New York. The common shareholders of Westchester received 229.645 shares of Valley

common stock for each Westchester share they owned prior to the merger. The total consideration for the merger was \$211.1 million, consisting of approximately 15.7 million shares of Valley common stock.

Dudley Ventures. On October 8, 2021, Valley acquired certain subsidiaries of Arizona-based Dudley Ventures (DV), an advisory firm specializing in the investment and management of tax credits. The transaction included the acquisition of DV Fund Advisors and DV Advisory Services, which were both subsequently merged and renamed Dudley Ventures, as well as DV's community development entity, DV Community Investment. On November 16, 2021, Valley also acquired DV Financial Services, a registered broker-dealer regulated by FINRA, which is largely inactive. The DV related acquisitions support our efforts to build differentiated sources of non-interest income.

See Note 2 to the consolidated financial statements for further details on these and other acquisitions.

Operating Segments

Our operating segments are reassessed by management, at least on an annual basis, to ensure the proper identification and reporting of our operating segments. Valley re-evaluated its segment reporting during the second quarter 2022 to consider the Bank Leumi USA acquisition on April 1, 2022, along with other factors, including changes in the internal structure of operations, discrete financial information reviewed by key decision-makers, balance sheet management strategies and personnel. As a result, Valley currently reports the results of its operations and manages its business through three operating segments: Commercial Banking, Consumer Banking and Treasury and Corporate Other. Valley's Wealth Management and Insurance Services Division, comprised of trust, asset management, insurance and tax credit advisory services, is a reporting unit within the consumer banking segment. See Note 21 to the consolidated financial statements for additional details, including the financial performance of our operating segments.

Commercial Banking

Commercial and industrial loans. Commercial and industrial loans totaled approximately \$8.8 billion and represented 18.8 percent of the total loan portfolio at December 31, 2022. During 2022, we acquired \$2.4 billion of commercial and industrial loans from Bank Leumi USA. We make commercial loans to small and middle market businesses most often located in New Jersey, New York, and Florida, as well as lending on a national basis within our specialty lines of business. A significant proportion of Valley's commercial and industrial loan portfolio is granted to long-standing customers of proven ability, strong repayment performance, and high character. Underwriting standards are designed to assess the borrower's ability to generate recurring cash flow sufficient to meet the debt service requirements of loans granted. While such recurring cash flow serves as the primary source of repayment, most of the loans are collateralized by borrower assets intended to serve as a secondary source of repayment should the need arise. Anticipated cash flows of borrowers, however, may not occur as expected and the collateral securing these loans may fluctuate in value. In the case of loans secured by accounts receivable, the ability of the borrower to collect all amounts due from its customers may be impaired. Our loan decisions include consideration of a borrower's willingness to repay debts, collateral coverage, standing in the community and other forms of support. Strong consideration is given to long-term existing customers that have maintained a favorable relationship with the Bank. Commercial loan products offered consist of term loans for equipment purchases, working capital lines of credit that assist our customers' financing of accounts receivable and inventory, and commercial mortgages for owner occupied properties. Working capital advances are generally used to finance seasonal requirements and are repaid at the end of the cycle. Short-term commercial business loans may be collateralized by a lien on accounts receivable, inventory, equipment and/or partly collateralized by real estate. Short-term loans may also be made on an unsecured basis based on a borrower's financial strength and past performance. Whenever possible, we obtain the personal guarantee of the borrower's principals to mitigate the risk. Unsecured loans, when made, are generally granted to the Bank's most creditworthy borrowers. Unsecured commercial and industrial loans totaled \$555.3 million (including \$33.6 million of SBA guaranteed PPP loans) at December 31, 2022. In addition, we provide financing to the health care and industrial equipment leasing market through our leasing subsidiary, Highland Capital Corp.

Valley National Bank is a certified SBA lender and originated \$3.2 billion in Paycheck Protection Program (PPP) loans authorized by the CARES Act during 2020 and 2021. The approximate 21,500 PPP loans to local businesses provided critical funding during an unprecedented economic crisis caused by the COVID-19 pandemic. Valley supported small businesses throughout the entire PPP process including assistance with the subsequent PPP loan forgiveness process. At December 31, 2022, Valley had \$33.6 million of PPP loans that remained outstanding as compared to \$436.0 million at December 31, 2021.

Commercial real estate loans. Commercial real estate and construction loans totaled \$29.4 billion and represented 62.7 percent of the total loan portfolio at December 31, 2022. During 2022, we acquired \$3.1 billion of commercial real estate loans from Bank Leumi USA. We originate commercial real estate loans that are secured by various diversified property types across the New York metropolitan area (New Jersey, New York and Pennsylvania), Florida and our other primary market footprints. Property types in this portfolio range from multi-family residential properties to non-owner occupied commercial, industrial/

warehouse and retail. Loans are generally written on an adjustable basis with rates tied to a specifically identified market rate index. Adjustment periods generally range between five to ten years and repayment is generally structured on a fully amortizing basis for terms up to thirty years. Commercial real estate loans are subject to underwriting standards and processes similar to commercial and industrial loans but generally they involve larger principal balances and longer repayment periods as compared to commercial and industrial loans. Commercial real estate loans are viewed primarily as cash flow loans and secondarily as loans secured by real property. Repayment of most loans is dependent upon the cash flow generated from the property securing the loan or the business that occupies the property. Commercial real estate loans may be more adversely affected by conditions in the real estate markets or in the general economy and accordingly, conservative loan to value ratios are required at origination, as well as stress tested to evaluate the impact of market changes relating to key underwriting elements. The properties securing the commercial real estate portfolio represent diverse types, with most properties located within Valley's primary markets. With respect to loans to developers and builders, we originate and manage construction loans structured on either a revolving or a non-revolving basis, depending on the nature of the underlying development project. Our construction loans totaling approximately \$3.7 billion at December 31, 2022 are generally secured by the real estate to be developed and may also be secured by additional real estate to mitigate the risk. During 2022, we acquired \$834 million of construction loans from Bank Leumi USA. Within our construction portfolio, we have a diverse mix of both residential (for sale and rental) and commercial development projects. Non-revolving construction loans often involve the disbursement of substantially all committed funds with repayment substantially dependent on the successful completion and sale, or lease, of the project. Sources of repayment for these types of loans may be from pre-committed permanent loans from other lenders, sales of developed property, or an interim loan commitment from Valley until permanent financing is obtained elsewhere. Revolving construction loans (generally relating to single-family residential construction) are controlled with loan advances dependent upon the presale of housing units financed. These loans are closely monitored by on-site inspections and are considered to have higher risks than other real estate loans due to their ultimate repayment being sensitive to interest rate changes, governmental regulation of real property, general economic conditions and the availability of long-term financing.

Consumer Banking

Residential mortgage loans. Residential mortgage loans totaled \$5.4 billion and represented 11.4 percent of the total loan portfolio at December 31, 2022. Our residential mortgage loans include fixed and variable interest rate loans located mostly in New Jersey, New York and Florida. Valley's ability to be repaid on such loans is closely linked to the economic and real estate market conditions in our lending markets. We also make mortgage loans secured by homes beyond this primary geographic area; however, lending outside this primary area is generally made in support of existing customer relationships, as well as targeted purchases of loans guaranteed by third parties. Mortgage loan originations are based on underwriting standards that generally comply with Fannie Mae and/or Freddie Mac requirements. Appraisals and valuations of real estate collateral are contracted through an approved appraisal management company. The appraisal management company adheres to all regulatory requirements. The Bank's appraisal management policy and procedure is in accordance with regulatory requirements and guidance issued by the Bank's primary regulator. Credit scoring, using FICO® and other proprietary, credit scoring models is employed in the ultimate, judgmental credit decision by Valley's underwriting staff. Valley does not use third party contract underwriting services. In deciding whether to originate each residential mortgage, Valley considers the qualifications of the borrower, the value of the underlying property and other factors that we believe are predictive of future loan performance. Valley originated first mortgages include both fixed rate and adjustable rate mortgage (ARM) products with 10-year to 30-year maturities. The adjustable rate loans have a fixed-rate, fixed payment, introductory period of 5 to 10 years that is selected by the borrower. Additionally, Valley originates jumbo residential mortgage loans, which are mostly fixed-rate with 30-year maturities. At December 31, 2022, fixed and adjustable rate jumbo residential mortgage loans totaled approximately \$2.6 billion and \$1.1 billion, respectively. Interest-only (i.e., non-amortizing) residential mortgage loans within our jumbo portfolio totaled \$193.3 million (or 3.60 percent of the total residential mortgage loan portfolio) at December 31, 2022. The Bank services certain residential mortgage portfolios, and it is compensated for loan administrative services performed for mortgage servicing rights related primarily to loans originated and sold by the Bank. See Notes 5 and 8 to the consolidated financial statements for further details.

Other consumer loans. Other consumer loans totaled \$3.3 billion and represented 7.1 percent of the total loan portfolio at December 31, 2022. Our other consumer loan portfolio is primarily comprised of direct and indirect automobile loans, loans secured by the cash surrender value of life insurance, home equity loans and lines of credit, and to a lesser extent, secured and unsecured other consumer loans (including credit card loans). Valley is an auto lender in New Jersey, New York, Pennsylvania, Florida, Connecticut, Delaware and Alabama offering indirect auto loans secured by either new or used automobiles. Automobile originations (including light truck and sport utility vehicles) are largely produced via indirect channels, originated through approved automobile dealers. Our indirect auto lending model in Florida and Alabama uses New Jersey based underwriting and loan servicing platform. The Florida auto dealer network generated approximately \$134.1 million and \$143.6 million of auto loans in 2022 and 2021, respectively, while the auto loans originated from Alabama totaled \$29.5 million in 2022 as compared to \$49.4 million in 2021. Home equity lending consists of both fixed and variable interest rate products

mainly to provide home equity loans to our residential mortgage customers or take a secondary position to another lender's first lien position within the footprint of our primary lending territories. We generally will not exceed a combined (i.e., first and second mortgage) loan-to-value ratio of 80 percent when originating a home equity loan. Other consumer loans include direct consumer term loans, both secured and unsecured, but are largely comprised of personal lines of credit secured by cash surrender value of life insurance. The product is mainly originated through the Bank's retail branch network and third party financial advisors. Unsecured consumer loans totaled approximately \$63.8 million, including \$16.8 million of credit card loans, at December 31, 2022.

Wealth Management. Our Wealth Management and Insurance Services Division provides asset management advisory, brokerage, trust, commercial, personal and title insurance, and tax credit advisory services. Asset management advisory services include investment services for individuals and small to medium sized businesses, trusts and custom-tailored investment strategies designed for various types of retirement plans. Our brokerage services mainly facilitate the buying and selling of registered securities for banking clients. Trust services include living and testamentary trusts, investment management, custodial and escrow services, and estate administration primarily to individuals. Tax credit advisory services include sourcing, syndication, and structuring federal and state tax credits for commercial customers and development projects.

Treasury and Corporate Other

Although we are primarily focused on our lending and wealth management services, a large portion of our income is generated through investments in various types of securities. Treasury and Corporate Other largely consists of the Treasury managed held to maturity and available for sale debt securities portfolios mainly utilized in the liquidity management needs of our lending segments and income and expense items resulting from support functions not directly attributable to a specific segment. As of December 31, 2022, our total investment securities and interest bearing deposits with banks were \$5.2 billion and \$503.6 million, respectively. See the "Investment Securities Portfolio" section of the MD&A and Note 4 to the consolidated financial statements for additional information concerning our investment securities.

Changes in Loan Portfolio Composition

At December 31, 2022 and 2021, approximately 75 percent of Valley's gross loans totaling \$46.9 billion and \$34.2 billion, respectively, consisted of commercial real estate (including construction loans), residential mortgage and home equity loans. The remaining 25 percent at both December 31, 2022 and 2021, respectively, consisted of loans not collateralized by real estate. Valley has no internally planned changes that would significantly impact the current composition of our loan portfolio by loan type. However, we have continued to diversify the types of borrowers within our geographic concentrations in New Jersey, the New York City metropolitan area, including Westchester County, New York, and Florida. Many external factors outlined in Item 1A. Risk Factors, the "Executive Summary" section of Item 7. MD&A, and elsewhere in this report may impact our ability to maintain the current composition of our loan portfolio. See the "Loan Portfolio" section in Item 7. MD&A in this report for further discussion of our loan composition and concentration risks.

The following table presents the loan portfolio and loans held for sale by segments by state and our percentage of total loans by state at December 31, 2022.

Loan Portfolio and Loans Held for Sale by Segment:						
	Commercial and Industrial	Commercial Real Estate	Residential	Consumer	Total	% of Total
New York	\$ 2,030,012	\$ 10,399,920	\$ 1,455,664	\$ 907,999	\$ 14,793,595	32 %
Florida	2,316,846	7,956,045	1,412,092	498,723	12,183,706	26
New Jersey	1,778,539	6,049,451	1,805,649	1,190,865	10,824,504	23
California	479,433	1,040,358	96,476	45,030	1,661,297	4
Illinois	217,778	429,732	4,621	34,822	686,953	1
Alabama	65,215	375,300	36,550	81,583	558,648	1
Other	1,917,007	3,182,062	571,616	555,930	6,226,615	13
Total	\$ 8,804,830	\$ 29,432,868	\$ 5,382,668	\$ 3,314,952	\$ 46,935,318	100 %
Less: Loans held for sale, at fair value	—	—	18,118	—	18,118	
Total loan portfolio	\$ 8,804,830	\$ 29,432,868	\$ 5,364,550	\$ 3,314,952	\$ 46,917,200	

Risk Management

Financial institutions must manage a variety of business risks that can significantly affect their financial performance. Significant risks we confront are credit risks and asset/liability management risks, which include interest rate and liquidity risks. Credit risk is the risk of not collecting payments pursuant to the contractual terms of loan, lease and investment assets. Interest rate risk results from changes in interest rates which may impact the re-pricing of assets and liabilities in different amounts or at different dates. Liquidity risk is the risk that we will be unable to fund obligations to loan customers, depositors or other creditors at a reasonable cost.

Valley's Board performs its risk oversight function primarily through several standing committees, including the Risk Committee, all of which report to the full Board. The full Board regularly engages in discussions of risk management and receives reports on risk factors from our executive management, other Company officers and the chair of the Risk Committee. The Risk Committee assists the Board with among other things, oversight of management's established enterprise-wide risk management framework and risk culture which are intended to align with Valley's strategic plan and which the Risk Committee deems appropriate for Valley's capital, business activities, size and risk appetite. Management utilizes the enterprise-wide risk management framework to holistically manage and monitor risks across the organization and to aggregate and manage the risk appetite approved by the board. As part of the risk management framework, the Risk Committee reviews and recommends to the Board risk tolerances and limits for strategic, credit, interest rate, price, liquidity, compliance, operational (including cyber and information security risk), and reputation risks, oversees risk management within those tolerances and monitors compliance with applicable laws and regulations. With guidance from and oversight by the Risk Committee, management continually refines and enhances its risk management policies, procedures and monitoring programs to be able to adapt to changing risks.

Valley continues to internally run stress tests of its capital position that are subject to review by Valley's primary regulators. The Bank's 2022 Capital Stress Test included a climate related scenario that considered geographical climate events within the Bank's diverse footprint. The results of the internal stress tests are considered in combination with other risk management and monitoring practices at Valley to maintain an overall risk management program.

Cyber Security

Information security is a significant operational risk for Valley. Information security includes the risk of losses resulting from cyber-attacks. Valley frequently experiences attempted cyber security attacks against its systems as described in Item 1A. To date, there have been no incidents that have resulted in material losses or significant disruption of services to our customers. Over the last several years, we have continued to significantly increase the resources dedicated to cybersecurity. We believe that further increases are likely to be required in the future, in anticipation of increases in the sophistication and persistence of cyber-attacks. We employ personnel dedicated to overseeing the infrastructure and systems necessary to defend against cyber security incidents. Senior management is briefed on information and cyber security matters, preparedness and any incidents requiring a response.

Valley's Board, through its Risk Committee, has primary oversight responsibility for information security and receives regular updates and reporting from management on information and cyber security matters, including information related to any third-party assessments of Valley's cyber program. Management regularly updates Valley's information security policies to address these matters and are presented to the Risk Committee for approval.

We may be required to expend significant additional resources to modify our protective measures, to investigate and remediate vulnerabilities or other exposures and if we experience a cyber security breach of customer data, to make required notifications to customers and disclosure to government officials. As a result, cyber security and the continued development and enhancement of the controls and processes designed to protect our systems, computers, software, data and networks from attack, damage or unauthorized access is a high priority for us. While we have confidence in our cyber security practices and personnel, we also know we are not immune from a costly and successful attack.

Credit Risk Management and Underwriting Approach

Credit risk management. For all loan types, we adhere to a credit policy designed to minimize credit risk while generating the maximum income given the level of risk appetite. Management reviews and approves these policies and procedures on a regular basis with subsequent approval by the Board of Directors annually. Credit authority relating to a significant dollar percentage of the overall portfolio is centralized and controlled by the Credit Risk Management Division and by a Credit Committee. A reporting system supplements the review process by providing management with frequent reports concerning loan production, loan quality, internal loan classifications, concentrations of credit, loan delinquencies, non-performing and potential problem loans. Loan portfolio diversification is an important factor utilized by us to manage the portfolio's risk across business sectors, geographic markets and through cyclical economic circumstances.

Our historical and current loan underwriting practice prohibits the origination of payment option adjustable residential mortgages which allow for negative interest amortization and subprime loans. Virtually all of our residential mortgage loan originations in recent years have conformed to rules requiring documentation of income, assets sufficient to close the transactions and debt to income ratios that support the borrower's ability to repay under the loan's proposed terms and conditions. These rules are applied to all loans originated for retention in our portfolio or for sale in the secondary market.

Loan underwriting and loan documentation. Loan approvals are well documented in accordance with specific and detailed underwriting policies and verification procedures. General underwriting guidance is consistent across all loan types with possible variations in procedures and due diligence dictated by specific loan requests. Due diligence standards require acquisition and verification of sufficient financial information to determine a borrower's or guarantor's credit worthiness, capital support, capacity to repay, collateral support, and character. Credit worthiness is generally verified using personal or business credit reports from independent credit reporting agencies. Capacity to repay the loan is based on verifiable liquidity and earnings capacity as shown on financial statements and/or tax returns, banking activity levels, operating statements, rent rolls or independent verification of employment. Finally, collateral valuation is determined via appraisals from independent, bank-approved, certified or licensed property appraisers, valuation services, or readily available market resources.

Types of collateral. Loan collateral, when required, may consist of any one or a combination of the following asset types depending upon the loan type and intended purpose: commercial or residential real estate; general business assets including working assets such as accounts receivable, inventory, or fixed assets such as equipment or rolling stock; marketable securities or other forms of liquid assets such as bank deposits or cash surrender value of life insurance; automobiles; or other assets wherein adequate protective value can be established and/or verified by reliable outside independent appraisers. In addition to these types of collateral, we, in many cases, will obtain the personal guarantee of the borrower's principals or an affiliated corporate entity to mitigate the risk of certain commercial and industrial loans and commercial real estate loans. Valley does not accept crypto assets as loan collateral.

Many times, we will underwrite loans to legal entities formed for the limited purpose of the business which is being financed. Credit granted to these entities and the ultimate repayment of such loans is primarily based on the cash flow generated from the property securing the loan or the business that occupies the property. The underlying real property securing the loans is considered a secondary source of repayment, and normally such loans are also supported by guarantees of the legal entity members. Absent such guarantees or approval by our credit committee, our commercial real estate underwriting guidelines require that the loan to value ratio (at origination) should not exceed 60 percent, except for certain low risk loan categories where the loan to value ratio requirement may be higher, based on the estimated market value of the property as established by an independent licensed appraiser.

Reevaluation of collateral values. Commercial loan renewals, refinancings and other subsequent transactions that include the advancement of new funds or result in the extension of the amortization period beyond the original term, require a new or updated appraisal. Renewals, refinancings and other subsequent transactions that do not include the advancement of new funds (other than for reasonable closing costs) or, in the case of commercial loans, the extension of the amortization period beyond the original term, do not require a new appraisal unless management believes there has been a material change in market conditions or the physical aspects of the property which may negatively impact the collectability of our loan. In general, the period of time an appraisal continues to be relevant will vary depending upon the circumstances affecting the property and the marketplace. Examples of factors that could cause material changes to reported values include the passage of time, the volatility of the local market, the availability of financing, the inventory of competing properties, new improvements to, or lack of maintenance of, the subject or competing surrounding properties, changes in zoning and environmental contamination.

Certain collateral-dependent loans are reported at the fair value of the underlying collateral (less estimated selling costs) if repayment is expected solely from the collateral and are commonly referred to as "collateral dependent loans." Commercial real estate loans are collateralized by real estate and construction loans are generally secured by the real estate to be developed and may also be secured by additional real estate or other collateral to mitigate the risk. Residential and home equity loans are collateralized by residential real estate. Collateral values for such existing loans are typically estimated using individual appraisals performed every 12 months (or 18 months for collateral dependent loans less than \$1.0 million with current loan to value ratios not exceeding 75 percent). Between scheduled appraisals, property values are monitored within the commercial portfolio by reference to recent trends in commercial property sales as published by leading industry sources. Property values are monitored within the residential mortgage portfolio by reference to available market indicators, including real estate price indices within Valley's primary lending areas.

All refinanced residential mortgage loans to be held in our loan portfolio require either a new appraisal or a new evaluation in accordance with our appraisal policy. However, certain residential mortgage loans may be originated for sale and sold without new appraisals when the investor (Fannie Mae or Freddie Mac) accepts a refinance of an existing government sponsored enterprise loan without the benefit of a new appraisal. Additionally, all loan types are assessed for full or partial

charge-off when they are between 90 and 120 days past due (or sooner when the borrowers' obligation has been released in bankruptcy) based upon their estimated net realizable value. See Note 1 to our consolidated financial statements for additional information concerning our loan portfolio risk elements, credit risk management and our loan charge-off policy.

Loan Renewals and Modifications

In the normal course of our lending business, we may renew loans to existing customers upon maturity of the existing loan. These renewals are granted provided that the new loan meets our standard underwriting criteria for such loan type. Additionally, on a case-by-case basis, we may extend, restructure, or otherwise modify the terms of existing loans from time to time to remain competitive and retain certain profitable customers, as well as assist customers who may be experiencing financial difficulties. If the borrower is experiencing financial difficulties and a concession has been made at the time of such modification, the loan is classified as a troubled debt restructured loan (TDR).

The majority of the concessions made for TDRs involve an extension of the term of the loan without a corresponding adjustment to the risk premium reflected in the interest rate, lowering the monthly payments on loans through either a reduction in interest rate below a market rate or a combination of these two methods. Concessions rarely result in the forgiveness of principal or accrued interest. In addition, Valley frequently obtains additional collateral or guarantor support when modifying such loans. If the borrower has demonstrated performance under the previous terms and Valley's underwriting process shows the borrower has the capacity to continue to perform under the restructured terms, the loan will continue to accrue interest. Non-accruing restructured loans may be returned to accrual status when there has been a sustained period of repayment performance (generally six consecutive months of payments) and both principal and interest are deemed collectible.

Extension of Credit to Past Due Borrowers

Loans are placed on non-accrual status generally when they become 90 days past due and the full and timely collection of principal and interest becomes uncertain. Valley prohibits the advancement of additional funds on non-accrual loans, TDRs and CARES Act loan modifications, except under certain workout plans if such extension of credit is intended to mitigate losses.

Allowance for Credit Losses

We maintain an allowance for credit losses (ACL) for financial assets measured at amortized cost. The ACL consists of the allowance for loan losses and unfunded loan commitments (combined the "allowance of credit losses for loans"), and the allowance for credit losses for held to maturity securities. The estimate of expected credit losses under the current expected credit losses (CECL) methodology adopted on January 1, 2020 is based on relevant information about the past events, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amounts. Our CECL methodology to estimate the allowance for loan losses has two components: (i) a collective reserve component for estimated lifetime expected credit losses for pools of loans that share common risk characteristics and (ii) an individual reserve component for loans that do not share risk characteristics, consisting of collateral dependent, TDR, and expected TDR loans. The allowance for unfunded credit commitments mainly consists of undisbursed non-cancellable lines of credit, new loan commitments and commercial standby letters of credit valued using a similar methodology as used for loans. Valley estimated the collective ACL using a current expected credit losses methodology which is based on relevant information about historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the loan balances. Management's estimate of expected losses inherent in these off-balance sheet credit exposures also incorporates estimated utilization rate over the commitment's contractual period or an expected pull-through rate for new loan commitments. To measure the expected credit losses on held to maturity debt securities that have loss expectations, Valley estimates the expected credit losses using a discounted cash flow model developed by a third-party. The amount of ACL is based on ongoing, quarterly assessments by management. See Note 1 to the consolidated financial statements for further discussion regarding CECL methodology.

Loans Originated by Third Parties

The Bank makes purchases of various types of commercial loans and loan participations and residential mortgage loans originated by, and sometimes serviced by, other financial institutions. We generally do not purchase other types of loans. The loan purchase decision is usually based on several factors, including current loan origination volumes, market interest rates, excess liquidity, our continuous efforts to meet the credit needs of certain borrowers under the Community Reinvestment Act (CRA), as well as other asset/liability management strategies. Valley purchased approximately \$36.6 million and \$58.3 million of 1-4 family loans, qualifying for CRA purposes during 2022 and 2021, respectively. All purchased loans are selected using Valley's normal underwriting criteria at the time of purchase, or in some cases guaranteed by third parties. Purchased commercial and industrial, and commercial real estate participation loans are, at times seasoned loans with expected shorter durations, but generally purchased at inception. Additionally, each purchased participation loan is stress-tested by Valley to assure its credit quality.

Purchased commercial loans (including commercial and industrial and commercial real estate participation loans) and residential mortgage loans totaled approximately \$1.1 billion and \$493.4 million, respectively, at December 31, 2022 representing 3.4 percent, and 9.2 percent of our total commercial and residential mortgage loans, respectively.

At December 31, 2022, 2.7 percent of commercial loans originated by third parties were past due 30 days or more, which represented 9.5 percent of our total commercial loan portfolio delinquencies, and 2.7 percent of residential mortgage loans originated by third parties were past due 30 days or more which represented 28.2 percent of our total residential mortgage portfolio delinquencies.

Additionally, Valley has performed credit due diligence on the majority of the loans acquired in its bank acquisitions (disclosed under the “Recent Acquisitions” section above) in determining their fair value as of the acquisition date. See the “Loan Portfolio” section of our MD&A of this report below for additional information.

Competition

Valley National Bank is one of the largest commercial banks headquartered in New Jersey, with its top markets located in northern and central New Jersey, the New York City boroughs of Manhattan, Brooklyn and Queens, Long Island, Westchester County, New York, Florida and Alabama. Valley ranked 16th in competitive ranking and market share based on the deposits reported by 162 FDIC-insured financial institutions in the New York, Northern New Jersey and Long Island deposit markets as of June 30, 2022. The FDIC also ranked Valley 6th, 27th, 17th, and 16th in the states of New Jersey, New York, Florida, and Alabama, respectively, based on deposit market share as of June 30, 2022. While our FDIC rankings reflect a solid foundation in our primary markets, the market for banking and bank-related services is highly competitive and we face substantial competition in all areas of our operations from a variety of different competitors, many of which are larger and may have more financial resources than Valley to deal with the potential negative changes in the financial markets and regulatory landscape. Many of these competitors may have fewer regulatory constraints, greater resources and lending limits than we, have greater name recognition and market presence that benefit them in attracting business, and offer certain services that we do not or cannot provide. In addition, larger competitors may be able to price loans and deposits more aggressively than we do.

Valley competes with other providers of financial services such as commercial and savings banks, savings and loan associations, credit unions, money market and mutual funds, mortgage companies, title agencies, asset managers, insurance companies, and a large list of other local, regional and national institutions which offer financial services. We compete by offering quality products and innovative services at competitive prices, and by maintaining our products and services offerings to keep pace with customer preferences in the market areas in which we operate. Further, the financial services industry is facing a wave of digital disruption from financial technology (fintech) companies and other large financial services providers. The financial services industry is continually undergoing rapid technological change with frequent introductions of new, technology-driven products and services which increases efficiency and enables financial institutions to better serve customers and to reduce costs. These competitors provide innovative digital solutions to traditional retail banking services and products. Additionally, fintech companies tend to have stronger operating efficiencies and fewer regulatory burdens than their traditional bank counterparts, including Valley. We also face intense competition from direct banks because online banking provides customers the ability to rapidly deposit and withdraw funds and open and close accounts making the transaction experience more efficient. Nevertheless, we believe we can compete effectively by utilizing various strategies and product offerings including our long history of local, solutions-based customer service. This level of service and commitment is particularly impactful because of our strong community presence with over 90 years of service, providing us a competitive advantage with such customers over certain non-traditional bank competitors.

Overall, our customers are influenced by the convenience, solution-based service from our knowledgeable staff and personal contacts, as well as availability of products and services. We provide such convenience through our multi-channel delivery system, including more than 200 branch offices, an extensive ATM network, and our telephone, on-line and digital banking systems.

We continually review our pricing, products, locations, alternative delivery channels and various acquisition prospects, and periodically engage in discussions regarding possible acquisitions to maintain and enhance our competitive position.

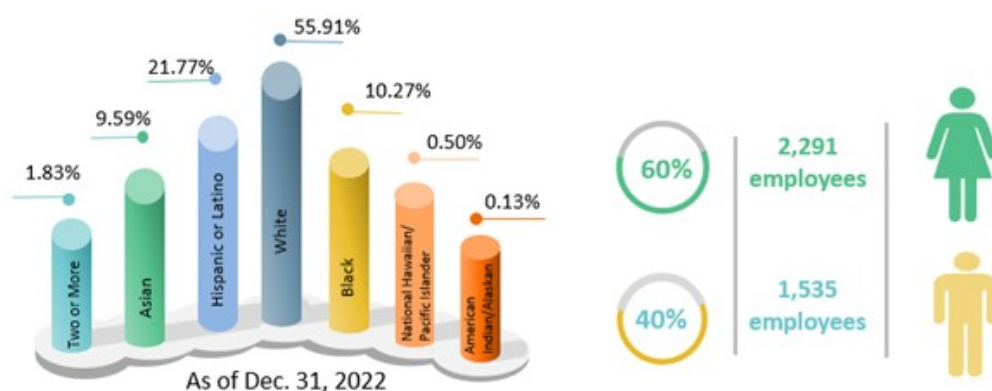
Human Capital

We strive to build an inclusive, diverse, and high-performing culture where empowered associates, innovation and collaboration thrive. We are a customer-centric organization committed to our associates, our customers, and our shareholders.

Demographics. As of December 31, 2022, Valley National Bank and its subsidiaries employed 3,826 full and part time employees across our multi-state footprint. During the year 2022, we hired 930 employees, and our voluntary turnover rate was 22 percent. Our average tenure was 7.8 years.

Diversity, Equity and Inclusion. We embrace and value our inclusive culture of belonging that celebrates unique perspectives and experiences. We leverage our strong and inclusive culture to provide quality service to our customers, the communities in which we operate and each other. We remain focused on one guiding principle - we all belong at Valley. This vision drives our Associate Resource Group Program (ARG Program), which is open to every Valley associate and our Diversity Equity and Inclusion (DEI) Governance Framework. Within this framework, we strive to enhance our ability to bring new ideas to the table, raise new questions, innovate our practices and products, and strengthen our connections with our communities. This structure includes the DEI Leadership Advisory Council, chaired by our CEO, which is charged with maintaining Valley's commitment to DEI and ensuring that these principles are part of Valley's business practices and policies.

As of December 31, 2022, the population of our workforce broken down by diversity and gender was as follows, based on information voluntarily provided by our workforce:



In comparison to the percentages shown above, the diversity of the population of our workforce was relatively unchanged from one year ago, whereas of December 31, 2021, 63 percent and 37 percent identified as Female and Male, respectively.

Total Rewards. We offer competitive total rewards programs to attract, engage, retain, and motivate talent across our footprint. These programs include base wages, performance-based bonus and incentive compensation, stock awards, a 401(k) Plan with a very competitive company match, healthcare and insurance benefits, voluntary benefits, commuter benefits, health savings account, flexible spending accounts, tuition reimbursement, paid time off, disability, family leave, wellness and employee assistance programs.

Health and Safety. Valley remains committed to the safety, health and well-being of our associates. Valley recently increased the duration of our paid short-term disability benefit for eligible associates dealing with personal illness. Our bereavement leave was also revised to provide associates more flexibility when faced with the loss of a significant person in their life. Valley introduced paid parental leave to all birth, adoptive and foster parents to support bonding. We continue to engage with associates who request a reasonable accommodation to perform their role and promote our Employee Assistance Program. Valley keeps the associate contribution to our health plans low and promotes incentives offered by our insurance carriers to stay healthy and prevent chronic illness. Valley partners with our 401(k) plan provider to educate associates on financial wellness solutions.

In addition to paid time off for vacation and other personal needs, Valley further encourages work-life balance by offering partial and full-time remote work arrangements and flexible work hours to many of our associates. Associates may also use two paid days off a year to volunteer their time to a cause that is important to them.

Talent. Our overall purpose and goal to attract, develop and retain key and top talent within both our Talent Acquisition and Talent Development teams is crucial to all aspects of Valley's activities and long-term success and is central to our long-term strategy. We actively engage our senior business leaders in reviewing their critical roles in coordination with their strategic talent initiatives through our annual Talent Review and Succession Planning process, which has created a broader understanding of our key talent needs. We continue to evolve our workplace strategies that center on the people experience with a breadth of development opportunities, including our flagship Leadership Development programs, to provide meaningful experiences that challenge our high potential and high performing associates. Our goal is to enhance the core capabilities of our top talent in leadership and management skills to prepare them for future roles. We also continue to look to strengthen Valley's position as an Employer of Choice by enhancing our end-to-end associate onboarding experience and leveraging our annual engagement survey results to continue to influence our culture and employee satisfaction.

Corporate Social and Environmental Responsibility

Valley recognizes the social and environmental responsibility that arises from the impact of our activities on peoples' lives and society as a whole. To comply with this responsibility, we established the Environmental, Social and Governance (ESG) Council in 2020 with respect to ESG issues and issued our first ESG report in 2021. The Council helps guide us to consider how environmental, social and governmental issues impact Valley's ability to achieve its long-term strategy while being socially responsible.

Additional information regarding Valley's human capital management and corporate social and environmental responsibility can be found under "Environmental, Social and Governance (ESG) Matters" in our 2023 Proxy Statement when it is issued.

Information about our Executive Officers

Name	Age at December 31, 2022	Executive Officer Since	Office	Principal occupation during last five years other than Valley
Ira Robbins	48	2009	Chairman of the Board and Chief Executive Officer of Valley and Valley National Bank	
Thomas A. Iadanza	64	2015	President of Valley and Valley National Bank	
Michael D. Hagedorn	56	2019	Senior Executive Vice President, Chief Financial Officer of Valley and Valley National Bank	2015 - 2018 Vice Chairman, UMB Financial Corporation, President and CEO, UMB Bank n.a.
Joseph V. Chillura	56	2020	Senior Executive Vice President of Valley and President, Commercial Banking, of Valley National Bank	
Raja Dakkuri	51	2022	Senior Executive Vice President, Chief Risk Officer of Valley and Valley National Bank	2015 - 2022 Executive at Bank Leumi USA since 2015 where he was most recently the CFO & COO
Yvonne M. Surowiec	62	2017	Senior Executive Vice President of Valley and Chief People Officer of Valley National Bank	
Mark Saeger	58	2018	Executive Vice President of Valley and Chief Credit Officer of Valley National Bank	
Mitchell L. Crandell	52	2007	Executive Vice President, Chief Accounting Officer of Valley and Valley National Bank	

All officers serve at the pleasure of the Board of Directors.

Available Information

The SEC maintains a website at www.sec.gov which contains reports and other information filed with the SEC electronically. We make our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K and amendments thereto available on our website at www.valley.com without charge as soon as reasonably practicable after filing or furnishing them to the SEC. Also available on our website, are Valley's Code of Conduct and Ethics that applies to all of our employees, including our executive officers and directors, Valley's Audit Committee Charter, Valley's Compensation

and Human Capital Management Committee Charter, Valley's Nominating and Corporate Governance Committee Charter, and Valley's Corporate Governance Guidelines.

Additionally, we will provide without charge a copy of our Annual Report on Form 10-K or the Code of Conduct and Ethics to any shareholder by mail. Requests should be sent to Valley National Bancorp, Attention: Shareholder Relations, 1455 Valley Road, Wayne, NJ 07470.

SUPERVISION AND REGULATION

The banking industry is highly regulated. Statutory and regulatory controls increase a bank holding company's cost of doing business and limit the options of its management to deploy assets and maximize income. The compliance cost for Valley is significant and subject to increase as new governmental regulations are enacted and/or the level of enforcement of those regulations increases. In particular, Valley employs specialists and retains outside advisors with the expectation that Valley will have sufficient resources to comply with the regulations to which it is subject. Certain of Valley's competitors, including credit unions, fintech companies, and others, are not regulated to the extent that Valley and other banks are, which may place Valley at a competitive disadvantage.

The following discussion is not intended to be a complete list of all the activities regulated by the banking laws or of the impact of such laws and regulations on Valley or Valley National Bank. It is intended only to briefly summarize some material provisions.

Bank Holding Company Regulation

Valley is a bank holding company within the meaning of the BHC Act. As a bank holding company, Valley is supervised by the FRB and is required to file reports with the FRB and provide such additional information as the FRB may require. In July 2021, Valley elected to be treated as a financial holding company.

The BHC Act prohibits a bank holding company, with certain exceptions, from acquiring direct or indirect ownership or control of five percent or more of the voting shares of any company which is not a bank and from engaging in any business other than that of banking, managing and controlling banks or furnishing services to subsidiary banks, except that it may, upon application, engage in, and may own shares of companies engaged in, certain businesses found by the FRB to be so closely related to banking "as to be a proper incident thereto." As detailed further below, a bank holding company that has elected to be treated as a financial holding company, as Valley has, may engage in a broader range of non-banking activities that are "financial in nature." The BHC Act requires prior approval by the FRB of the acquisition by Valley of five percent or more of the voting stock of any other bank. Satisfactory capital ratios, Community Reinvestment Act ratings, and anti-money laundering policies are generally prerequisites to obtaining federal regulatory approval to make acquisitions. The policy of the FRB provides that a bank holding company is expected to act as a source of financial strength to its subsidiary bank and to commit resources to support the subsidiary bank in circumstances in which it might not do so absent that policy. Acquisitions through the Bank require approval of the OCC. The BHC Act does not place territorial restrictions on the activities of non-bank subsidiaries of bank holding companies.

As a financial holding company, Valley may engage in a broader range of non-banking activities than permitted for bank holding companies and their subsidiaries that have not elected to become financial holding companies. Financial holding companies may engage directly or indirectly, either de novo or by acquisition, in activities that are defined under the BHC Act or determined by the Federal Reserve to be financial in nature or incident to a financial activity, provided that the financial holding company gives the Federal Reserve after-the-fact notice of certain new activities. Activities defined to be financial in nature include, but are not limited to: providing financial or investment advice; underwriting; dealing in or making markets in securities; making merchant banking investments, subject to significant limitations; and any activities previously found by the Federal Reserve to be so closely related to banking as to be a proper incident thereto. In order to maintain our status as a financial holding company, we and the Bank are expected to be well capitalized and well managed, as defined in applicable regulations and determined in part by the results of regulatory examinations, and must comply with Community Reinvestment Act obligations. Failure to maintain these standards may result in restrictions on our activities and may ultimately permit the Federal Reserve to take enforcement actions against us and restrict our ability to engage in activities defined to be financial in nature.

Regulation of Bank Subsidiary

Valley National Bank is subject to the supervision of, and to regular examination by, the OCC. Various laws and the regulations thereunder applicable to Valley and its bank subsidiary impose restrictions and requirements in many areas, including capital requirements, the maintenance of reserves, establishment of new offices, the making of loans and investments, consumer protection, employment practices, bank acquisitions and entry into new types of business. There are various legal

limitations, including Sections 23A and 23B of the Federal Reserve Act, which govern the extent to which a bank subsidiary may finance or otherwise supply funds to its holding company or its holding company's non-bank subsidiaries. Under federal law, no bank subsidiary may, subject to limited exceptions, make loans or extensions of credit to, or investments in the securities of, its parent or the non-bank subsidiaries of its parent (other than direct subsidiaries of such bank which are not financial subsidiaries) or take their securities as collateral for loans to any borrower. Each bank subsidiary is also subject to collateral security requirements for any loans or extensions of credit permitted by such exceptions. With the approval of the OCC, and subject to certain legal requirements, a bank may establish financial subsidiaries which may act as insurance agents, securities brokers and perform other non-banking functions.

Capital Requirements

The FRB and the OCC have rules establishing a comprehensive capital framework for U.S. banking organizations, referred to as the Basel III rules.

Under Basel III, the minimum capital ratios for us and Valley National Bank are as follows:

- 4.5 percent CET1 (common equity Tier 1) to risk-weighted assets.
- 6.0 percent Tier 1 capital (i.e., CET1 plus Additional Tier 1) to risk-weighted assets.
- 8.0 percent Total capital (i.e., Tier 1 plus Tier 2) to risk-weighted assets.
- 4.0 percent Tier 1 capital to average consolidated assets as reported on consolidated financial statements (known as the "leverage ratio").

Under Basel III, both Valley and Valley National Bank are required to maintain a 2.5 percent "capital conservation buffer" on top of the minimum risk-weighted asset ratios, effectively resulting in minimum ratios of (i) CET1 to risk-weighted assets of at least 7.0 percent, (ii) Tier 1 capital to risk-weighted assets of at least 8.5 percent, and (iii) total capital to risk-weighted assets of at least 10.5 percent. The capital conservation buffer is designed to absorb losses during periods of economic stress. Banking institutions with a ratio of (i) CET1 to risk-weighted assets, (ii) Tier 1 capital to risk-weighted assets or (iii) total capital to risk-weighted assets above the respective minimum but below the capital conservation buffer will face constraints on dividends, equity repurchases and discretionary bonus payments to executive officers based on the amount of the shortfall. Basel III also provides for a number of complex deductions from and adjustments to its various capital components.

Pursuant to the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), each federal banking agency has promulgated regulations, specifying the levels at which a financial institution would be considered "well capitalized," "adequately capitalized," "undercapitalized," "significantly undercapitalized," or "critically undercapitalized," and to take certain mandatory and discretionary supervisory actions based on the capital level of the institution.

With respect to Valley National Bank, Basel III also revised the "prompt corrective action" regulations of FDICIA, by (i) introducing a CET1 ratio requirement at each capital quality level (other than critically undercapitalized); (ii) increasing the minimum Tier 1 capital ratio requirement for each category; and (iii) requiring a leverage ratio of 5 percent to be well-capitalized. The OCC's regulations implementing these provisions of FDICIA provide that an institution will be classified as "well capitalized" if it (i) has a total risk-based capital ratio of at least 10.0 percent, (ii) has a Tier 1 risk-based capital ratio of at least 8.0 percent, (iii) has a CET1 ratio of at least 6.5 percent, (iv) has a Tier 1 leverage ratio of at least 5.0 percent, and (v) meets certain other requirements. An institution will be classified as "adequately capitalized" if it meets the aforementioned minimum capital ratios under Basel III. An institution will be classified as "undercapitalized" if it (i) has a total risk-based capital ratio of less than 8.0 percent, (ii) has a Tier 1 risk-based capital ratio of less than 6.0 percent, (iii) has a CET1 ratio of less than 4.5 percent or (iv) has Tier 1 leverage ratio of less than 4.0 percent. An institution will be classified as "significantly undercapitalized" if it (i) has a total risk-based capital ratio of less than 6.0 percent, (ii) has a Tier 1 risk-based capital ratio of less than 4.0 percent, (iii) has a CET1 ratio of less than 3.0 percent or (iv) has a Tier 1 leverage ratio of less than 3.0 percent. An institution will be classified as "critically undercapitalized" if it has a tangible equity to total assets ratio that is equal to or less than 2.0 percent. An insured depository institution may be deemed to be in a lower capitalization category if it receives an unsatisfactory examination rating. Similar categories apply to bank holding companies.

Valley National Bank's capital ratios were all above the minimum levels required for it to be considered a "well capitalized" financial institution at December 31, 2022, under the "prompt corrective action" regulations.

For regulatory capital purposes, in accordance with the Federal Reserve Board's final interim rule as of April 3, 2020, we deferred 100 percent of the CECL Day 1 impact to shareholders' equity plus 25 percent of the reserve build (i.e., provision for credit losses less net charge-offs) for a two-year period ending January 1, 2022. On January 1, 2022, the deferral amount totaling \$47.3 million after-tax started to be phased-in by 25 percent and will increase by 25 percent per year until fully phased-

in on January 1, 2025. As of December 31, 2022, approximately \$11.8 million of the \$47.3 million deferral amount was recognized as a reduction to regulatory capital and, as a result, reduced our risk-based capital ratios by approximately 3 basis points.

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the Dodd-Frank Act)

The Dodd-Frank Act significantly changed the bank regulatory landscape and impacted the lending, deposit, investment, trading and operating activities of financial institutions and their holding companies. Some of the effects are discussed below.

The Dodd-Frank Act created the Consumer Financial Protection Bureau (CFPB) and shifted most of the federal consumer protection rules applicable to banks and the enforcement power with respect to such rules to the CFPB.

Under the Durbin Amendment contained in the Dodd-Frank Act, the FRB adopted rules applying to banks with more than \$10 billion in assets which established a maximum permissible interchange fee equal to no more than 21 cents plus 5 basis points of the transaction value for many types of debit interchange transactions. The FRB also adopted a rule to allow a debit card issuer to recover 1 cent per transaction for fraud prevention purposes if the issuer complies with certain fraud-related requirements required by the FRB. The FRB also has rules governing routing and exclusivity that require issuers to offer two unaffiliated networks for routing transactions on each debit or prepaid product. Because we exceed \$10 billion in assets, we are subject to the interchange fee cap.

The Dodd-Frank Act also imposed stress testing on Valley and the Bank. However, the 2018 Economic Growth, Regulatory Relief, and Consumer Protection Act (the “EGRRCPA”) and a joint interagency statement regarding the impact of the EGRRCPA resulted in Valley and the Bank being no longer subject to the stress testing requirements. However, under safety and soundness principles we continue to conduct stress testing of our own design.

Volcker Rule

The Volcker Rule (contained in the Dodd-Frank Act) prohibits an insured depository institution and its affiliates from: (i) engaging in certain “proprietary trading” and (ii) investing in or sponsoring certain types of funds (Covered Funds). The Rule also effectively prohibits most short-term trading strategies investments and prohibits the use of some hedging strategies. In 2021, the Volcker Rule was amended to exempt certain qualifying venture capital funds from the definition of Covered Funds. We identified no investments held as of December 31, 2022 that meet the definition of Covered Funds. Valley has invested in venture capital funds consistent with the exemption requirements.

Incentive Compensation

The Dodd-Frank Act requires the federal bank regulators and the SEC to maintain guidelines prohibiting incentive-based payment arrangements at specified regulated entities, including us and our Bank, having at least \$1 billion in total assets that encourage inappropriate risks by providing an executive officer, employee, director or principal stockholder with excessive compensation, fees, or benefits or that could lead to material financial loss to the entity.

The FRB and the OCC review, as part of their regular, risk-focused examination process, the incentive compensation arrangements of banking organizations, similar to the Bank, which are not “large, complex banking organizations.” These reviews are tailored to each organization based on the scope and complexity of the organization’s activities and the prevalence of incentive compensation arrangements.

Dividend Limitations

Valley is a legal entity separate and distinct from its subsidiaries. Valley’s revenues (on a parent company only basis) result in substantial part from dividends paid by the Bank. The Bank’s dividend payments, without prior regulatory approval, are subject to regulatory limitations. Under the National Bank Act, without consent, a national bank may declare, in any one year, dividends only in an amount aggregating not more than the sum of its net profits for such year and its retained net profits for the preceding two years. In addition, the bank regulatory agencies have the authority to prohibit us from paying dividends if the supervising agency determines that such payment would constitute an unsafe or unsound banking practice. Among other things, consultation with the FRB supervisory staff is required in advance of our declaration or payment of a dividend to our shareholders that exceeds our earnings for the trailing four-quarter period in which the dividend is being paid.

Transactions by the Bank with Related Parties

Valley National Bank’s authority to extend credit to its directors, executive officers and 10 percent shareholders, as well as to entities controlled by such persons (insiders), is currently governed by the requirements of the National Bank Act, Sarbanes-Oxley Act and Regulation O of the FRB thereunder. Among other things, these provisions require that extensions of

credit to insiders (i) be made on terms that are substantially the same as, and follow credit underwriting procedures that are not less stringent than, those prevailing for comparable transactions with unaffiliated persons and that do not involve more than the normal risk of repayment or present other unfavorable features and (ii) not exceed certain limitations on the amount of credit extended to such persons, individually and in the aggregate, which limits are based, in part, on the amount of the Bank's capital. In addition, extensions of credit in excess of certain limits must be approved by the Bank's Board of Directors. Under the Sarbanes-Oxley Act, Valley and its subsidiaries, other than the Bank under the authority of Regulation O, may not extend or arrange for any personal loans to its directors and executive officers.

Section 22 of the Federal Reserve Act prohibits the Bank from paying to a director, officer, attorney or employee a rate on deposits that is greater than the rate paid to other depositors on similar deposits with the Bank. Regulation W governs and limits transactions between the Bank and Valley.

Community Reinvestment

Under the Community Reinvestment Act (CRA), as implemented and overseen by federal banking regulators, a national bank has a continuing and affirmative obligation consistent with its safe and sound operation to help meet the credit needs of its entire community, including low- and moderate-income neighborhoods. The CRA does not establish specific lending requirements or programs for financial institutions, nor does it limit an institution's discretion to develop the types of products and services that it believes are best suited to its particular community. The CRA requires regulators, in connection with its examination of a national bank, to assess the institution's record of meeting the credit needs of its community and to take such record into account in its evaluation of certain applications by such institution. The CRA also requires all institutions to make public disclosure of their CRA ratings. Valley National Bank received an overall "outstanding" CRA rating in its most recent completed examination for the three-year period ending in 2021.

A bank that does not have a CRA program that is deemed "satisfactory" or better by its regulator may be prevented from making acquisitions.

USA PATRIOT Act

As part of the USA PATRIOT Act, Congress adopted the International Money Laundering Abatement and Financial Anti-Terrorism Act of 2001 (the "Anti Money Laundering Act"). The Anti Money Laundering Act authorizes the Secretary of the U.S. Treasury, in consultation with the heads of other government agencies, to adopt special measures applicable to financial institutions such as banks, bank holding companies, broker-dealers and insurance companies. Among its other provisions, the Anti Money Laundering Act requires each financial institution: (i) to establish an anti-money laundering program; (ii) to establish due diligence policies, procedures and controls that are reasonably designed to detect and report instances of money laundering in United States private banking accounts and correspondent accounts maintained for non-United States persons or their representatives; and (iii) to avoid establishing, maintaining, administering, or managing correspondent accounts in the United States for, or on behalf of, a foreign shell bank that does not have a physical presence in any country.

Regulations implementing the due diligence requirements require minimum standards to verify customer identity and maintain accurate records, encourage cooperation among financial institutions, federal banking agencies, and law enforcement authorities regarding possible money laundering or terrorist activities, prohibit the anonymous use of "concentration accounts," and require all covered financial institutions to have in place an anti-money laundering compliance program.

The OCC, along with other banking agencies, have strictly enforced various anti-money laundering and suspicious activity reporting requirements using formal and informal enforcement tools to cause banks to comply with these provisions.

A bank that is issued a formal or informal enforcement requirement with respect to its Anti Money Laundering program will be prevented from making acquisitions.

Office of Foreign Assets Control Regulation (OFAC)

The U.S. Treasury Department's OFAC administers and enforces economic and trade sanctions against targeted foreign countries and regimes, under authority of various laws, including designated foreign countries, nationals and others. OFAC publishes lists of specially designated targets and countries. We and our Bank are responsible for, among other things, blocking accounts of, and transactions with, such targets and countries, prohibiting unlicensed trade and financial transactions with them and reporting blocked transactions after their occurrence. Failure to comply with these sanctions could have serious legal and reputational consequences, including causing applicable bank regulatory authorities not to approve merger or acquisition transactions when regulatory approval is required or to prohibit such transactions even if approval is not required.

Consumer Financial Protection Bureau Supervision

As a financial institution with more than \$10 billion in assets, Valley National Bank is supervised by the CFPB for consumer protection purposes. The CFPB's regulation of Valley National Bank is focused on risks to consumers and compliance with the federal consumer financial laws and includes regular examinations of the Bank. The CFPB, along with the Department of Justice and bank regulatory authorities also seek to enforce discriminatory lending laws. In such actions, the CFPB and others have used a disparate impact analysis, which measures discriminatory results without regard to intent. Consequently, unintentional actions by Valley could have a material adverse impact on our lending and results of operations if the actions are found to be discriminatory by our regulators.

Valley National Bank is subject to federal consumer protection statutes and regulations promulgated under those laws, including, but not limited to the following:

- Truth-In-Lending Act and Regulation Z, governing disclosures of credit terms to consumer borrowers;
- Home Mortgage Disclosure Act and Regulation C, requiring financial institutions to provide certain information about home mortgage and refinanced loans;
- Equal Credit Opportunity Act and Regulation B, prohibiting discrimination on the basis of race, creed, or other prohibited factors in extending credit;
- Fair Credit Reporting Act and Regulation V, governing the provision of consumer information to credit reporting agencies and the use of consumer information; and
- Fair Debt Collection Act, governing the manner in which consumer debts may be collected by collection agencies.

Valley National Bank's deposit operations are also subject to the following federal statutes and regulations, among others:

- The Truth in Savings Act and Regulation DD, which requires disclosure of deposit terms to consumers;
- Regulation CC, which relates to the availability of deposit funds to consumers;
- The Right to Financial Privacy Act, which imposes a duty to maintain the confidentiality of consumer financial records and prescribes procedures for complying with administrative subpoenas of financial records; and
- Electronic Funds Transfer Act and Regulation E, governing automatic deposits to, and withdrawals from, deposit accounts and customers' rights and liabilities arising from the use of automated teller machines and other electronic banking services.

The CFPB examines Valley National Bank's compliance with such laws and the regulations under them.

Insurance of Deposit Accounts

The Bank's deposits are insured up to applicable limits by the FDIC. Under the FDIC's risk-based system, insured institutions are assigned to one of four risk categories based on supervisory evaluations, regulatory capital levels and certain other factors with less risky institutions paying lower assessments on their deposits.

As required by the Dodd-Frank Act, the FDIC adopted rules that revise the assessment base to consist of average consolidated total assets during the assessment period minus the average tangible equity during the assessment period. In addition, the rules eliminated the adjustment for secured borrowings, including Federal Home Loan Bank (FHLB) advances, and made certain other changes to the impact of unsecured borrowings and brokered deposits on an institution's deposit insurance assessment.

The rules also revised the assessment rate schedule to provide initial base assessment rates ranging from 5 to 35 basis points and total base assessment rates ranging from 2.5 to 45 basis points after adjustment.

The Dodd-Frank Act made permanent a \$250 thousand limit for federal deposit insurance.

Transition from London Interbank Offered Rate

Central banks around the world, including the FRB, are working to implement the transition from the London Interbank Offered Rate (LIBOR) to replacement benchmarks including the Secured Overnight Financing Rate (SOFR) in the United

States. Most tenors of LIBOR will cease being published on June 30, 2023, although some tenors ceased at the end of 2021. The U.S. federal banking agencies issued guidance essentially requiring banking organizations to cease using LIBOR as a reference rate in new contracts by the end of 2021. The change away from LIBOR may have an adverse impact on the value of, return on and trading markets for a broad array of financial products, including any LIBOR-based securities, loans and derivatives that are included in our financial assets and liabilities. The transition away from LIBOR also required extensive changes to the contracts that govern these LIBOR-based products, as well as our systems and processes.

The Adjustable Interest Rate (LIBOR Act), which was signed into law on March 15, 2022, provides that a LIBOR-based benchmark in any contract that contains no or inadequate “fallback provisions” will be automatically replaced, once LIBOR ceases to be published, by a benchmark replacement selected by the Federal Reserve. On December 16, 2022, the Federal Reserve adopted a final rule implementing the LIBOR Act that, among other things, identifies the applicable SOFR-based benchmark replacements under the LIBOR Act, for various contract types. The LIBOR Act pre-empts similar state laws such as the New York State statute providing for recommended benchmark replacements for contracts governed by New York law without adequate fallback provisions.

A number of the Bank's commercial loans, certain residential mortgage loans, derivative positions, trust preferred securities issued to our capital trusts and the reset provisions for our preferred stock issuances are based upon LIBOR. The Bank will also be subject to changes to models and systems that currently use LIBOR reference rates, as well as market and strategic risks that could arise from the use of alternative reference rates. Regulators have expressed concern about litigation that could arise due to the change from LIBOR to another benchmark. As of December 31, 2021, Valley ceased originating any LIBOR based products. We continue to make significant progress on the transition away from LIBOR, as coordinated by the Bank's working group established to facilitate the transition.

Federal Securities Laws

Valley's common stock is registered with the Securities and Exchange Commission (the “SEC”) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Valley is subject to the information, proxy solicitation, insider trading and other requirements and restrictions under the Exchange Act.

Broker-Dealer and Securities Regulation

The SEC is the federal agency charged with administration of the federal securities laws in the United States. Our U.S. broker-dealer subsidiaries are subject to SEC regulations relating to their business operations, including, but not limited to sales and trading practices, capital structure, record-keeping, privacy requirements, and the conduct of directors, officers and employees. Our broker-dealer subsidiaries are also subject to regulation by state securities commissions in those states in which they conduct business. Our primary U.S. broker-dealer, Valley Financial Management, Inc. (VFM), is currently registered as a broker-dealer in most U.S. states, the District of Columbia and Puerto Rico.

Broker-dealer supervision. Much of the regulation of broker-dealers in the U.S. has been delegated to self-regulatory organizations (SROs), such as the Financial Industry Regulatory Authority (FINRA) and securities exchanges. These SROs adopt and amend rules for regulating the industry, subject to the approval of government agencies. These SROs also conduct periodic examinations of member broker-dealers.

The SEC, SROs and state securities regulators may conduct administrative proceedings that can result in censure, fine, suspension or expulsion of a broker-dealer, its officers, employees or other associated persons. Such administrative proceedings, whether or not resulting in adverse findings, can require substantial expenditures and may adversely impact the reputation of a broker-dealer.

Securities Investor Protection Corporation. Our U.S. broker-dealer subsidiaries are subject to the Securities Investor Protection Act (SIPA) and are required by federal law to be members of the Securities Investors Protection Corporation (SIPC). The SIPC was established under SIPA and oversees the liquidation of broker-dealers during liquidation or financial distress. The SIPC fund provides protection for cash and securities held in client accounts up to \$500,000 per client, with a limitation of \$250,000 on claims for cash balances.

Our broker-dealer subsidiaries are “introducing” broker-dealers and operate under SEC Rule 15c3-3(k)(2)(i) & (ii) (Customer Protection Rule). They do not hold customers' funds or safekeep customer securities or clear transactions for clients; instead, transactions are cleared on a fully disclosed basis through a third-party broker dealer that provides clearing, custody and other ancillary services.

Net capital requirements. Our broker-dealer subsidiaries are subject to certain of the SEC's financial stability rules, including the: (i) net capital rule; (ii) record-keeping rules; and (iii) notification rules. Rule 15c3-1 of the Exchange Act (the

“Net Capital Rule”) requires that a broker-dealer maintain minimum net capital. Generally, a broker-dealer’s net capital is net worth plus qualified subordinated debt less deductions for non-allowable (or non-liquid) assets and other adjustments and operational charges. At December 31, 2022, our broker-dealer subsidiaries were in compliance with applicable net capital requirements.

The SEC, FINRA and other regulatory organizations impose rules that require notification when net capital falls below certain predefined thresholds. These rules also dictate the ratio of debt-to-equity in the regulatory capital composition of a broker-dealer, and constrain the ability of a broker-dealer to expand its business under certain circumstances. If a broker-dealer fails to maintain the required net capital, it may be subject to penalties and other regulatory sanctions, including suspension or revocation of registration by the SEC or applicable regulatory authorities, and suspension or expulsion by these regulators could ultimately lead to the broker-dealer’s liquidation. Additionally, the Net Capital Rule and certain FINRA rules impose requirements that may have the effect of prohibiting a broker-dealer from distributing or withdrawing capital and requiring prior notice to, and approval from, the SEC and FINRA for certain capital withdrawals.

Anti-money laundering. Our broker-dealer subsidiaries must comply with the Bank Secrecy Act, the USA PATRIOT Act and other rules and regulations, including FINRA requirements, designed to fight international money laundering and to block terrorist access to the U.S. financial system. We are required to have systems and procedures to ensure compliance with such laws and regulations.

Standard of care. Pursuant to the Dodd-Frank Act, the SEC was charged with considering whether broker-dealers should be subject to a standard of care similar to the fiduciary standard applicable to registered investment advisors. In June 2019, the SEC adopted a package of rule-makings and interpretations related to the provision of advice by broker-dealers and investment advisers, including Regulation Best Interest and Form CRS. Among other things, Regulation Best Interest requires a broker-dealer to act in the best interest of a retail client when making a recommendation to that client of any securities transaction or investment strategy involving securities. Form CRS requires that broker-dealers and investment advisers provide retail investors with a brief summary document containing simple, easy-to-understand information about the nature of the relationship between the parties. Various states have also proposed, or adopted, laws and regulations seeking to impose new standards of conduct on broker-dealers that may differ from the SEC’s regulations, which may lead to additional implementation costs.

Investment Advisers Act

VFM and our subsidiary Hallmark Capital Management, Inc. (“HCM”) are registered investment advisers. In this capacity, VFM and HCM are subject to the Investment Advisers Act of 1940, as amended (the “Investment Advisers Act”), and SEC rules and regulations thereunder, including with respect to record-keeping, operational and marketing requirements, disclosure obligations and prohibitions on fraudulent activities. The SEC is authorized to institute proceedings and impose sanctions for violations of the Investment Advisers Act, ranging from fines and censure to termination of an investment adviser’s registration. Our investment adviser subsidiaries are also subject to state laws and regulations, including anti-fraud laws, in those states in which they conduct business. Noncompliance with the Investment Advisers Act or other federal and state securities laws and regulations could result in investigations, sanctions, disgorgement, fines and reputational harm.

Insurance regulation

Valley’s insurance agency subsidiary (Valley Insurance Services, Inc.) provides property and casualty insurance, employee benefits, risk management, loss control and claims services to business clients, as well as home, auto, boat and life insurance to individuals. In addition, VFM is licensed as an insurance agency to provide life and health insurance in several states. Regulation of insurance brokerage is generally performed at a state, rather than a national, level. Both Valley’s insurance agency subsidiaries operate in multiple states, and as a result, they and their employees are subject to various state regulatory and licensing requirements. Valley’s insurance agency subsidiaries monitor compliance with the various state insurance regulators, and also have relationships with third party vendors to ensure compliance and awareness among entities and their employees of relevant requirements and changes, and emerging regulatory issues.

Prohibitions Against Tying Arrangements

Banks are subject to the prohibitions of 12 U.S.C. Section 1972 on certain tying arrangements. A depository institution is prohibited, subject to some exceptions, from extending credit to or offering any other service, or fixing or varying the consideration for such extension of credit or service, on the condition that the customer obtain some additional service from the institution or its affiliates or not obtain services of a competitor of the institution.

Item 1A. Risk Factors

An investment in our securities is subject to risks inherent to our business. The material risks and uncertainties that management believes may affect Valley are described below. Before making an investment decision, you should carefully consider the risks and uncertainties described below together with all of the other information included or incorporated by reference in this report. The risks and uncertainties described below are not the only ones facing Valley. Additional risks and uncertainties that management is not aware of or that management currently believes are immaterial may also impair Valley's business operations. The value or market price of our securities could decline due to any of these identified or other risks, and you could lose all or part of your investment. This report is qualified in its entirety by these risk factors.

Risks Related to the Operating Environment and the COVID-19 Pandemic

Our financial results and condition may be adversely impacted by changing economic conditions.

Financial institutions can be affected by changing conditions in the real estate and financial markets. The lingering effects of the COVID-19 pandemic, geopolitical instability, including the conflict between Russia and Ukraine, foreign currency exchange volatility, volatility in global capital markets, inflationary pressures, and higher interest rates may meaningfully impact loan production, income levels, and the measurement of certain significant estimates such as the allowance for credit losses. Moreover, in a period of economic contraction, we may experience elevated levels of credit losses, reduced interest income, impairment of goodwill and other financial assets, diminished access to capital markets and other funding sources, and reduced demand for our products and services. Volatility in the housing markets, real estate values and unemployment levels results in significant write-downs of asset values by financial institutions. The majority of Valley's lending is in northern and central New Jersey, the New York City metropolitan area and Florida. As a result of this geographic concentration, a significant broad-based deterioration in economic conditions in these areas could have a material adverse impact on the quality of Valley's loan portfolio, results of operations and future growth potential.

An unexpected COVID-19 pandemic resurgence due to new variants could cause us to experience higher credit losses in our lending portfolio, additional increases in our allowance for credit losses, impairment of our goodwill and other financial assets, diminished access to capital markets and other funding sources, further reduced demand for our products and services, and other negative impacts on our financial position, results of operations.

During 2022, the Federal Reserve took unprecedented action during the year to restrain inflation and improve the stability of the economy by raising the target federal funds rate several times from 25 basis points in the beginning of the year to 75 basis points toward the end of the year and brought the benchmark interest rates up by a collective 4.25 percent. As inflation increases and market interest rates rise, the value of our investment securities, particularly those with longer maturities, would decrease, although this effect can be less pronounced for floating rate instruments. In addition, inflation generally increases the cost of goods and services we use in our business operations, such as electricity and other utilities, which increases our non-interest expenses. Furthermore, our customers are also affected by inflation and the rising costs of goods and services used in their households and businesses, which could have a negative impact on their ability to repay their loans with us.

Any of these effects, if sustained, may impair our capital and liquidity positions, require us to take capital actions, prevent us from satisfying our minimum regulatory capital ratios and other supervisory requirements, or result in downgrades in our credit ratings and the reduction or elimination of our common stock dividend in future periods.

The extent to which current economic environment has a further impact on our business, results of operations, and financial condition, as well as the regulatory capital and liquidity ratios, will depend on future developments, which are highly uncertain and cannot be predicted, including the scope and duration of the current economic environment and actions taken by governmental authorities and other third parties in response to the geopolitical conflict, and inflationary pressure.

Risks Related to our Merger with Bank Leumi USA

Valley has incurred and is expected to incur significant costs related to the merger and integration.

Valley has incurred certain non-recurring costs associated with the initial merger, including legal, financial advisory, accounting, consulting and other advisory fees, severance/employee benefit-related costs and other related costs. Valley has also incurred and is expected to incur substantial costs in connection with the integration of Valley and Bank Leumi USA. There are a large number of processes, policies, procedures, operations, technologies and systems integrations that are still ongoing. Valley has assumed that a certain level of costs will be incurred, however, there are many factors beyond Valley's control that could affect the total amount or the timing of the integration costs. Moreover, many of the costs that will be incurred are, by their nature, difficult to estimate accurately. These integration costs may result in Valley taking charges against

earnings, and the amount and timing of such charges are uncertain at present. Valley incurred total merger-related expenses of \$71.2 million and \$8.9 million for the years ended December 31, 2022 and 2021, respectively.

Combining Valley and Bank Leumi USA may be more difficult, costly or time consuming than expected and Valley may fail to realize the anticipated benefits of the merger.

To realize the anticipated benefits and synergies from the merger, Valley must successfully integrate the Bank Leumi USA business in a manner that permits those synergies to be realized. If Valley is not able to successfully achieve these objectives, the anticipated benefits of the merger may not be realized fully or at all or may take longer to realize than expected. In addition, the actual synergies and anticipated benefits of the merger could be less than anticipated, and integration may result in additional unforeseen expenses.

Prior to the merger, Valley and Bank Leumi USA operated independently. The success of the merger depends, in part, on Valley's ability to successfully complete the ongoing integration of the businesses of both companies in a manner that does not materially disrupt existing customer relations or result in decreased revenue or reputational harm. It is possible that the integration process could result in the loss of key employees, the disruption of either company's ongoing businesses, difficulties in integrating operations and systems, including communications systems, administrative and information technology infrastructure and financial reporting and internal control systems, or inconsistencies in standards, controls, procedures and policies that adversely affect the companies' ability to maintain relationships with clients, customers, depositors and employees or to achieve the anticipated benefits of the merger. Any disruption to either company's business could cause its customers to remove their accounts and move their business to a competing financial institution. Integration efforts may also divert management attention and resources. These integration matters could have an adverse effect on Valley.

Valley may be unable to retain Valley or Bank Leumi USA personnel successfully.

The success of the merger depends in part on Valley's ability to retain the talents and dedication of key employees employed prior to the merger by Valley and Bank Leumi USA. It is possible that these employees may decide not to remain with Valley. If Valley is unable to retain key employees, including management, who are critical to the successful integration of the companies and future operations, Valley could face disruptions in operations, loss of existing customers, loss of key information, expertise or know-how and unanticipated additional recruitment costs. In addition, if key employees terminate their employment, Valley's business activities may be adversely affected and management's attention may be diverted from successfully integrating Valley and Bank Leumi USA to hiring suitable replacements, all of which may cause Valley's business to suffer. In addition, Valley may not be able to locate or retain suitable replacements for any key employees who leave.

Risks Associated with Our Business Model

The loss of or decrease in lower-cost funding sources within our deposit base, including our inability to achieve deposit retention targets under our branch transformation strategy, may adversely impact our net interest income and net income.

Checking and savings, NOW, and money market deposit account balances and other forms of customer deposits can decrease when customers perceive alternative investments, such as the stock market, U.S. Treasury securities, and money market or fixed income mutual funds, as providing a better risk/return trade-off. Additionally, our customers largely bank with us because of our local customer service and convenience. For certain customers, this convenience could be negatively impacted by continued branch consolidation activity undergone as part of our branch transformation strategy. If customers move money out of bank deposits and into other investments, Valley could lose a low-cost source of funds, increasing its funding costs and reducing Valley's net interest income and net income.

Our deposit services for businesses in the state licensed cannabis industry could expose us to liabilities and regulatory compliance costs.

In 2020, we implemented specialized deposit services intended for a limited number of state licensed medical-use cannabis business customers. Medical use cannabis, as well as recreational use businesses are legal in numerous states and the District of Columbia, including our primary markets of New Jersey, New York, and Florida. However, such businesses are not legal at the federal level and marijuana remains a Schedule I drug under the Controlled Substances Act of 1970. In 2014, the U.S. Department of the Treasury's Financial Crimes Enforcement Network (FinCEN) published guidelines for financial institutions servicing state legal cannabis businesses. We have implemented a comprehensive control framework that includes written policies and procedures related to the on-boarding of such businesses and the monitoring and maintenance of such business accounts that comports with the FinCEN guidance. Additionally, our policies call for due diligence review of the cannabis business before the business is on-boarded, including confirmation that the business is properly licensed and maintains the license in good standing in the applicable state. Throughout the relationship, our policies call for continued monitoring of

the business, including site visits, to determine if the business continues to meet our requirements, including maintenance of required licenses and calls for undertaking periodic financial reviews of the business. The Bank's program originally was limited to offering depository products to medical cannabis businesses. Deposit transactions are monitored for compliance with the applicable state medical program rules and other regulations. In the latter half of 2021, the Bank expanded its cannabis-related business offerings to some limited lending on real estate and deposit services to licensed recreational dispensaries. The Bank may offer additional banking products and services to such customers in the future.

While we believe our policies and procedures allow us to operate in compliance with the FinCEN guidelines, there can be no assurance that compliance with the FinCEN guidelines will protect us from federal prosecution or other regulatory sanctions. Federal prosecutors have significant discretion and there can be no assurance that the federal prosecutors will not choose to strictly enforce the federal laws governing cannabis. Any change in the federal government's enforcement position could potentially subject us to criminal prosecution and other regulatory sanctions. As a general matter, the medical and recreational cannabis business is considered high-risk, thus increasing the risk of a regulatory action against our BSA/AML program that has adverse consequences, including but not limited to, preventing us from undertaking mergers, acquisitions and other expansion activities.

A significant portion of our loan portfolio is secured by real estate, and events that negatively impact the real estate market could adversely affect our asset quality and profitability for those loans secured by real property and increase the number of defaults and the level of losses within our loan portfolio.

A significant portion of our loan portfolio is secured by real estate. As of December 31, 2022, approximately 75 percent of our total loans had real estate as a primary or secondary component of collateral. The real estate collateral in each case provides an alternate source of repayment in the event of default by the borrower and could deteriorate in value during the time the credit is extended. A downturn in the real estate market in our primary market areas could result in an increase in the number of borrowers who default on their loans and a reduction in the value of the collateral securing their loans, which in turn could have an adverse effect on our profitability and asset quality. If we are required to liquidate the collateral securing a loan to satisfy the debt during a period of reduced real estate values, our earnings and shareholders' equity could be adversely affected. Any declines in home or commercial real estate prices in the New Jersey, New York and Florida markets we primarily serve, along with the unpredictable long-term path of the economy, also may result in increases in delinquencies and losses in our loan portfolios. Unexpected decreases in home or commercial real estate prices coupled with slow economic growth and elevated levels of unemployment could drive losses beyond those which are provided for in our allowance for loan losses. In that event, our earnings could be adversely affected.

We could incur future goodwill impairment.

If our estimates of the fair value of our goodwill change as a result of changes in our business or other factors, we may determine a goodwill impairment charge is necessary. Estimates of the fair value of goodwill are determined using several factors and assumptions, including, but not limited to, industry pricing multiples and estimated cash flows. Based upon Valley's 2022 goodwill impairment testing, the fair values of its three reporting units, wealth management, consumer banking, and commercial banking, were in excess of their carrying values. No assurance can be given that we will not record an impairment loss on goodwill in the future and any such impairment loss could have a material adverse effect on our results of operations and financial condition. At December 31, 2022, our goodwill totaled \$1.9 billion. See Note 8 to the consolidated financial statements for additional information.

Our market share and income may be adversely affected by our inability to successfully compete against larger and more diverse financial service providers, digital fintech start-up firms and other financial services providers that have advanced technological capabilities.

Valley faces substantial competition in all areas of its operations from a variety of different competitors, many of which are larger and may have more financial resources than Valley to deal with the potential negative changes in the financial markets and regulatory landscape. Many of these competitors may have fewer regulatory constraints, broader geographic service areas, greater capital, and, in some cases, lower cost structures. Valley competes with other providers of financial services such as commercial and savings banks, savings and loan associations, credit unions, money market and mutual funds, mortgage companies, title agencies, asset managers, insurance companies, and a large list of other local, regional and national institutions which offer financial services.

Additionally, the financial services industry is facing a wave of digital disruption from fintech companies and other large financial services providers. The financial services industry is continually undergoing rapid technological change with frequent introductions of new, technology-driven products and services which increase efficiency and enable financial institutions to better serve customers and to reduce costs. These competitors provide innovative web-based solutions to traditional retail

banking services and products. Fintech companies tend to have stronger operating efficiencies and fewer regulatory burdens than their traditional bank counterparts, including Valley.

Regulatory changes may continue to allow new entrants into the markets in which we operate. The result of these regulatory changes will likely cause other non-traditional financial services companies to compete directly with Valley. Many of the companies have stronger operating efficiencies and fewer regulatory burdens than their traditional bank counterparts, including Valley.

Our future success depends, in part, upon our ability to address the needs of our customers by using technology to provide products and services that will satisfy customer demands, as well as to create additional efficiencies in our operations. As a result of COVID-19, many customers have become more reliant on, and their expectations have increased with respect to, this technology. We may not be able to effectively implement new, technology-driven products and services or be successful in marketing these products and services to our customers and service interruptions, transaction processing errors and system conversion delays and may cause us to fail to comply with applicable laws. Many of Valley's competitors have substantially greater resources to invest in technological improvements. Valley may not be able to effectively implement new technology-driven products and services or be successful in marketing these products and services to its customers. Failure to successfully keep pace with technological change affecting the financial services industry could have a material adverse impact on Valley's business and, in turn, Valley's financial condition and results of operations.

Failure to successfully implement our growth strategies could cause us to incur substantial costs and expenses which may not be recouped and adversely affect our future profitability.

From time to time, Valley may implement new lines of business or offer new products and services within existing lines of business. There are substantial risks and uncertainties associated with these efforts, particularly in instances where the markets are not fully developed. Valley may invest significant time and resources to develop and market new lines of business and/or products and services. Initial timetables for the introduction and development of new lines of business and/or new products or services may not be achieved, and price and profitability targets may not prove feasible. External factors, such as compliance with regulations, competitive alternatives, and shifting customer preferences, may also impact the successful implementation of a new line of business or a new product or service. Additionally, any new line of business and/or new product or service could have a significant impact on the effectiveness of Valley's system of internal controls. Failure to successfully manage these risks could have a material adverse effect on Valley's business, results of operations and financial condition.

Our investments in certain tax-advantaged projects may not generate returns as anticipated and may have an adverse impact on our results of operations.

We invest in certain tax-advantaged investments that support qualified affordable housing projects, community development and, prior to 2019, renewable energy resources. Our investments in these projects are designed to generate a return primarily through the realization of federal and state income tax credits, and other tax benefits, over specified time periods. Third parties perform diligence on these investments for us on which we rely both at inception and on an ongoing basis. We are subject to the risk that previously recorded tax credits, which remain subject to recapture by taxing authorities based on compliance features required to be met at the project level, may fail to meet certain government compliance requirements and may not be able to be realized. The possible inability to realize these tax credits and other tax benefits may have a negative impact on our financial results. The risk of not being able to realize the tax credits and other tax benefits depends on many factors outside our control, including changes in the applicable tax code and the ability of the projects to be completed.

We previously invested in mobile solar generators sold and leased back by DC Solar and its affiliates (DC Solar). DC Solar had its assets frozen in December 2018 by the U.S. Department of Justice. DC Solar and related entities are in Chapter 7 bankruptcy. A group of investors who purchased mobile solar generators from, and leased them back to, DC Solar, including us received tax credits for making these renewable resource investments. During the fourth quarter 2019, several of the co-conspirators pleaded guilty to fraud in the ongoing federal investigation. Based upon this new information, Valley deemed that its tax positions related to the DC Solar funds did not meet the more likely than not recognition threshold in Valley's tax reserve assessment at December 31, 2019. As a result, our net income for the year ended December 31, 2019, included an increase to our provision for income taxes of \$31.1 million, reflecting the reserve for uncertain tax liability positions related to tax credits and other tax benefits previously recognized from the investments in the DC Solar funds plus interest. The principals pled guilty to fraud in early 2020. During 2021, the Internal Revenue Service commenced an audit connected with our investment in DC Solar and the audit remains open at this time.

While we believe that Valley was fully reserved for the tax positions related to DC Solar at December 31, 2022, we continue to evaluate all our existing tax positions each quarter under U.S. GAAP.

We are subject to environmental liability risk associated with lending activities which could have a material adverse effect on our financial condition and results of operations.

A significant portion of our loan portfolio is secured by real property. During the ordinary course of business, we may foreclose on and take title to properties securing certain loans. In doing so, there is a risk that hazardous or toxic substances could be found on these properties. If hazardous or toxic substances are found, we may be liable for remediation costs, as well as for personal injury and property damage. Environmental laws may require us to incur substantial expenses and may materially reduce the affected property's value or limit our ability to use or sell the affected property. In addition, future laws or more stringent interpretations or enforcement policies with respect to existing laws may increase our exposure to environmental liability. Although we have policies and procedures to perform an environmental review prior to originating certain commercial real estate loans, as well as before initiating any foreclosure action on real property, these reviews may not be sufficient to detect all potential environmental hazards. The remediation costs and any other financial liabilities associated with an environmental hazard could have a material adverse effect on our financial condition and results of operations.

We may incur future losses in connection with repurchases and indemnification payments related to mortgages that we have sold into the secondary market.

We engage in the origination of residential mortgages for sale into the secondary market, while typically retaining the loan servicing. In connection with such sales, we make representations and warranties, which, if breached, may require us to repurchase such loans, substitute other loans or indemnify the purchasers of such loans for actual losses incurred in respect of such loans. The aggregate principal balances of residential mortgage loans serviced by the Bank for others approximated \$3.5 billion and \$3.6 billion at December 31, 2022 and 2021, respectively. Over the past several years, we have experienced a nominal amount of repurchase requests, and only a few of which have actually resulted in repurchases by Valley (nine and five loan repurchases in 2022 and 2021, respectively). None of the loan repurchases resulted in a material loss. As of December 31, 2022, no reserves pertaining to loans sold were established on our financial statements. While we currently believe our repurchase risk remains low based upon our careful loan underwriting and documentation standards, it is possible that requests to repurchase loans could occur in the future, and such requests may have a negative financial impact on us.

Interest rate swap fees within capital markets income are a significant component of our non-interest income and could fluctuate in future periods.

Valley executes interest rate swaps with commercial lending customers to facilitate their respective risk management strategies. Interest rate swap fees reported within capital markets income totaled approximately \$43.1 million, or 21 percent, and \$26.9 million, or 17 percent, of total non-interest income for the years ended December 31, 2022 and 2021, respectively. While we believe our commercial loan customers will continue to use interest rate swap for managing interest rate risk, several factors, including, but not limited to, the actual and expected level of market interest rates, can impact their decision to use such products. As a result, we can provide no assurance that our interest rate swap fees will remain at the level reported for the year ended December 31, 2022.

We may not be able to attract and retain skilled people.

Our success depends, in large part, on our ability to attract and retain key people. Competition for the best people in most activities in which we engage can be intense and we may not be able to hire people or to retain them, in particular due to an increasingly competitive labor market. The labor market continues to experience elevated levels of turnover in the aftermath of the COVID-19 pandemic, and we have been impacted by an extremely competitive labor market, including increased competition for talent across all aspects of our business, as well as increased competition with non-traditional competitors, such as fintech companies. Employers are offering increased compensation and opportunities to work with greater flexibility, including remote work, on a permanent basis. These can be important factors in a current associate's decision to leave us as well as in a prospective associate's decision to join us. As competition for skilled professionals remains intense, we may have to devote significant resources to attract and retain qualified personnel, which could negatively impact earnings. The unexpected loss of services of one or more of our key personnel, including, but not limited to, the executive officers disclosed in Item 1 of this Annual Report, could have a material adverse impact on our business because we would lose the employees' skills, knowledge of the market, and years of industry experience and may have difficulty promptly finding qualified replacement personnel.

We are subject to risks relating to environmental, social and governance (“ESG”) matters that could adversely affect our reputation, business, financial condition and results of operations, as well as the price of our common and preferred stock.

We are subject to a variety of risks, including reputational risk, associated with ESG matters. The public holds diverse and often conflicting views on these matters. We have multiple stakeholders, including our shareholders, clients, associates, federal and state regulatory authorities, and the communities in which we operate, and these stakeholders will often have differing priorities and expectations regarding ESG issues. If we take action in conflict with one or another of those stakeholders’ expectations, we could experience an increase in client complaints, a loss of business, or reputational harm. We could also face negative publicity or reputational harm based on the identity of those with whom we choose to do business. Any adverse publicity in connection with ESG issues could damage our reputation, ability to attract and retain clients and associates, compete effectively, and grow our business.

In addition, proxy advisory firms and certain institutional investors who manage investments in public companies are increasingly integrating ESG factors into their investment analysis. The consideration of ESG factors in making investment and voting decisions is relatively new. Accordingly, the frameworks and methods for assessing ESG policies are not fully developed, vary considerably among the investment community, and will likely continue to evolve over time. Moreover, the subjective nature of methods used by various stakeholders to assess a company with respect to ESG criteria could result in erroneous perceptions or a misrepresentation of our actual ESG policies and practices. Organizations that provide ratings information to investors on ESG matters may also assign unfavorable ratings to us. Certain of our clients might also require that we implement additional ESG procedures or standards in order to continue to do business with them. If we fail to comply with specific ESG-related investor or client expectations and standards, or to provide the disclosure relating to ESG issues that any third parties may believe is necessary or appropriate (regardless of whether there is a legal requirement to do so), our reputation, business, financial condition, and/or results of operations, as well as the price of our common and preferred stock could be negatively impacted.

Climate change and severe weather could significantly impact our ability to conduct our business.

There is an increasing concern over the risks of climate change and related environmental sustainability matters. The physical risks of climate change include discrete events, such as flooding and wildfires, and longer-term shifts in climate patterns, such as extreme heat, sea level rise, and more frequent and prolonged drought. Such events could disrupt our operations or those of our customers or third parties on which we rely, including through direct damage to assets and indirect impacts from market volatility. Additionally, transitioning to a low-carbon economy may entail extensive policy, legal, technology and market initiatives.

A significant portion of our primary markets is located near coastal waters which could generate naturally occurring severe weather, or in response to climate change, which could have a significant impact on our ability to conduct business. Many areas in New Jersey, New York, Florida and Alabama in which the vast majority of our branches and offices operate are subject to severe flooding from time to time and significant disruptions related to the weather may become common events in the future. Heavy storms and hurricanes can also cause severe property damage and result in business closures, negatively impacting both the financial health of retail and commercial customers and our ability to operate our business. The risk of significant disruption and potential losses from future storm activity exists in all of our primary markets.

Risks Related to Our Industry

Changes in interest rates could reduce our net interest income and earnings.

Valley’s earnings and cash flows are largely dependent upon its net interest income. Net interest income is the difference between interest income earned on interest-earning assets, such as loans and investment securities, and interest expense paid on interest-bearing liabilities, such as deposits and borrowed funds. Interest rates are sensitive to many factors that are beyond Valley’s control, including general economic conditions, competition, and policies of various governmental and regulatory agencies and, in particular, the policies of the Federal Reserve. Changes in interest rates driven by such factors could influence not only the interest Valley receives on loans and investment securities and the amount of interest it pays on deposits and borrowings, but such changes could also affect (i) Valley’s ability to originate loans and obtain deposits, (ii) the fair value of Valley’s financial assets, including the held to maturity and available for sale investment securities portfolios, and (iii) the average duration of Valley’s interest-earning assets and liabilities. This also includes the risk that interest-earning assets may be more responsive to changes in interest rates than interest-bearing liabilities, or vice versa (repricing risk), the risk that the individual interest rates or rate indices underlying various interest-earning assets and interest-bearing liabilities may not change in the same degree over a given time period (basis risk), and the risk of changing interest rate relationships across the spectrum of interest-earning asset and interest-bearing liability maturities (yield curve risk). The Federal Reserve maintained the target range for the federal funds rate between 0.00 and 0.25 percent during 2021. Beginning in March 2022, the Federal Reserve

significantly increased the target federal funds rate incrementally through 2022 resulting in a target range between 4.25 and 4.50 percent at December 31, 2022, effectively increasing interest rates. During the first quarter 2023, the Federal Reserve increased the target federal funds rate another 0.25 percent and may further increase the target federal funds rate in 2023 in an attempt to reduce inflation. Any substantial or unexpected change in market interest rates could have a material adverse effect on Valley's financial condition and results of operations. See additional information in the "Net Interest Income" and "Interest Rate Sensitivity" sections of our MD&A.

We may not be able to detect money laundering and other illegal or improper activities fully or on a timely basis, which could expose us to additional liability and could have a material adverse effect on us.

We are required to comply with anti-money laundering, anti-terrorism and other laws and regulations in the United States. These laws and regulations require us, among other things, to adopt and enforce "know-your-customer" policies and procedures and to report suspicious and large transactions to applicable regulatory authorities. These laws and regulations have become increasingly complex and detailed, require improved systems and sophisticated monitoring and compliance personnel and have become the subject of enhanced government supervision.

While we have adopted policies and procedures aimed at detecting and preventing the use of our banking network for money laundering and related activities, those policies and procedures may not completely eliminate instances in which we may be used by customers to engage in money laundering and other illegal or improper activities. To the extent we fail to fully comply with applicable laws and regulations, the OCC, along with other banking agencies, have the authority to impose fines and other penalties and sanctions on us. In addition, our business and reputation could suffer if customers use our banking network for money laundering or illegal or improper purposes.

The replacement of the LIBOR benchmark interest rate may have an impact on Valley's business, financial condition or results of operations.

The Adjustable Interest Rate (LIBOR) Act (the "LIBOR Act"), is a Federal law that was passed March 15, 2022, to permit financing agreements that contain a LIBOR-based benchmark without inadequate "fallback provisions" to be automatically replaced, once LIBOR ceases, by a benchmark replacement recommended by the Federal Reserve. On December 16, 2022, the Federal Reserve adopted a final rule implementing the LIBOR Act that, among other things, identifies the applicable SOFR-based benchmark replacements under the LIBOR Act. The LIBOR Act pre-empts similar state laws such as the New York State statute providing for recommended benchmark replacements for contracts governed by New York law without adequate fallback provisions. US Dollar LIBOR rates will continue to be published until June 30, 2023, to allow adequate time for legacy LIBOR based financing to move to an alternate reference interest rate.

SOFR is considered to be a risk free rate and LIBOR was a risk weighted rate. Thus, SOFR tends to be a lower rate than LIBOR because it does not contain a risk component. The difference may negatively impact Valley's interest rate margin utilizing SOFR as compared to LIBOR. We no longer use LIBOR as an index for any new loan originations and commenced its changeover of legacy LIBOR based financing to alternate indexes. The implementation of a substitute index or indices for the calculation of interest rates under loan agreements with borrowers may cause us to incur expenses related to the transition, may result in reduced loan interest income. Borrowers may dispute substitute index, indices or equalization credit spread adjustments. Some disputes with borrowers over the appropriateness or comparability to LIBOR of the substitute index or indices may result in litigation. The interest rate differences, costs associated with the indices changeover from LIBOR to SOFR and the limited potential for litigation related to the cessation of LIBOR may have an adverse impact to Valley. These consequences cannot be entirely predicted and may impact the market value for or value of LIBOR-linked securities, loans, and other financial obligations or extensions of credit held by or due to us.

Higher charge-offs and weak credit conditions could require us to further increase our allowance for credit losses through a provision charge to earnings.

The process for determining the amount of the allowance for credit losses is critical to our financial results and conditions. It requires difficult, subjective and complex judgments about the future, including the impact of national and regional economic conditions on the ability of our borrowers to repay their loans. If our judgment proves to be incorrect, our allowance for credit losses may not be sufficient to cover the lifetime credit losses inherent in our loan and held to maturity debt securities portfolios, as well as unfunded credit commitments. Deterioration in economic conditions affecting borrowers, including as a result of inflationary pressures or other macroeconomic factors resulting from the COVID-19 pandemic or otherwise, new information regarding existing loans, identification of additional problem loans and other factors, both within and outside of our control, may require an increase in the allowance for credit losses. Additionally, bank regulators review the classification of our loans in their examination of us and we may be required in the future to change the internal classification on certain loans, which may require us to increase our provision for credit losses or loan charge-offs. If actual net charge-offs were to exceed Valley's allowance, its earnings would be negatively impacted by additional provisions for credit losses. Any

increase in our allowance for credit losses or loan charge-offs as required by the OCC or otherwise could have an adverse effect on our results of operations or financial condition.

An increase in our non-performing assets may reduce our interest income and increase our net loan charge-offs, provision for loan losses, and operating expenses.

Non-performing assets (including non-accrual loans, other real estate owned, and other repossessed assets) totaled \$272.0 million at December 31, 2022. Our non-accrual loans represented 0.57 percent of total loans at December 31, 2022 and included non-accrual taxi medallion loans totaling \$66.5 million with related reserves of \$42.2 million, or 63.5 percent of such loans, within the allowance for loan losses. These non-performing assets can adversely affect our net income mainly through decreased interest income and increased operating expenses incurred to maintain such assets or loss charges related to subsequent declines in the estimated fair value of foreclosed assets. Adverse changes in the value of our non-performing assets, or the underlying collateral, or in the borrowers' performance or financial conditions could adversely affect our business, results of operations and financial condition. Potential further declines in the market valuation of taxi medallions and the stressed operating environment within New York City due to the COVID-19 pandemic, increases in crime or other factors could also negatively impact the future performance of this portfolio. There can be no assurance that we will not experience increases in non-performing loans in the future, or that our non-performing assets will not result in lower financial returns in the future.

We may be required to consult with the Federal Reserve Bank (FRB) before declaring cash dividends on our common stock, which ultimately may delay, reduce, or eliminate such dividends and adversely affect the market price of our common stock.

Holders of our common stock are only entitled to receive such cash dividends as our Board of Directors may declare out of funds legally available for such payments. Although we have historically declared cash dividends on our common stock, we are not required to do so. We may reduce or eliminate our common stock cash dividend in the future depending upon our results of operations, financial condition or other metrics, which could be adversely impacted by the factors described in this Item 1A, including the potential ongoing impact of the COVID-19 pandemic and the uncertain U.S. economic conditions.

In July 2020, the FRB updated its supervisory guidance to provide greater clarity regarding the situations in which bank holding companies, like Valley, may expect an expedited consultation in connection with the declaration of dividends that exceed quarterly earnings. To qualify, amongst other criteria, total commercial real estate loan concentrations cannot represent 300 percent or more of total capital and the outstanding balance of the commercial real estate loan portfolio cannot increase by 50 percent or more during the prior 36 months. Currently, we believe that Valley does not meet the standard for expedited consultation and approval of its dividend, should it be required. As a result, Valley could be subject to a lengthier and possibly more burdensome review process by the FRB when considering paying dividends that exceed quarterly earnings. The delay, reduction or elimination of our quarterly dividend could adversely affect the market price of our common stock. See additional information regarding our quarterly cash dividend and the current rate of earnings retention in the "Capital Adequacy" section of the MD&A.

General Commercial, Operational and Financial and Regulatory Risks

Our controls and procedures may fail or be circumvented, which may result in a material adverse effect on our business, results of operations and financial condition.

Management periodically reviews and updates our internal controls, disclosure controls and procedures, and corporate governance policies. Any system of controls, however well designed and operated, is based in part on certain assumptions and can provide only reasonable, not absolute, assurances that the objectives of the system are met. Any failure or circumvention of the controls and procedures or failure to comply with regulations related to controls and procedures could have a material adverse effect on our business, results of operations and financial condition.

We rely on our systems of controls and procedures, and if our system fails, our operations could be disrupted.

We face the risk that the design of our controls and procedures, including those to mitigate the risk of fraud by employees or outsiders, may prove to be inadequate or are circumvented, thereby causing delays in detection of errors or inaccuracies in data and information. We regularly review and update our internal controls, disclosure controls and procedures, and corporate governance policies and procedures. Any system of controls, however well designed and operated, is based in part on certain assumptions and can provide only reasonable, not absolute, assurances that the objectives of the system are met. Any failure or circumvention of our controls and procedures or failure to comply with regulations related to controls and procedures could have a material adverse effect on our business, results of operations and financial condition.

We may also be subject to disruptions of our systems arising from events that are wholly or partially beyond our control (including, for example, electrical or telecommunications outages), which may give rise to losses in service to customers and to financial loss or liability. We are further exposed to the risk that our external vendors may be unable to fulfill their contractual obligations (or will be subject to the same risk of fraud or operational errors by their respective employees as us) and to the risk that our (or our vendors') business continuity and data security systems prove to be inadequate. We maintain a system of comprehensive policies and a control framework designed to monitor vendor risks including, among other things, (i) changes in the vendor's organizational structure or internal controls, (ii) changes in the vendor's financial condition, (iii) changes in the vendor's support for existing products and services and (iv) changes in the vendor's strategic focus. While we believe these policies and procedures help to mitigate risk, the failure of an external vendor to perform in accordance with the contracted arrangements under service level agreements could be disruptive to our operations, which could have a material adverse impact on our business and, in turn, our financial condition and results of operations.

Our business, financial condition and results of operations could be adversely affected by the outbreak of pandemic disease, acts of terrorism, and other external events.

The emergence of widespread health emergencies or pandemics, such as COVID-19, could lead to additional quarantines, business shutdowns, labor shortages, disruptions to supply chains, and overall economic instability. Additionally, New York City and New Jersey remain central targets for potential acts of terrorism against the United States. Such events could affect the stability of our deposit base, impair the ability of borrowers to repay outstanding loans, impair the value of collateral securing loans, cause significant property damage, result in loss of revenue and/or cause us to incur additional expenses. Although we have established and regularly test disaster recovery policies and procedures, the occurrence of any such event in the future could have a material adverse effect on our business, which, in turn, could have a material adverse effect on our financial condition and results of operations.

Our ability to make opportunistic acquisitions is subject to significant risks, including the risk that regulators will not provide the requisite approvals.

We may make opportunistic whole or partial acquisitions of other banks, branches, financial institutions, or related businesses from time to time that we expect may further our business strategy. Any possible acquisition will be subject to regulatory approval, and there can be no assurance that we will be able to obtain such approval in a timely manner or at all. Even if we obtain regulatory approval, these acquisitions could involve numerous risks, including lower than expected performance or higher than expected costs, difficulties related to integration, diversion of management's attention from other business activities, changes in relationships with customers, and the potential loss of key employees. In addition, we may not be successful in identifying acquisition candidates, integrating acquired institutions, or preventing deposit erosion or loan quality deterioration at acquired institutions. Competition for acquisitions can be intense, and we may not be able to acquire other institutions on attractive terms. There can be no assurance that we will be successful in completing or will even pursue future acquisitions, or if such transactions are completed, that we will be successful in integrating acquired businesses into operations. Ability to grow may be limited if we choose not to pursue or are unable to successfully make acquisitions in the future.

The CECL model for determining our allowance for credit losses could add volatility to our provision for credit losses and earnings.

The current expected credit loss (CECL) model requires the allowance for credit losses for certain financial assets, including loans, held to maturity securities and certain off-balance sheet credit exposures, to be calculated based on current expected credit losses over the lives of the assets rather than incurred losses as of a point in time. Our estimation process is subject to risks and uncertainties, including a reliance on historical loss and trend information that may not be representative of current conditions and indicative of future performance. Accordingly, our actual lifetime credit losses may be materially different than the amounts reported in the allowance due to the inherent uncertainty in the estimation process, including future loss estimates based upon our reasonable and supportable economic forecasts. Also, future credit losses could differ materially from those estimates due to changes in values and circumstances after the balance sheet date. Changes in such estimates could significantly impact our allowance, provision for credit losses and earnings.

We may be unable to adequately manage our liquidity risk, which could affect our ability to meet our obligations as they become due, capitalize on growth opportunities, or pay regular dividends on our common stock.

Liquidity risk is the potential that Valley will be unable to meet its obligations as they come due, capitalize on growth opportunities as they arise, or pay regular dividends on our common stock because of an inability to liquidate assets or obtain adequate funding on a timely basis, at a reasonable cost and within acceptable risk tolerances. Liquidity is required to fund various obligations, including credit commitments to borrowers, mortgage and other loan originations, withdrawals by depositors, repayment of borrowings, dividends to shareholders, operating expenses and capital expenditures. Liquidity is derived primarily from commercial and retail deposit growth and retention; principal and interest payments on loans; principal

and interest payments on investment securities; sale, maturity and prepayment of investment securities; net cash provided from operations; and access to other funding sources, such as the FHLB and certain brokered deposit channels established by the Bank.

Our access to funding sources in amounts adequate to finance our activities could be impaired by factors that affect us specifically or the financial services industry in general. Factors that could have a detrimental impact to our access to liquidity sources include a decrease in the level of our business activity due to persistent weakness, or downturn, in the economy or adverse regulatory action against us. Our ability to borrow could also be impaired by factors that are not necessarily specific to us, such as a severe disruption of the financial markets or negative views and expectations about the prospects for the financial services industry as a whole.

Cyber attacks could compromise our information or result in the data of our customers being improperly divulged or our systems being disrupted, which could expose us to liability, losses and escalating operating costs.

Valley regularly collects, processes, transmits and stores confidential information regarding its customers, employees and others for whom it services loans. In some cases, this confidential or proprietary information is collected, compiled, processed, transmitted or stored by third parties on Valley's behalf. Information security risks have increased because of the proliferation of new technologies and the increased sophistication and activities of perpetrators of cyber attacks. Many financial institutions and companies engaged in data processing have reported significant breaches in the security of their websites or other systems, some of which have involved sophisticated and targeted attacks intended to obtain unauthorized access to confidential information, destroy data, denial-of-service, or sabotage systems, often through the introduction of computer viruses or malware, cyber attacks and other means. In addition, there have been well-publicized "ransomware" attacks against various U.S. companies with the intent to materially disrupt their computer network and services. Globally, cybersecurity attacks are increasing in number and the attackers are increasingly organized and well-financed, or at times supported by state actors. In addition, geopolitical tensions or conflicts, such as Russia's invasion of Ukraine or increasing tension with China, may create a heightened risk of cybersecurity attacks. Valley frequently experiences attempted cybersecurity attacks against its systems. There can be no assurances that Valley will not incur breaches of our systems or that of our vendors which may expose the data of our customers or disrupt our services, exposing us to significant damage, ongoing operational costs and/or reputational harm.

Cyber risk exposure will remain elevated or increase in the future due to, among other things, the increasing size and prominence of Valley in the financial services industry, our expansion of internet and mobile banking tools and new products based on customer needs, and the system and customer account conversions associated with the integration of merger targets. Successful attacks on any one of many our third-party service providers may adversely affect our business and result in the disclosure or misuse of our confidential information or that of our customers. There can be no assurance that we or our third-party service providers will not suffer a cyber attack that exposes us to significant damages, operational costs, or reputational harm.

Extensive regulation and supervision have a negative impact on our ability to compete in a cost-effective manner and may subject us to material compliance costs and penalties, and changes in regulation could adversely affect our business, financial condition and results of operations.

Valley, primarily through its principal subsidiary and certain non-bank subsidiaries, is subject to extensive federal and state regulation and supervision. Banking regulations are primarily intended to protect depositors' funds, federal deposit insurance funds and the banking system as a whole. Many laws and regulations affect Valley's lending practices, capital structure, investment practices, dividend policy and growth, among other things. They encourage Valley to ensure a satisfactory level of lending in defined areas and establish and maintain comprehensive programs relating to anti-money laundering and customer identification. Congress, state legislatures, and federal and state regulatory agencies continually review banking laws, regulations and policies for possible changes. Changes to statutes, regulations or regulatory policies, including changes in interpretation or implementation of statutes, regulations or policies, could affect Valley in substantial and unpredictable ways. Such changes could subject Valley to additional costs, limit the types of financial services and products it may offer and/or increase the ability of non-banks to offer competing financial services and products, among other things. Failure to comply with laws, regulations or policies could result in sanctions by regulatory agencies, civil money penalties and/or reputational damage, which could have a material adverse effect on Valley's business, financial condition and results of operations. Valley's compliance with certain of these laws will also be considered by banking regulators when reviewing bank merger and bank holding company acquisitions.

We are subject to numerous laws designed to protect consumers, including the Community Reinvestment Act and fair lending laws, and failure to comply with these laws could lead to a wide variety of sanctions.

The Community Reinvestment Act, the Equal Credit Opportunity Act, the Fair Housing Act and other fair lending laws and regulations impose community investment and nondiscriminatory lending requirements on financial institutions. The

Consumer Financial Protection Bureau, the Department of Justice and other federal agencies are responsible for enforcing these laws and regulations. A successful regulatory challenge to an institution's performance under the Community Reinvestment Act, the Equal Credit Opportunity Act, the Fair Housing Act or other fair lending laws and regulations could result in a wide variety of sanctions, including damages and civil money penalties, injunctive relief, restrictions on mergers and acquisitions, restrictions on expansion and restrictions on entering new business lines. Private parties also may challenge an institution's performance under fair lending laws in litigation. Such actions could have a material adverse effect on our business, financial condition and results of operations.

Changes in accounting policies or accounting standards could cause us to change the manner in which we report our financial results and condition in adverse ways and could subject us to additional costs and expenses.

Valley's accounting policies are fundamental to understanding its financial results and condition. Some of these policies require the use of estimates and assumptions that may affect the value of Valley's assets or liabilities and financial results. Valley identified its accounting policies regarding the allowance for credit losses, goodwill and other intangible assets, and income taxes to be critical because they require management to make difficult, subjective and complex judgments about matters that are inherently uncertain. Under each of these policies, it is possible that materially different amounts would be reported under different conditions, using different assumptions, or as new information becomes available.

From time to time, the FASB and the SEC change their guidance governing the form and content of Valley's external financial statements. In addition, accounting standard setters and those who interpret U.S. generally accepted accounting principles (U.S. GAAP), such as the FASB, SEC and banking regulators may change or even reverse their previous interpretations or positions on how these standards should be applied. Such changes are expected to continue and may accelerate dependent upon the FASB and International Accounting Standards Board commitments to achieving convergence between U.S. GAAP and International Financial Reporting Standards. Changes in U.S. GAAP and changes in current interpretations are beyond Valley's control, can be hard to predict and could materially impact how Valley reports its financial results and condition. In certain cases, Valley could be required to apply new or revised guidance retroactively or apply existing guidance differently (also retroactively) which may result in Valley restating prior period financial statements for material amounts. Additionally, significant changes to U.S. GAAP may require costly technology changes, additional training and personnel, and other expenses that will negatively impact our results of operations.

Claims and litigation could result in significant expenses, losses and damage to our reputation.

From time to time as part of Valley's normal course of business, customers, bankruptcy trustees, former customers, contractual counterparties, third parties and current and former employees make claims and take legal action against Valley based on actions or inactions of Valley. If such claims and legal actions are not resolved in a manner favorable to Valley, they may result in financial liability and/or adversely affect the market perception of Valley and its products and services. This may also impact customer demand for Valley's products and services. Any financial liability could have a material adverse effect on Valley's financial condition and results of operations. Any reputation damage could have a material adverse effect on Valley's business.

Risks Related to an Investment in our Securities

We may reduce or eliminate the cash dividend on our common stock, which could adversely affect the market price of our common stock.

Holders of our common stock are only entitled to receive such cash dividends as our Board of Directors may declare out of funds legally available for such payments. Although we have historically declared cash dividends on our common stock, we are not required to do so and may reduce or eliminate our common stock cash dividend in the future depending upon our results of operations, financial condition or other metrics. This reduction or elimination of our dividend could adversely affect the market price of our common stock.

If our subsidiaries are unable to pay dividends or make distributions to us, we may be unable to make dividend payments to our preferred and common shareholders or interest payments on our long-term borrowings and junior subordinated debentures issued to capital trusts.

We are a separate and distinct legal entity from our banking and non-banking subsidiaries and depend on dividends, distributions, and other payments from the Bank and its non-banking subsidiaries to fund cash dividend payments on our preferred and common stock and to fund most payments on our other obligations. Regulations relating to capital requirements affect the ability of the Bank to pay dividends and other distributions to us and to make loans to us. Additionally, if our subsidiaries' earnings are not sufficient to make dividend payments to us while maintaining adequate capital levels, we may not be able to make dividend payments to our preferred and common shareholders or interest payments on our long-term

borrowings and junior subordinated debentures issued to capital trusts. Furthermore, our right to participate in a distribution of assets upon a subsidiary's liquidation or reorganization is subject to the prior claims of the subsidiary's creditors.

Future acquisitions may dilute shareholder value, especially tangible book value per share.

We regularly evaluate opportunities to acquire other financial institutions. Future mergers or acquisitions involving cash, debt, or equity securities may occur at any time. Acquisitions typically involve the payment of a premium over book and market values, and therefore, some dilution of our tangible book value per common share may occur in connection with any future acquisitions.

Future offerings of common stock, preferred stock, debt or other securities may adversely affect the market price of our stock and dilute the holdings of existing shareholders.

In the future, we may increase our capital resources or, if our or the Bank's actual or projected capital ratios fall below or near the current (Basel III) regulatory required minimums, we or the Bank could be forced to raise additional capital by making additional offerings of common stock, preferred stock or debt securities. Additional equity offerings may dilute the holdings of our existing shareholders or reduce the market price of our common stock, or both. Holders of our common stock are not entitled to preemptive rights or other protections against dilution. Upon liquidation, holders of our debt securities and shares of preferred stock, and lenders with respect to other borrowings will receive distributions of our available assets prior to the holders of our common stock. See Note 18 to the consolidated financial statements for more details on our common and preferred stock.

Item 1B. *Unresolved Staff Comments*

None.

Item 2. *Properties*

We conduct our business at 231 retail banking centers locations in northern and central New Jersey, the New York City boroughs of Manhattan, Brooklyn and Queens, Long Island, Westchester County, New York, Florida, Alabama, California and Illinois. We own 96 of our banking center facilities and several non-branch operating facilities. The other properties are leased for various terms. Valley considers its properties to be suitable and adequate for its current business needs.

The following table summarizes our leased and owned retail banking centers in each state:

	Leased	Owned	Number of banking centers	% of Total
New Jersey				
Northern	56	45	101	43.7
Central	13	14	27	11.7
Total New Jersey	69	59	128	55.4
New York				
Manhattan, Brooklyn and Queens	16	7	23	10.0
Long Island	9	3	12	5.2
Westchester County	7	0	7	3.0
Total New York	32	10	42	18.2
Florida	27	15	42	18.2
Alabama	4	12	16	6.9
California	2	0	2	0.9
Illinois	1	0	1	0.4
Total	135	96	231	100.0 %

Our principal executive office is located at One Penn Plaza in Manhattan, New York. Many of our bank operations are located in Wayne, New Jersey, where we own five office buildings. Our New York City corporate headquarters are primarily used as a central hub for New York based lending activities of senior executives and other commercial lenders. Additionally, we acquired two leased offices in New York City from Bank Leumi USA that are primarily used for commercial lending and

our broker-dealer, VFM. We also lease six non-bank office facilities in Florida, used for operational, executive and lending purposes.

Additional information regarding Valley's leased locations and owned facilities can be found within Note 6. Leases and Note 7. Premises and Equipment, Net in the Notes to the Consolidated Financial Statements contained in Part II - Item 8. Financial Statements and Supplementary Data, respectively.

Item 3. *Legal Proceedings*

In the normal course of business, we are a party to various outstanding legal proceedings and claims. In the opinion of management, our financial condition, results of operations, and liquidity should not be materially affected by the outcome of such legal proceedings and claims.

Item 4. *Mine and Safety Disclosures*

Not applicable.

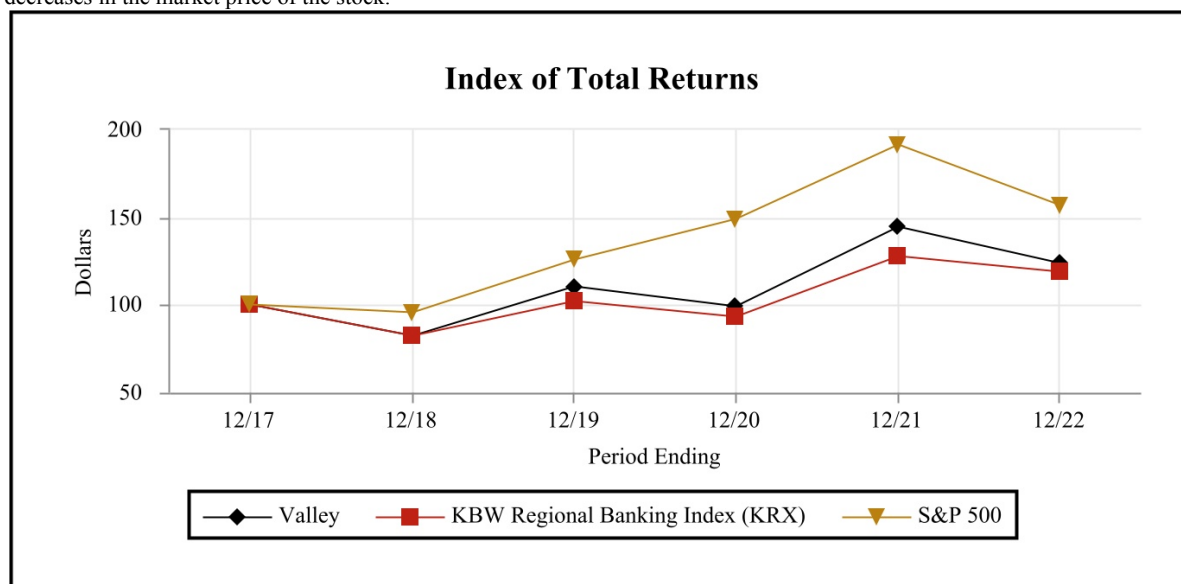
PART II

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

Our common stock is traded on the NASDAQ Global Select Market under the ticker symbol "VLY". There were 7,183 shareholders of record as of December 31, 2022.

Performance Graph

The following graph compares the cumulative total return on a hypothetical \$100 investment made on December 31, 2017 in: (a) Valley's common stock; (b) the KBW Regional Banking Index (KRX) and (c) the Standard and Poor's (S&P) 500 Stock Index. The graph is calculated assuming that all dividends are reinvested during the relevant periods. The graph shows how a \$100 investment would increase or decrease in value over time based on dividends (stock or cash) and increases or decreases in the market price of the stock.



	12/17	12/18	12/19	12/20	12/21	12/22
Valley	\$ 100.00	\$ 82.21	\$ 110.38	\$ 99.27	\$ 144.72	\$ 123.58
KBW Regional Banking Index (KRX)	100.00	82.51	102.20	93.33	127.53	118.71
S&P 500	100.00	95.61	125.70	148.81	191.48	156.77

The information under “Performance Graph” is not deemed to be “filed” with the SEC and will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent specifically incorporated by reference into such a filing.

Issuer Repurchase of Equity Securities

The following table presents the purchases of equity securities by the issuer and affiliated purchasers during the three months ended December 31, 2022:

Period	Total Number of Shares Purchased ⁽¹⁾	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans ^{(2) (3)}	Maximum Number of Shares that May Yet Be Purchased Under the Plans ⁽³⁾
October 1, 2022 to October 31, 2022	1,220	\$ 10.95	—	25,000,000
November 1, 2022 to November 30, 2022	2,389	11.73	—	25,000,000
December 1, 2022 to December 31, 2022	5,734	11.94	—	25,000,000
Total	9,343	\$ 11.76	—	

⁽¹⁾ Includes repurchases made in connection with the vesting of employee restricted stock awards.

⁽²⁾ On January 17, 2007, Valley publicly announced its intention to repurchase up to 4.7 million outstanding common shares in the open market or in privately negotiated transactions. On April 26, 2022, Valley terminated its 2007 stock repurchase plan.

⁽³⁾ On April 26, 2022, Valley publicly announced a stock repurchase program for up to 25 million shares of Valley common stock. The authorization to repurchase will expire on April 25, 2024.

Recent Stock Issuance. On October 8, 2021, Valley acquired certain subsidiaries of Dudley Ventures, LLC (See Note 2 to the consolidated financial statements). Per the terms of the merger agreement, we subsequently issued 327,083 shares of our common stock to the two former principals of Dudley Ventures on February 8, 2023 as partial consideration for the transaction. The value of the issued shares amounted to approximately \$3.75 million. The shares were issued pursuant to and in accordance with exemption from registration under Section 4(a)(2) of the Securities Act for transactions by an issuer not involving a public offering.

Item 6. *[Reserved]*

Item 7. *Management’s Discussion and Analysis (MD&A) of Financial Condition and Results of Operations*

The purpose of this analysis is to provide the reader with information relevant to understanding and assessing Valley’s results of operations and financial condition for each of the past two years. In order to fully appreciate this analysis, the reader is encouraged to review the consolidated financial statements and accompanying notes thereto appearing under Item 8 of this report, and statistical data presented in this document. For comparison of our results of operations for the years ended December 31, 2021 and 2020, please refer to Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations of our Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on February 28, 2022.

Cautionary Statement Concerning Forward-Looking Statements

This report, both in MD&A and elsewhere, contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements are not historical facts and include expressions about management’s confidence and strategies and management’s expectations about our business, new and existing programs and products, acquisitions, relationships, opportunities, taxation, technology, market conditions and economic expectations. These statements may be identified by such forward-looking terminology as “intend,” “should,” “expect,” “believe,” “view,” “opportunity,” “allow,” “continues,” “reflects,” “typically,” “usually,” “anticipate,” “may,” “estimate,” “outlook,” “project” or similar statements or variations of such terms. Such forward-looking statements involve certain risks and uncertainties. Actual results may differ materially from such forward-looking statements. Factors that may cause actual results to differ materially from those contemplated by such forward-looking statements in addition to those risk factors listed under the “Risk Factors” section in Part I, Item 1A of this Annual Report on Form 10-K include, but are not limited to:

- the impact of unfavorable macroeconomic conditions or downturns, instability or volatility in financial markets and other events and factors outside of our control, such as U.S. and global recession concerns, geopolitical concerns including the

conflict between Russia and Ukraine, inflationary pressures, labor market volatility, supply chain issues, and the COVID-19 pandemic or other public health crisis;

- risks associated with our acquisition of Bank Leumi USA, including the inability to realize expected cost savings and synergies from the acquisition in the amounts or timeframe anticipated, greater than expected costs or difficulties relating to integration matters, any inability to retain customers and qualified employees of Bank Leumi USA, and the potential for greater than expected non-recurring charges related to the acquisition;
- the impact of COVID-19 and any future resurgences on the U.S. and global economies, including business disruptions, reductions in employment, supply chain interruptions, inflation, Federal Reserve actions impacting the level of market interest rates and increases in business failures, specifically among our clients, as well as on our business, our employees and our ability to provide services to our customers;
- the loss of or decrease in lower-cost funding sources within our deposit base, including our inability to achieve deposit retention targets under Valley's branch transformation strategy;
- the impact of forbearances or deferrals we are required to, or agree to as a result of customer requests and/or government actions, including, but not limited to our potential inability to recover fully deferred payments from the borrower or the collateral;
- the risks related to the replacement of the London Interbank Offered Rate with Secured Overnight Financing Rate and other reference rates, including increased expenses and litigation and the effectiveness of hedging strategies;
- damage verdicts or settlements or restrictions related to existing or potential class action litigation or individual litigation arising from claims of violations of laws or regulations, contractual claims, breach of fiduciary responsibility, negligence, fraud, environmental laws, patent or trademark infringement, employment related claims, and other matters;
- a prolonged downturn in the economy, mainly in New Jersey, New York, Florida, Alabama, California, and Illinois, as well as an unexpected decline in commercial real estate values within our market areas;
- higher or lower than expected income tax expense or tax rates, including increases or decreases resulting from changes in uncertain tax position liabilities, tax laws, regulations and case law;
- the inability to grow customer deposits to keep pace with loan growth;
- a material change in our allowance for credit losses under CECL due to forecasted economic conditions and/or unexpected credit deterioration in our loan and investment portfolios;
- the need to supplement debt or equity capital to maintain or exceed internal capital thresholds;
- greater than expected technology related costs due to, among other factors, prolonged or failed implementations, additional project staffing and obsolescence caused by continuous and rapid market innovations;
- cyber-attacks, ransomware attacks, computer viruses or other malware that may breach the security of our websites or other systems to obtain unauthorized access to confidential information, destroy data, disable or degrade service, or sabotage our systems;
- results of examinations by the Office of the Comptroller of the Currency (OCC), the Federal Reserve Bank (FRB), the Consumer Financial Protection Bureau (CFPB) and other regulatory authorities, including the possibility that any such regulatory authority may, among other things, require us to increase our allowance for credit losses, write-down assets, reimburse customers, change the way we do business, or limit or eliminate certain other banking activities;
- our inability or determination not to pay dividends at current levels, or at all, because of inadequate earnings, regulatory restrictions or limitations, changes in our capital requirements or a decision to increase capital by retaining more earnings;
- unanticipated loan delinquencies, loss of collateral, decreased service revenues, and other potential negative effects on our business caused by severe weather, pandemics or other public health crises, acts of terrorism or other external events; and
- unexpected significant declines in the loan portfolio due to the lack of economic expansion, increased competition, large prepayments, changes in regulatory lending guidance or other factors.

Critical Accounting Estimates

Our accounting and reporting policies conform, in all material respects, to U.S. GAAP. In preparing the consolidated financial statements, management has made estimates, judgments and assumptions that affect the reported amounts of assets and liabilities as of the date of the consolidated statements of financial condition and results of operations for the periods indicated. Actual results could differ materially from those estimates.

Valley's accounting policies are fundamental to understanding management's discussion and analysis of its financial condition and results of operations. Our significant accounting policies are presented in Note 1 to the consolidated financial

statements. We identified our policies for the allowance for credit losses, goodwill and other intangible assets, and income taxes to be critical because management has to make subjective and/or complex judgments about matters that are inherently uncertain and because it is likely that materially different amounts would be reported under different conditions or using different assumptions. Management has reviewed the application of these policies with the Audit Committee of Valley's Board of Directors.

The judgments used by management in applying the critical accounting policies discussed below may be affected by significant changes in the economic environment, which may result in changes to future financial results. Specifically, subsequent evaluations of the loan portfolio, in light of the factors then prevailing, may result in material changes in the allowance for credit losses in future periods, and the inability to collect on outstanding loans could result in increased loan losses.

Allowance for Credit Losses. Determining the allowance for credit losses for loans has historically been identified as a critical accounting estimate. We estimate and recognize an allowance for lifetime expected credit losses for loans, unfunded credit commitments and held to maturity debt securities measured at amortized cost. See Notes 1, 4 and 5 to the consolidated financial statements for further discussion of our accounting policies and methodologies for establishing the allowance for credit losses.

The accounting estimates relating to the allowance for credit losses is a "critical accounting estimate" for the following reasons:

- Changes in the provision for credit losses can materially affect our financial results;
- Estimates relating to the allowance for credit losses require us to project future borrower performance, delinquencies and charge-offs, along with, when applicable, collateral values, based on a reasonable and supportable forecast period utilizing forward-looking economic scenarios in order to estimate probability of default and loss given default;
- The allowance for credit losses is influenced by factors outside of our control such as industry and business trends, geopolitical events and the effects of laws and regulations as well as economic conditions such as trends in gross domestic product (GDP), unemployment, housing prices, interest rates, inflation, and energy prices; and
- Judgment is required to determine whether the models used to generate the allowance for credit losses produce an estimate that is sufficient to encompass the current view of lifetime expected credit losses.

Management's determination of the amount of the ACL is a critical accounting estimate as it requires significant reliance on the credit risk we ascribe to individual borrowers, the use of estimates and significant judgment as to the amount and timing of expected future cash flows on individually evaluated loans, significant reliance on historical loss rates on homogenous portfolios, consideration of our quantitative and qualitative evaluation of past events, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amounts. Changes in such estimates could significantly impact our allowance and provision for credit losses. Accordingly, our actual credit loss experience may not be in line with our expectations.

Changes in Our Allowance for Credit Losses for Loans

Valley considers it difficult to quantify the impact of changes in the economic forecast on its allowance for credit losses for loans. However, management believes the following discussion may enable investors to better understand the variables that drive the allowance for credit losses for loans, which totaled \$483.3 million and \$375.7 million at December 31, 2022 and 2021, respectively. On April 1, 2022, Valley recorded reserves of \$70.3 million in the allowance for credit losses for loans related to purchased credit deteriorated (PCD) loans acquired from Bank Leumi USA, and an additional second quarter 2022 provision of \$41.0 million related to non-PCD loans and unfunded credit commitments also acquired from Bank Leumi USA.

As discussed further in the "Allowance for Credit Losses" section in this MD&A, we incorporated a multi-scenario economic forecast for estimating lifetime expected credit losses at December 31, 2022 and 2021. Due to the building inflationary pressures during most of 2022, aggressive interest rate hikes by the Federal Reserve and other global political and economic factors, Valley's CECL model incorporated a more pessimistic economic outlook in terms of GDP growth, unemployment levels and potential near term negative economic impacts, given such uncertain economic conditions at December 31, 2022 as compared to December 31, 2021. As a result, the qualitative economic component of our reserves at December 31, 2022 increased to approximately 16 percent of total allowance for credit losses for loans at December 31, 2022 as compared to 6 percent at December 31, 2021. Other qualitative non-economic reserves, largely based upon management judgements about certain inherent factors in acquired loan portfolios not reflected in our quantitative reserves, increased to approximately 20 percent of total allowance for credit losses for loans at December 31, 2022 as compared to 10 percent at

December 31, 2021. The increased level of reserves resulting from the higher percentage of these significant judgmental factors during 2022 was partly mitigated by decreases in the quantitative portion of our allowance based upon a transition matrix model which calculates an expected life of loan loss percentage for each loan pool by generating probability of default and loss given default metrics.

Specific reserves totaling \$86.6 million and \$71.5 million, respectively, within the allowance at December 31, 2022 and 2021 are also largely based upon management's valuation of collateral for collateral dependent loans and the present value of expected cash flows for certain troubled debt restructured loans. These specific reserves include \$42.2 million and \$58.5 million at December 31, 2022 and 2021, respectively, related to New York City taxi medallion loan valuations based on the estimated value of the underlying medallions. The valuation of the underlying medallions could be adversely impacted by further illiquidity or dislocation in the market, resulting in depressed market valuations of the underlying collateral, thus leading to additional provisions for loan losses. See additional taxi medallion loan valuation sensitivity analysis under the "Non-performing Assets" section of this MD&A.

Goodwill and Other Intangible Assets. We have significant goodwill and other intangible assets related to our acquisitions totaling \$1.9 billion and \$197.5 million at December 31, 2022, respectively. We record all acquired assets, including goodwill and other intangible assets, and assumed liabilities in purchase acquisitions at fair value as of the acquisition date, and expense all acquisition related costs as incurred as required by ASC Topic 805, "Business Combinations." The initial recording of goodwill and other intangible assets requires subjective judgments concerning estimates of the fair value of the acquired assets and assumed liabilities. Goodwill is subject to annual tests for impairment or more often, if events or circumstances indicate it may be impaired. Our determination of whether or not goodwill is impaired requires us to make significant judgments and to use significant estimates and assumptions regarding estimated future cash flows. If we change our strategy or if market conditions shift, our judgments may change, which may result in adjustments to the recorded goodwill balance. Other intangible assets are amortized over their estimated useful lives and are subject to impairment tests if events or circumstances indicate a possible inability to realize the carrying amount. Such evaluation of other intangible assets is based on undiscounted cash flow projections.

An impairment loss is recognized if the carrying value of the net assets assigned to the reporting unit exceeds the fair value of the reporting unit, with the impairment loss not to exceed the amount of goodwill recorded. We perform our annual goodwill impairment test in the second quarter of each year, or more often if events or circumstances warrant. In addition to the annual impairment test, we assessed the impact of the lingering effects of the COVID-19 pandemic and other factors on macroeconomic variables and economic forecasts and how those might impact the fair value of our reporting units each quarter end. After consideration of these variables and other possible triggering events or circumstances, as well as our operating results, we determined it was more-likely-than-not that the fair values of our three reporting units, Wealth Management, Consumer Banking, and Commercial Banking, were in excess of their carrying values during 2022. Therefore, we concluded there were no triggering events that would require additional goodwill impairment test of the reporting units during 2022.

Based upon Valley's 2022 annual goodwill impairment testing, the fair values of its three reporting units were in excess of their carrying values. In 2023, we will continue to monitor and evaluate the impact of the pandemic and the overall economic conditions that may impact our market capitalization and any triggering events that may indicate a possible impairment of goodwill allocated to our reporting units. While not expected at this time, we may be required to record a charge to earnings should there be a deficiency in our estimated fair value of one or more of our reporting units during our subsequent annual (or more frequent) impairment tests. See the "Business Segments" section in this MD&A for more information regarding our business segments/reporting units.

Fair value is determined using certain discounted cash flow and market multiple methods. Estimated cash flows may extend far into the future and, by their nature, are difficult to determine over an extended timeframe. Factors that may materially affect the estimates include, among others, impact of the pandemic on macroeconomic variables and economic forecasts, competitive forces, customer behaviors and attrition, changes in revenue growth trends, cost structures and technology, and changes in discount rates, growth rate, terminal values, and specific industry or market sector conditions. To assist in assessing the impact of potential goodwill or other intangible assets impairment charges at December 31, 2022, the impact of a five percent impairment charge on these intangible assets would result in a reduction in pre-tax income of approximately \$103.3 million. See Note 8 to the consolidated financial statements for additional information regarding goodwill and other intangible assets.

Income Taxes. We are subject to the income tax laws of the U.S., its states and municipalities. The income tax laws of the jurisdictions in which we operate are complex and subject to different interpretations by the taxpayer and the relevant government taxing authorities. In establishing a provision for income tax expense, we must make judgments and interpretations about the application of these inherently complex tax laws to our business activities, as well as the timing of when certain items may affect taxable income.

Our interpretations may be subject to review during examination by taxing authorities and disputes may arise over the respective tax positions. We attempt to resolve these disputes during the tax examination and audit process and ultimately through the court systems when applicable. We monitor relevant tax authorities and revise our estimate of accrued income taxes due to changes in income tax laws and their interpretation by the courts and regulatory authorities on a quarterly basis. Revisions of our estimate of accrued income taxes also may result from our own income tax planning and from the resolution of income tax controversies. Such revisions in our estimates may be material to our operating results for any given quarter.

The provision for income taxes is composed of current and deferred taxes. Deferred taxes arise from differences between assets and liabilities measured for financial reporting versus income tax return purposes. Deferred tax assets are recognized if, in management's judgment, their realizability is determined to be more likely than not. We perform regular reviews to ascertain the realizability of our deferred tax assets. These reviews include management's estimates and assumptions regarding future taxable income, which also incorporate various tax planning strategies. In connection with these reviews, if we determine that a portion of the deferred tax asset is not realizable, a valuation allowance is established. Management determined it is more likely than not that Valley will realize its net deferred tax assets, except for immaterial valuation allowances, as of December 31, 2022 and 2021.

We also maintain a reserve related to certain tax positions that management believes contain an element of uncertainty. An uncertain tax position is measured based on the largest amount of benefit that management believes is more likely than not to be realized. During 2022, 2021 and 2020, our income tax expense reflected increases of \$1.8 million, \$1.2 million and \$1.5 million, respectively, to our tax provision related to reserve for uncertain tax liability positions and/or accrued interest related to such positions at December 31, 2022, 2021 and 2020, respectively.

See Notes 1 and 13 to the consolidated financial statements and the "Executive Summary" and "Income Taxes" sections in this MD&A for an additional discussion on the accounting for income taxes.

New Authoritative Accounting Guidance. See Note 1 of the consolidated financial statements for a description of recent accounting pronouncements including the dates of adoption and the anticipated effect on our results of operations and financial condition.

Executive Summary

Company Overview. At December 31, 2022, Valley had consolidated total assets of \$57.5 billion, total net loans of \$46.5 billion, total deposits of \$47.6 billion and total shareholders' equity of \$6.4 billion. Our commercial bank operations include branch office locations in northern and central New Jersey, the New York City boroughs of Manhattan, Brooklyn and Queens, Long Island, Westchester County, New York, Florida, Alabama, California and Illinois. Of our current 231 branch network, 55 percent, 18 percent, and 18 percent of the branches are located in New Jersey, New York, and Florida, respectively, with the remaining 8 percent of the branches in Alabama, California and Illinois combined. Despite targeted branch consolidation activity, we have significantly grown both in asset size and locations over the past several years primarily both through organic efforts and through bank acquisitions. Our most recent bank acquisition is discussed below.

Bank Leumi Le-Israel Corporation. On April 1, 2022, Valley completed its acquisition of Bank Leumi Le-Israel Corporation, the U.S. subsidiary of Bank Leumi Le-Israel B.M., and parent company of Bank Leumi USA, collectively referred to as "Bank Leumi USA". At the acquisition date, Bank Leumi USA had approximately \$8.1 billion in assets, \$5.9 billion of loans and \$7.0 billion of deposits, after purchase accounting adjustments. Valley issued approximately 85 million shares of common stock and paid \$113.4 million in cash in the transaction. The consideration for the acquisition totaled approximately \$1.2 billion, inclusive of the value of stock options. The transaction resulted in \$403.2 million of goodwill and \$153.4 million of combined core deposit and other intangible assets subject to amortization. See Note 2 to the consolidated financial statements for additional details regarding the acquisition of Bank Leumi USA and other recent acquisition activities.

Impact of COVID-19. Over the last three years, the novel coronavirus (COVID-19) exposed the vulnerability of global supply chains and our dependence on countries like China for essential consumer goods. During 2022, the COVID-19 pandemic continued to have a severe disruptive impact on the U.S. and global economy, particularly due to supply chain disruptions and labor shortages. While the U.S. experienced an economic rebound since 2021, partly due to the large scale vaccinations efforts, the first half of 2022 brought new global outbreaks of the COVID variants and a significant rise in inflation. As a result, worldwide inflationary concerns outweigh the other negative impacts of COVID-19 during the second half of 2022 and continued into 2023. Additionally, the reversal of China's "zero COVID" policy in December 2022 resulted in a massive wave of new infections in China, which is expected to suppress economic growth. China's economy slowdown could have prolonged negative consequences for the global economy as China exports up to one-third of the world's intermediate goods. We continue to closely monitor the impact of COVID-19 and the emergence of new variants, as well as its impact on our

associates, customers, communities and results of operations and other government or Federal Reserve actions. See Item 1A. Risk Factors" and the "Operating Environment" section of MD&A for more details.

The Coronavirus Aid, Relief, and Economic Security (CARES) Act and additional legislation that followed including the Consolidated Appropriations Act and the American Rescue Plan Act of 2021 provided funding for the SBA's Paycheck Protection Program (PPP) and established rules for qualifying borrowers to receive loan forgiveness by the SBA under this program. Valley extended a total of \$3.2 billion PPP loans under the program and the vast majority of these loans received forgiveness from the SBA during 2022 and 2021. As of December 31, 2022, we had only \$33.6 million of PPP loans outstanding (including \$6.9 million acquired from Bank Leumi USA).

Annual Results. Net income for the year ended December 31, 2022 was \$568.9 million, or \$1.14 per diluted common share as compared to \$473.8 million, or \$1.12 per diluted common share for 2021. The \$95.0 million increase in net income as compared to the same period one year ago was mainly due to the following changes:

- a \$445.7 million increase in net interest income mainly due to higher average loan balances driven by both acquired and organic loan volumes and increased yields on new and adjustable-rate loans; and
- a \$51.8 million increase in non-interest income driven by increases in wealth management and trust fees and service charges on deposit accounts totaling \$19.8 million and \$15.5 million, respectively, primarily related to brokerage fee and deposit growth resulting from the Bank Leumi USA acquisition, and a \$11.7 million increase in other income related to higher swap fee income and growth due to the acquisition, partially offset by a decrease in net gains on sales of residential mortgage loans;

These items were partially offset by:

- a \$24.2 million increase in our provision for credit losses;
- a \$333.4 million increase in non-interest expense largely due to increases in salary and employee benefits; technology, furniture and equipment expenses; and net occupancy caused by our expanded banking operations resulting from the acquisitions of Bank Leumi USA on April 1, 2022 and The Westchester Bank Holding Corporation (Westchester) on December 1, 2021; and
- a \$44.9 million increase in income tax expense mostly due to higher pre-tax income for the year ended December 31, 2022.

See the "Net Interest Income," "Non-Interest Income," "Non-Interest Expense," and "Income Taxes" sections in this MD&A for more details on the items above and other infrequent items, including merger related expenses, impacting our 2022 annual results.

Operating Environment. The year ended December 31, 2022 was defined by volatile markets as a result of higher interest rates and inflation, Russia's war in Ukraine, and fears of a recession. It was also a year of aggressive monetary tightening, with the Federal Reserve increasing rates by a cumulative 4.25 percent throughout the year. During 2022, real gross domestic product increased 2.1 percent compared to an increase of 5.9 percent in 2021. The increase in economic activity was driven in large part by household spending on goods and services, and a favorable mix of export activity outpacing imports. Residential fixed investments declined as mortgage rates increased causing potential home buyers to hold back and wait for affordability to improve. Business fixed investment, inventory restocking and government spending increased at a tepid rate.

During 2022, the Federal Reserve took unprecedented action to restrain inflation and improve the stability of the economy. The Federal Reserve raised the federal funds rate seven consecutive times ranging from 25 basis points in the beginning of the year to 75 basis points toward the end of the year and brought its benchmark interest rate up by a collective 4.25 percent. In addition, the Federal Reserve has continued to reduce its holdings of Treasury securities and agency residential and commercial mortgage-backed securities. The Federal Reserve is strongly committed to returning inflation to its 2 percent objective.

The 10-year U.S. Treasury note yield ended 2022 at 3.88 percent, 236 basis points higher compared with December 31, 2021. Meanwhile, the spread between the 2- and 10-year U.S. Treasury note yields ended the year at a negative (0.53) percent, 132 basis point lower compared to the end of 2021.

For all commercial banks in the U.S., loans and leases increased approximately 11.3 percent from December 31, 2021 to December 31, 2022. For the industry, banks reported that demand for commercial and industrial loans, particularly among large and middle-market firms, had increased sharply compared to the prior year. Alternatively, demand for commercial real estate lending was challenged, particularly those related to construction and land development. While overall industry loan growth

was strong during the year, banks reported that demand for most commercial and consumer loan products had declined notably in the fourth quarter of 2022. Higher interest rates drove up cost of capital further constraining new construction and overall housing demand. Additionally, the industry reported increasing underwriting standards across both commercial and consumer loan products.

Further expected increases in market interest rates, persistently high inflation and geopolitical tensions, which continued to exacerbate supply chain issues, and tight labor market conditions, among other factors, have added a higher level of uncertainty to the future path of the U.S. economy and an elevated risk of a recession. Additionally, further increases in the market interest rates may cause firms to restrain investment and related borrowings, and Valley and its financial results could be adversely impacted, as highlighted in the remaining MD&A discussion below.

Loans. Total loans increased \$12.8 billion to \$46.9 billion at December 31, 2022 as compared to December 31, 2021 largely due to a combination of \$5.9 billion of acquired loans from Bank Leumi USA, strong commercial loan volumes and an increase in new residential mortgage loans originated for investment rather than sale, partially offset by a decline in PPP loans. The PPP loans included within the commercial and industrial loan category decreased \$476.0 million from December 31, 2021 as result of SBA loan forgiveness. Excluding acquired loans from Bank Leumi USA, commercial real estate (including construction), non-PPP commercial and industrial, residential mortgage and automobile loans increased 24.5 percent, 20.0 percent, 17.7 percent, and 11.2 percent, respectively, during the year ended December 31, 2022. Loans held for sale totaled \$18.1 million and \$139.5 million at December 31, 2022 and 2021, respectively.

For 2023, we are targeting net loan growth in the range of 7 to 9 percent based on the gross loans of \$46.9 billion at December 31, 2022. However, there can be no assurance that we will achieve such levels given the potential for unforeseen changes in the market and other conditions detailed in our risk factors set forth under Item 1A. of this Report. See further details on our loan activities under the “Loan Portfolio” section below.

Asset Quality. Total non-performing assets (NPAs), consisting of non-accrual loans, other real estate owned (OREO) and other repossessed assets increased \$26.6 million, or 10.8 percent to \$272.0 million at December 31, 2022 as compared to December 31, 2021. This increase was largely due to higher non-accrual construction loans (including acquired loans from Bank Leumi USA), partially offset by lower non-accrual commercial real estate loans and residential mortgage loans. Non-accrual loans totaled \$269.8 million, or 0.57 percent of our entire loan portfolio of \$46.9 billion, at December 31, 2022 as compared to \$240.2 million, or 0.70 percent of total loans, at December 31, 2021. Net loan charge-offs totaled \$19.1 million and \$15.1 million for the years ended December 31, 2022 and 2021, respectively.

Total accruing past due loans (i.e., loans past due 30 days or more and still accruing interest) increased \$35.0 million to \$90.9 million, or 0.19 percent of total loans at December 31, 2022 as compared to \$55.9 million, or 0.16 percent of total loans, at December 31, 2021. The increase was largely due to increases in commercial and industrial, and commercial real estate loans in the 69 to 89 days past due and 90 or more days past due delinquency categories. See further details in the “Non-performing Assets” section below.

Deposits and Borrowings. Overall, average deposits increased by \$9.2 billion to \$42.5 billion for the year ended December 31, 2022 as compared to 2021 largely due to \$7.0 billion of deposits assumed from Bank Leumi USA, growth in average non-maturity deposits balances, as well as \$1.2 billion in deposits assumed from Westchester Bank Holding Corporation (Westchester) on December 1, 2021. The average non-interest bearing deposits and savings, NOW and money market account and time deposits balances increased by \$4.3 billion, \$4.4 billion, and \$435.0 million, respectively, for the year ended December 31, 2022 as compared to 2021. Average non-interest-bearing deposits; savings, NOW and money market deposits; and time deposits represented approximately 35 percent, 53 percent and 12 percent of total deposits at December 31, 2022, respectively.

Actual ending balances for deposits increased \$12.0 billion to \$47.6 billion at December 31, 2022 as compared to 2021 mostly due to the assumed deposits from Bank Leumi USA and Westchester, commercial customer deposit organic growth, and increased utilization of brokered deposits, consisting of money market and time deposit accounts, in our funding mix. Non-interest bearing deposits increased \$2.8 billion at December 31, 2022 as compared to 2021 largely due to deposits assumed from Bank Leumi USA, partially offset by some migration of both commercial and retail balances to interest bearing deposit products during the second half of 2022. Total brokered deposits increased to \$5.9 billion at December 31, 2022 as compared to \$1.4 billion to December 31, 2021 as we increased our utilization of such funds in the second half of 2022 as a favorable alternative to other borrowings. Non-interest bearing deposits; savings, NOW, money market deposits; and time deposits represented approximately 30 percent, 50 percent and 20 percent of total deposits as of December 31, 2022, respectively. While our overall deposit levels benefited from organic growth and acquired deposits during 2022, we believe the current operating environment will likely remain very challenging for Valley’s deposit gathering initiatives due to, among other factors, the high

level of short-term interest rates and additional forecasted interest rate hikes by the Federal Reserve to tame inflation. As a result, we cannot guarantee that we will be able to maintain deposit levels at or near those reported at December 31, 2022.

The following table presents average short-term and long-term borrowings for the years ended December 31, 2022 and 2021:

	2022	2021
	(in thousands)	
Average short-term borrowings:		
FHLB advances	\$ 531,020	\$ 722,192
Securities sold under repurchase agreements	137,527	163,223
Federal funds purchased	355,805	6,493
Total	<u>\$ 1,024,352</u>	<u>\$ 891,908</u>
Average long-term borrowings:		
FHLB advances	\$ 788,725	\$ 1,136,661
Subordinated debt	658,798	533,754
Securities sold under repurchase agreements	—	170,685
Junior subordinated debentures issued to capital trusts	56,588	56,243
Total	<u>\$ 1,504,111</u>	<u>\$ 1,897,343</u>

Average short-term borrowings increased \$132.4 million at December 31, 2022 as compared to 2021 mostly due to increased use of federal funds purchased as a part of our overall funding strategy, partially offset by lower utilization of FHLB advances. Average long-term borrowings (including junior subordinated debentures issued to capital trusts which are presented separately on the consolidated statements of financial condition) decreased \$393.2 million at December 31, 2022 as compared to 2021 largely due to the repayment of long-term repurchase agreements during the third quarter 2021 and, to a lesser extent, maturities of FHLB advances over the last 12 months. The average balance of subordinated debt increased due to the issuance of \$150 million of 6.25 percent fixed-to-floating rate subordinated notes during the third quarter 2022.

Actual ending balances for short-term borrowings decreased \$517.0 million to \$138.7 million at December 31, 2022 as compared to 2021 largely due to the maturity of FHLB advances during 2022 and lower repo balances at December 31, 2022. Long-term borrowings increased \$119.4 million to \$1.5 billion at December 31, 2022 as compared to \$1.4 billion at December 31, 2021 primarily due to the aforementioned issuance of subordinated notes during the third quarter 2022. See the “Net Interest Income” section below and Note 10 to the consolidated financial statements for additional details on our borrowed funds.

Non-GAAP Financial Measures. The table below presents selected performance indicators, their comparative non-GAAP measures and the (non-GAAP) efficiency ratio for the periods indicated. The Company believes that the non-GAAP financial measures provide useful supplemental information to both management and investors in understanding Valley’s underlying operational performance, business, and performance trends, and may facilitate comparisons of our current and prior performance with the performance of others in the financial services industry. Management utilizes these measures for internal planning, forecasting and analysis purposes. Management believes that Valley’s presentation and discussion of this supplemental information, together with the accompanying reconciliations to the GAAP financial measures, also allows investors to view performance in a manner similar to management. These non-GAAP financial measures should not be considered in isolation, as a substitute for or superior to financial measures calculated in accordance with U.S. GAAP. These non-GAAP financial measures may also be calculated differently from similar measures disclosed by other companies.

The following table presents our annualized performance ratios for the three years ended December 31, 2022, 2021 and 2020:

	2022	2021	2020
Selected Performance Indicators	(\$ in thousands, except for %)		
GAAP measures:			
Net income, as reported	\$ 568,851	\$ 473,840	\$ 390,606
Return on average assets	1.09 %	1.14 %	0.96 %
Return on average shareholders' equity	9.50	9.98	8.68
Non-GAAP measures:			
Net income, as adjusted	\$ 650,452	\$ 492,148	\$ 401,738
Return on average assets, as adjusted	1.25 %	1.19 %	0.99 %
Return on average shareholders' equity, as adjusted	10.87	10.37	8.93
Return on average tangible shareholders' equity (ROATE)	14.08	14.40	12.82
ROATE, as adjusted	16.10	14.96	13.19
Efficiency ratio	50.55 %	48.46 %	47.39 %
	As of December 31,		
Common Equity Per Share Data:	2022	2021	2020
Book value per common share	\$ 12.23	\$ 11.57	\$ 10.85
Tangible book value per common share	8.15	7.94	7.25

Non-GAAP Reconciliations to GAAP Financial Measures

Adjusted net income for the three years ended December 31, 2022, 2021 and 2020 was computed as follows:

	2022	2021	2020
	(in thousands)		
Net income, as reported (GAAP)	\$ 568,851	\$ 473,840	\$ 390,606
Add: Loss on extinguishment of debt (net of tax)	—	6,024	8,649
Less: Gains on available for sale and held to maturity securities transactions (net of tax) ⁽¹⁾	(69)	(390)	(377)
Add: Provision for credit losses (net of tax) ⁽²⁾	29,282	4,471	—
Add: Severance expense (mainly branch transformation, net of tax) ⁽³⁾	—	—	1,489
Add: Merger related expenses (net of tax) ⁽⁴⁾	52,388	6,698	1,371
Add: Litigation reserve (net of tax) ⁽⁵⁾	—	1,505	—
Net income, as adjusted (non-GAAP)	\$ 650,452	\$ 492,148	\$ 401,738

⁽¹⁾ Included in (losses) gains on securities transactions, net.

⁽²⁾ Primarily represents provision for credit losses for non-PCD loans and unfunded credit commitments acquired in bank acquisitions.

⁽³⁾ Severance expense is included in salary and employee benefits expense.

⁽⁴⁾ Merger related expenses are primarily within salary and employee benefits expense, technology, furniture and equipment expense, professional and legal fees, and other expense.

⁽⁵⁾ Included in professional and legal fees.

In addition to the items used to calculate net income, as adjusted, in the tables above, our net income is, from time to time, impacted by fluctuations in the level of net gains on sales of loans, wealth management fees, and swap fees recognized from commercial loan customer transactions. These amounts can vary widely from period to period due to, among other factors, the amount of residential mortgage loans originated for sale, loan portfolio sales, brokerage fees, and commercial loan customer demand for certain products. See the "Non-Interest Income" section below for more details.

Adjusted annualized return on average assets for the three years ended December 31, 2022, 2021 and 2020 is computed by dividing adjusted net income by average assets, as follows:

	2022	2021	2020
	(\$ in thousands)		
Net income, as adjusted (non-GAAP)	\$ 650,452	\$ 492,148	\$ 401,738
Average assets (GAAP)	\$ 52,182,310	\$ 41,475,682	\$ 40,557,326
Annualized return on average assets, as adjusted (non-GAAP)	1.25 %	1.19 %	0.99 %

Adjusted annualized return on average shareholders' equity for the three years ended December 31, 2022, 2021 and 2020 is computed by dividing adjusted net income by average shareholders' equity, as follows:

	2022	2021	2020
	(\$ in thousands)		
Net income, as adjusted (non-GAAP)	\$ 650,452	\$ 492,148	\$ 401,738
Average shareholders' equity (GAAP)	\$ 5,985,236	\$ 4,747,745	\$ 4,500,067
Annualized return on average shareholders' equity, as adjusted (non-GAAP)	10.87 %	10.37 %	8.93 %

ROATE and adjusted ROATE for the three years ended December 31, 2022, 2021 and 2020 are computed by dividing net income and adjusted net income, respectively, by average shareholders' equity less average goodwill and average other intangible assets, as follows:

	2022	2021	2020
	(\$ in thousands)		
Net income, as reported (GAAP)	\$ 568,851	\$ 473,840	\$ 390,606
Net income, as adjusted (non-GAAP)	\$ 650,452	\$ 492,148	\$ 401,738
Average shareholders' equity (GAAP)	\$ 5,985,236	\$ 4,747,745	\$ 4,500,067
Less: Average goodwill and other intangible assets (GAAP)	1,944,503	1,457,519	1,454,349
Average tangible shareholders' equity (non-GAAP)	\$ 4,040,733	\$ 3,290,226	\$ 3,045,718
Annualized ROATE (non-GAAP)	14.08 %	14.40 %	12.82 %
Annualized ROATE, as adjusted (non-GAAP)	16.10 %	14.96 %	13.19 %

The following table presents our efficiency ratio and a reconciliation of the efficiency ratio adjusted for such items during the years ended December 31, 2022, 2021 and 2020:

	2022	2021	2020
	(\$ in thousands)		
Total non-interest expense, as reported (GAAP)	\$ 1,024,949	\$ 691,542	\$ 646,148
Less: Loss on extinguishment of debt (pre-tax)	—	8,406	12,036
Less: Amortization of tax credit investments (pre-tax)	12,407	10,910	13,335
Less: Merger related expenses (pre-tax) ⁽¹⁾	71,203	8,900	1,907
Less: Litigation reserve (pre-tax) ⁽²⁾	—	2,100	—
Less: Severance expense (mainly branch transformation, pre-tax) ⁽³⁾	—	—	2,072
Total non-interest expense, as adjusted (non-GAAP)	941,339	661,226	616,798
Net interest income, as reported (GAAP)	1,655,640	1,209,901	1,118,904
Total non-interest income, as reported (GAAP)	206,793	155,013	183,032
Less: Gains on available for sale and held to maturity debt securities transactions, net (pre-tax) ⁽⁴⁾	(95)	(545)	(524)
Total net interest income and non-interest income, as adjusted (non-GAAP)	\$ 206,698	\$ 154,468	\$ 182,508
Gross operating income, as adjusted (non-GAAP)	\$ 1,862,338	\$ 1,364,369	\$ 1,301,412
Efficiency ratio, (non-GAAP)	50.55 %	48.46 %	47.39 %

(1) Included primarily within salary and employee benefits expense, technology, furniture and equipment expense, professional and legal fees, and other expense.

(2) Included in professional and legal fees.

(3) Severance expenses are included in salary and employee benefits expense.

(4) Included in (losses) gains on securities transactions, net.

Tangible book value per common share is computed by dividing shareholders' equity less preferred stock, goodwill and other intangible assets by common shares outstanding for the two years ended December 31, 2022 and 2021, as follows:

	2022	2021
	(\$ in thousands, except for share data)	
Common shares outstanding	506,374,478	421,437,068
Shareholders' equity (GAAP)	\$ 6,400,802	\$ 5,084,066
Less: Preferred stock	209,691	209,691
Less: Goodwill and other intangible assets	2,066,392	1,529,394
Tangible common shareholders' equity (non-GAAP)	\$ 4,124,719	\$ 3,344,981
Tangible book value per common share (non-GAAP)	8.15	7.94
Book value per common share (GAAP)	\$ 12.23	\$ 11.57

Net Interest Income

Net interest income consists of interest income and dividends earned on interest earning assets less interest expense on interest bearing liabilities and represents the main source of income for Valley. The net interest margin on a fully tax equivalent basis is calculated by dividing tax equivalent net interest income by average interest earning assets and is a key measurement used in the banking industry to measure income from interest earning assets.

Annual Period 2022. Net interest income on a tax equivalent basis increased by \$447.4 million to \$1.7 billion for 2022 as compared to 2021. Interest income on a tax equivalent basis increased \$644.1 million to \$2.0 billion for 2022 as compared to 2021 mostly due to an \$9.8 billion increase in average interest earning assets caused by a blend of organic and acquired loan growth, as well as increased loan yields on new originations and adjustable rate loans. Partially offsetting these positive events, interest and fee income related to PPP loans decreased \$72.2 million to \$12.8 million for 2022 as compared to 2021, as expected, from continued SBA loan forgiveness. Additionally, interest expense increased \$196.7 million to \$321.0 million for 2022 as compared to 2021 largely due to higher interest rates on deposits and a \$4.6 billion increase in average interest bearing liabilities.

Average interest earning assets totaling \$48.1 billion for the year ended December 31, 2022 increased \$9.8 billion, or 25.7 percent, as compared to 2021 primarily driven by a \$9.1 billion increase in average loan balances to \$41.9 billion. Average loans mainly increased due to \$5.9 billion and \$908.0 million of loans acquired from Bank Leumi USA and Westchester, respectively, and organic loan growth in the non-PPP loan categories over the 12-month period, partially offset by a \$402.4 million decrease in PPP loans caused by SBA forgiveness during 2022.

Average interest bearing liabilities increased \$4.6 billion to \$30.2 billion for the year ended December 31, 2022 as compared to 2021 mainly due to \$2.5 billion and \$727.2 million of interest bearing deposits assumed from Bank Leumi USA and Westchester, respectively, and organic commercial and retail growth in average non-maturity interest bearing deposits. Average short-term borrowings increased \$132.4 million and long-term borrowings decreased \$393.2 million in 2022 as compared to 2021. See additional information under "Deposits and Other Borrowings" in the Executive Summary section above.

The net interest margin on a tax equivalent basis was 3.45 percent for the year ended December 31, 2022 and increased 28 basis points as compared to 2021. The yield on average interest earning assets increased 62 basis points mainly attributable to higher yields on average loans and investments. The yield on average loans increased 53 basis points to 4.36 percent for 2022 as compared to 3.83 percent in 2021 largely due to new loan originations at higher market interest rates and repricing within our adjustable rate loan portfolio. The yields on average taxable and non-taxable investments also increased 60 basis points and 68 basis points, respectively, as compared to 2021 largely due to investment maturities and prepayments redeployed into new higher yielding securities, as well as lower premium amortization expense caused by a decline in prepayments on mortgage-backed securities during the second half of 2022. The overall cost of interest bearing liabilities increased 57 basis points to 1.06 percent for 2022 as compared to the prior year primarily due to higher market driven pricing of non-maturity deposits combined with greater utilization of brokered and retail CDs and short-term borrowings in our loan funding mix during 2022.

Fourth Quarter 2022. Net interest income on a tax equivalent basis totaling \$467.2 million for the fourth quarter 2022 increased \$11.9 million and \$151.2 million as compared to the third quarter 2022 and fourth quarter 2021, respectively. Interest income on a tax equivalent basis increased \$109.9 million to \$648.0 million for the fourth quarter 2022 as compared to the third quarter 2022. The increase was mostly due to higher average loan balances driven by our organic loan growth and increased yields on both new originations and adjustable rate loans in our portfolio. Interest expense of \$180.7 million for the fourth quarter 2022 increased \$98.0 million as compared to the third quarter 2022 largely due to higher interest rates on both non-maturity and new time deposits, as well as a \$2.4 billion increase in average time deposits.

Net interest margin on a tax equivalent basis of 3.57 percent for the fourth quarter 2022 decreased 3 basis points as compared to 3.60 percent for the third quarter 2022, and increased 34 basis points from 3.23 percent for the fourth quarter 2021. The yield on average interest earning assets increased by 69 basis points on a linked quarter basis mostly due to the aforementioned higher yields on new and adjustable rate loans in the fourth quarter 2022 as compared to third quarter 2022. The yield on average loans increased to 5.20 percent for the fourth quarter 2022 from 4.48 percent for the third quarter 2022 largely due to the higher level of market interest rates. The overall cost of average interest-bearing liabilities increased by 109 basis points to 2.15 percent for the fourth quarter 2022 as compared to the linked third quarter 2022 primarily due to higher interest rates on both non-maturity and new time deposits. Our cost of total average deposits was 1.36 percent for the fourth quarter 2022 as compared to 0.59 percent for the third quarter 2022. The increased cost of funds was mainly due to higher interest rates on most of our interest bearing deposit products combined with greater utilization of brokered and retail CDs in our funding mix during the fourth quarter 2022.

Based upon our estimates at December 31, 2022, we anticipated net interest income growth of approximately 16 to 18 percent for the full year of 2023 as compared to 2022. While our 2023 outlook for our net interest income is positive, we cannot provide any assurances with respect to the future trajectory of market interest rates or that our net interest margin or income will remain at the levels reported for the fourth quarter 2022.

The following table reflects the components of net interest income for each of the three years ended December 31, 2022, 2021 and 2020:

**ANALYSIS OF AVERAGE ASSETS, LIABILITIES AND SHAREHOLDERS' EQUITY AND
NET INTEREST INCOME ON A TAX EQUIVALENT BASIS**

	2022			2021			2020		
	Average Balance	Interest	Average Rate	Average Balance	Interest	Average Rate	Average Balance	Interest	Average Rate
(\$ in thousands)									
Assets									
Interest earning assets:									
Loans ⁽¹⁾⁽²⁾	\$ 41,930,353	\$ 1,828,576	4.36 %	\$ 32,816,985	\$ 1,257,489	3.83 %	\$ 31,785,859	\$ 1,284,807	4.04 %
Taxable investments ⁽³⁾	4,628,353	117,184	2.53	3,285,543	63,383	1.93	3,446,670	81,893	2.38
Tax-exempt investments ⁽¹⁾⁽³⁾	586,956	22,687	3.87	464,833	14,830	3.19	549,204	18,434	3.36
Interest bearing deposits with banks	921,719	13,064	1.42	1,660,454	1,738	0.10	1,229,200	2,556	0.21
Total interest earning assets	48,067,381	1,981,511	4.12	38,227,815	1,337,440	3.50	37,010,933	1,387,690	3.75
Allowance for loan losses	(442,068)			(349,877)			(295,131)		
Cash and due from banks	386,399			279,578			309,539		
Other assets	4,254,389			3,285,731			3,495,464		
Unrealized gains (losses) on securities available for sale, net	(83,791)			32,435			36,521		
Total assets	\$ 52,182,310			\$ 41,475,682			\$ 40,557,326		
Liabilities and Shareholders' Equity									
Interest bearing liabilities:									
Savings, NOW and money market deposits	\$ 22,652,502	\$ 186,709	0.82 %	\$ 18,223,279	\$ 42,879	0.24 %	\$ 14,280,137	\$ 76,169	0.53 %
Time deposits	5,009,302	69,691	1.39	4,574,337	25,094	0.55	8,125,869	106,067	1.31
Total interest bearing deposits	27,661,804	256,400	0.93	22,797,616	67,973	0.30	22,406,006	182,236	0.81
Short-term borrowings	1,024,352	17,453	1.70	891,908	5,374	0.60	1,621,581	11,372	0.70
Long-term borrowings	1,504,111	47,190	3.14	1,897,343	50,978	2.69	2,850,213	71,207	2.50
Total interest bearing liabilities	30,190,267	321,043	1.06	25,586,867	124,325	0.49	26,877,800	264,815	0.99
Non-interest bearing deposits	14,789,661			10,441,816			8,284,376		
Other liabilities	1,217,146			699,254			895,083		
Shareholders' equity	5,985,236			4,747,745			4,500,067		
Total liabilities and shareholders' equity	\$ 52,182,310			\$ 41,475,682			\$ 40,557,326		
Net interest income/interest rate spread ⁽⁵⁾		1,660,468	3.06 %		1,213,115	3.01 %		1,122,875	2.76 %
Tax equivalent adjustment		(4,828)			(3,214)			(3,971)	
Net interest income, as reported		\$ 1,655,640			\$ 1,209,901			\$ 1,118,904	
Net interest margin ⁽⁶⁾			3.44 %			3.16 %			3.02 %
Tax equivalent effect			0.01			0.01			0.01
Net interest margin on a fully tax equivalent basis ⁽⁶⁾			3.45 %			3.17 %			3.03 %

(1) Interest income is presented on a tax equivalent basis using a 21 percent federal tax rate.

(2) Loans are stated net of unearned income and include non-accrual loans.

(3) The yield for securities that are classified as available for sale is based on the average historical amortized cost.

(4) Includes junior subordinated debentures issued to capital trusts which are presented separately on the consolidated statements of condition.

(5) Interest rate spread represents the difference between the average yield on interest earning assets and the average cost of interest bearing liabilities and is presented on a fully tax equivalent basis.

(6) Net interest income as a percentage of total average interest earning assets.

The following table demonstrates the relative impact on net interest income of changes in the volume of interest earning assets and interest bearing liabilities and changes in rates earned and paid by Valley on such assets and liabilities. Variances resulting from a combination of changes in volume and rates are allocated to the categories in proportion to the absolute dollar amounts of the change in each category.

CHANGE IN NET INTEREST INCOME ON A TAX EQUIVALENT BASIS

	2022 Compared to 2021			2021 Compared to 2020		
	Change Due to Volume	Change Due to Rate	Total Change	Change Due to Volume	Change Due to Rate	Total Change
(in thousands)						
Interest income:						
Loans*	\$ 381,416	\$ 189,671	\$ 571,087	\$ 40,846	\$ (68,164)	\$ (27,318)
Taxable investments	30,492	23,309	53,801	(3,685)	(14,825)	(18,510)
Tax-exempt investments*	4,353	3,504	7,857	(2,726)	(878)	(3,604)
Federal funds sold and other interest bearing deposits	(1,105)	12,431	11,326	712	(1,530)	(818)
Total increase (decrease) in interest income	415,156	228,915	644,071	35,147	(85,397)	(50,250)
Interest expense:						
Savings, NOW and money market deposits	12,731	131,099	143,830	17,145	(50,435)	(33,290)
Time deposits	2,600	41,997	44,597	(34,806)	(46,167)	(80,973)
Short-term borrowings	908	11,171	12,079	(4,568)	(1,430)	(5,998)
Long-term borrowings and junior subordinated debentures	(11,545)	7,757	(3,788)	(25,271)	5,042	(20,229)
Total increase (decrease) in interest expense	4,694	192,024	196,718	(47,500)	(92,990)	(140,490)
Increase in net interest income	\$ 410,462	\$ 36,891	\$ 447,353	\$ 82,647	\$ 7,593	\$ 90,240

* Interest income is presented on a tax equivalent basis using a 21 percent federal tax rate.

Non-Interest Income

Non-interest income represented 9.5 percent and 10.4 percent of total interest income plus non-interest income for 2022 and 2021, respectively. For the year ended December 31, 2022, non-interest income increased \$51.8 million as compared to the year ended December 31, 2021 largely due to increases resulting from the acquisition of Bank Leumi USA and higher swap fee income derived from new commercial loan transactions. See further details below.

The following table presents the components of non-interest income for the years ended December 31, 2022, 2021, and 2020:

	2022	2021	2020
	(in thousands)		
Wealth management and trust fees	\$ 34,709	\$ 14,910	\$ 12,415
Insurance commissions	11,975	7,810	7,398
Capital markets	52,362	27,377	58,962
Service charges on deposit accounts	36,930	21,424	18,257
(Losses) gains on securities transactions, net	(1,230)	1,758	524
Fees from loan servicing	11,273	11,651	10,352
Gains on sales of loans, net	6,418	26,669	42,251
Bank owned life insurance	8,040	8,817	10,083
Other	46,316	34,597	22,790
Total non-interest income	\$ 206,793	\$ 155,013	\$ 183,032

Wealth management and trust fees income increased by \$19.8 million for the year ended December 31, 2022 as compared to 2021 mostly due to brokerage fees resulting from the acquisition of Bank Leumi USA and its wholly owned broker dealer subsidiary now legally named Valley Financial Management, Inc. The brokerage fees totaled \$8.6 million for the year ended

December 31, 2022. Trust and investment services income increased \$11.2 million for the year ended December 31, 2022 as compared to 2021 and was mainly driven by additional revenues from our advisory firm, Dudley Ventures, LLC, specializing in the investment and management of tax credit investments, which we acquired in October 2021 (See Note 2 to the consolidated financial statements).

Insurance commissions increased \$4.2 million for the year ended December 31, 2022 as compared to the same period in 2021 mostly due to stronger business volumes generated by the Bank's insurance agency subsidiary.

Capital market income increased \$25.0 million for the year ended December 31, 2022 as compared to 2021. The increase was largely driven by higher fee income from transactions executed for commercial customers related interest rate swaps and, to a lesser extent, foreign exchange fees. Swap fee income totaled \$43.1 million and \$26.9 million for the years ended December 31, 2022 and 2021, respectively. While we believe our commercial loan swap based product will remain attractive to borrowers in the current interest rate environment, we can provide no assurance that our swap fees will remain at the level reported for the year ended December 31, 2022. Foreign exchange fees totaled \$5.7 million for the year ended December 31, 2022 and largely related to new relationships acquired from Bank Leumi USA. Foreign exchange fees were not material prior to 2022.

Service charges on deposit accounts increased \$15.5 million for the year ended December 31, 2022 as compared to 2021 largely due to revenues related to deposit accounts acquired from Bank Leumi USA.

Net losses and gains on securities transactions for the years ended December 31, 2022 and 2021 were mostly due to net trading losses and gains related to our municipal bond trading platform launched in the first quarter 2021.

The net gains on sales of loans for each period are comprised of both gains on sales of residential mortgages and the net change in the mark to market gains and losses on our loans held for sale carried at fair value at each period end. Net gains on sales of loans decreased \$20.3 million for the year ended December 31, 2022 as compared to 2021. The decrease was mostly due to lower loan sale volumes as we sold approximately \$385.5 million of residential mortgage loans in 2022 compared to \$1.2 billion of such loans sold in 2021. The mark to market change on loans held for sale at fair value resulted in net losses totaling \$3.0 million and \$11.8 million for the year ended December 31, 2022 and 2021, respectively. Our ability to generate net gains on sales of loans could continue to be challenged by a number of factors, including the higher level of market interest rates, lower customer demand for conforming loan products and our decision to originate certain residential mortgage loans for investment in our loan portfolio rather than sale. See further discussions of our residential mortgage loan origination activity under the "Loan Portfolio" section of this MD&A below and Note 3 to the consolidated financial statements for details about the fair value methodology.

Other non-interest income increased \$11.7 million for the year ended December 31, 2022 as compared to 2021 due, in part to \$5.6 million increase in standby letter of credit and unfunded commitments fees as well as incremental increases in other operating non-interest income during 2022 as compared to 2021.

Non-Interest Expense

Non-interest expense increased \$333.4 million to \$1.0 billion for the year ended December 31, 2022 as compared to 2021 mainly driven by organic and acquired growth in our operations, ongoing technology transformation efforts and merger related expenses. See further details below.

The following table presents the components of non-interest expense for the years ended December 31, 2022, 2021 and 2020:

	2022	2021	2020
		(in thousands)	
Salary and employee benefits expense	\$ 526,737	\$ 375,865	\$ 333,221
Net occupancy expense	94,352	79,355	81,538
Technology, furniture and equipment expense	161,752	89,221	76,889
FDIC insurance assessment	22,836	14,183	18,949
Amortization of other intangible assets	37,825	21,827	24,645
Professional and legal fees	82,618	38,432	32,348
Loss on extinguishment of debt	—	8,406	12,036
Amortization of tax credit investments	12,407	10,910	13,335
Other	86,422	53,343	53,187
Total non-interest expense	\$ 1,024,949	\$ 691,542	\$ 646,148

Salary and employee benefits expense increased \$150.9 million for the year ended December 31, 2022 as compared to 2021. The increase in 2022 was largely due to strategic expansion of our headcount to enhance lending and operations (including additions to staff related to the Bank Leumi USA and Westchester acquisitions), increases in our branch compensation to preserve staffing and service levels, and to keep pace with the increases in wage demand across the industry. In addition, salary and employee benefits expense included approximately \$28.1 million of merger related expenses for the year ended December 31, 2022. The merger expenses, primarily consisted of change in control and severance payments, related to Bank Leumi USA during the second quarter 2022. We had \$6.5 million in 2021 mainly related to Westchester acquisition.

Net occupancy expenses increased \$15.0 million for the year ended December 31, 2022 as compared to 2021 mainly due to increases in lease and depreciation expense totaling \$7.4 million and \$2.0 million, respectively, mostly caused by additional branches and office facilities acquired from Bank Leumi USA and Westchester. In addition, repair and maintenance costs increased \$2.8 million during the year ended December 31, 2022 as compared to 2021. The merger related expenses within this category totaled \$1.5 million for the year ended December 31, 2022.

Technology, furniture and equipment expense increased \$72.5 million for the year ended December 31, 2022 as compared to 2021. The increase is largely driven by higher data processing costs related to the acquisitions of Bank Leumi USA and Westchester and additional investments in technology and equipment, and higher depreciation expense. Within this expense category, merger related expense totaled \$24.2 million for the year ended December 31, 2022.

FDIC insurance assessment expense increased \$8.7 million for the year ended December 31, 2022 as compared to 2021 mainly due to the bank acquisitions, as well as the organic growth of our balance sheet.

Amortization of other intangibles increased \$16.0 million for the year ended December 31, 2022 as compared to 2021 mostly due to higher amortization expense of core deposits and intangible assets, partially offset by a decrease in amortization of loan servicing rights. Amortization expense of core deposits and intangible assets increased \$15.3 million and \$5.3 million, respectively, during 2022 as compared to 2021 and was mainly due to the intangible assets resulting from the Bank Leumi USA acquisition. See Note 8 to the consolidated financial statements for additional information.

Professional and legal fees increased \$44.2 million for the year ended December 31, 2022 as compared to 2021. The increases were primarily due to higher consulting expense mainly related to technology transformation and new product initiatives and increased managed services. Within this expense category, merger related costs totaled \$11.5 million and \$1.7 million for the year ended December 31, 2022 and 2021, respectively.

Loss on extinguishment of debt totaling \$8.4 million for the year ended December 31, 2021 related to the prepayment of approximately \$248 million of long-term FHLB advances during the second quarter 2021.

Other non-interest expense increased \$33.1 million for the year ended December 31, 2022 as compared to 2021. These increases within this expense category mostly related to incrementally higher operating expenses due to the expansion of our operations, including acquisitions of Bank Leumi USA and Westchester. In addition, the year ended December 31, 2022 included a \$2.0 million contribution to the Valley Bank Charitable Fund.

Income Taxes

Income tax expense was \$211.8 million for the year ended December 31, 2022, reflecting an effective tax rate of 27.1 percent, as compared to \$166.9 million for the year ended December 31, 2021, reflecting an effective tax rate of 26.0 percent. The increase in effective tax rate during 2022 as compared to 2021 was mainly attributable to higher disallowed permanent adjustments. The CARES Act did not have a material impact on our reported income tax expense for the years ended December 31, 2022 and 2021.

Our uncertain tax liability positions totaling \$30.4 million remains unchanged at December 31, 2022 and relate to renewable energy tax credits and other tax benefits previously recognized from our investments in mobile generators sold and leased back by DC Solar and its affiliates.

U.S. GAAP requires that any change in judgment or change in measurement of a tax position taken in a prior annual period be recognized as a discrete event in the quarter in which it occurs, rather than being recognized as a change in effective tax rate for the current year. Our adherence to these tax guidelines may result in volatile effective income tax rates in future quarterly and annual periods. Factors that could impact management's judgment include changes in income, tax laws and regulations, and tax planning strategies. Based on the current information available, we anticipate that our effective tax rate will range from 27 percent to 29 percent for 2023.

See additional information regarding our income taxes under our "Critical Accounting Policies and Estimates" section above, as well as Note 13 to the consolidated financial statements.

Operating Segments

Prior to the second quarter 2022, Valley operated as four reportable segments: Consumer Lending, Commercial Lending, Investment Management, and Corporate and Other Adjustments. Valley re-evaluated its segment reporting during the second quarter 2022 to consider the Bank Leumi USA acquisition on April 1, 2022 along with other factors, including changes in the internal structure of operations, discrete financial information reviewed by key decision-makers, balance sheet management strategies and personnel. As a result, Valley determined it operated reportable segments consisting of Consumer Banking, Commercial Banking and Treasury and Corporate Other at December 31, 2022. Treasury and Corporate Other was reorganized to consolidate Treasury and other corporate-wide functions, including the Treasury managed investment securities portfolios and overnight interest earning cash balances formerly reported under Investment Management. The discrete financial information related to the activities previously reported in the Investment Management segment is no longer provided to Valley's CEO, who is the chief operating decision maker. Each operating segment is reviewed routinely for its asset growth, contribution to income before income taxes and return on average interest earning assets and impairment (if events or circumstances indicate a possible inability to realize the carrying amount). Valley regularly assesses its strategic plans, operations, and reporting structures to identify its reportable segments. There were no additional changes to Valley's reportable segments at December 31, 2022.

The accounting for each segment includes internal accounting policies designed to measure consistent and reasonable financial reporting and may result in income and expense measurements that differ from amounts under U.S. GAAP. Furthermore, changes in management structure or allocation methodologies and procedures may result in changes in reported segment financial data. The 2021 period balances reflect reclassifications to conform the presentation of the current operating segment structure. Valley's consolidated results were not impacted by the changes discussed above and remain unchanged for all periods presented.

The following tables present the financial data for Valley's operating segment for the year ended December 31, 2022 and 2021:

	December 31, 2022			
	Consumer Banking	Commercial Banking	Treasury and Corporate Other	Total
	(\$ in thousands)			
Average interest earning assets	\$ 8,133,665	\$ 33,796,688	\$ 6,137,028	\$ 48,067,381
Income before income taxes	64,753	787,047	(71,133)	780,667
Annualized return on average interest earning assets (before tax)	0.80 %	2.33 %	(1.16)%	1.62 %

December 31, 2021				
	Consumer Banking	Commercial Banking	Treasury and Corporate Other	Total
	(\$ in thousands)			
Average interest earning assets	\$ 7,262,808	\$ 25,554,177	\$ 5,410,830	\$ 38,227,815
Income (loss) before income taxes	138,192	552,394	(49,847)	640,739
Annualized return on average interest earning assets (before tax)	1.90 %	2.16 %	(0.92)%	1.68 %

Consumer Banking. The Consumer Banking segment represented 18.5 percent of the total loan portfolio at December 31, 2022, and was mainly comprised of residential mortgage loans and automobile loans, and to a lesser extent, home equity loans, secured personal lines of credit and other consumer loans (including credit card loans). The duration of the residential mortgage loan portfolio (which represented 11.4 percent of our total loan portfolio at December 31, 2022) is subject to movements in the market level of interest rates and forecasted prepayment speeds. The weighted average life of the automobile loans portfolio (representing 3.7 percent of total loans at December 31, 2022) is relatively unaffected by movements in the market level of interest rates. However, the average life may be impacted by new loans as a result of the availability of credit within the automobile marketplace and consumer demand for purchasing new or used automobiles. The consumer banking segment also includes the Wealth Management and Insurance Services Division, comprised of trust, asset management, insurance and tax credit advisory services.

Consumer Banking's average interest earning assets increased \$870.9 million to \$8.1 billion for the year ended December 31, 2022 as compared to 2021. The increase was largely due to new residential mortgage loan volumes originated for investment rather than sale over the last 12-month period, as well as growth in automobile loans and secured personal lines of credit.

Income before income taxes generated by the Consumer Banking segment decreased \$64.8 million to \$73.4 million for the year ended December 31, 2022 as compared to \$138.2 million for the year ended December 31, 2021 largely due to a \$39.8 million increase in the internal transfer expense, higher provision for loan losses and a decline in non-interest income. The provision for loan losses increased \$27.7 million for the year ended December 31, 2022 from \$6.8 million credit (negative) provision for the same period of 2021. The increase in provision was mainly due to higher reserves resulting from residential loan growth, as well as a more pessimistic economic forecast component within our CECL model as compared to one year ago. See further details in the "Allowance for Credit Losses" section of this MD&A. Non-interest income decreased \$15.6 million mostly due to a decline in net gains on sales of residential mortgage loans for the year ended December 31, 2022 as compared to 2021 mainly caused by a steep decline in customer refinance activity and greater use of non-conforming loan products in a rising interest rate environment. Net interest income increased \$3.9 million due to additional income generated from higher average loan balances and yields on new loan originations.

Net interest margin on the Consumer Banking portfolio decreased 28 basis points to 2.75 percent for the year ended December 31, 2022 as compared to 2021 mainly due to a 34 basis point increase in the costs associated with our funding sources, partially offset by a 6 basis point increase in the yield on average loans. The increase in our funding costs was mainly due to higher interest rates on most of our interest bearing commercial and retail deposit products, increased utilization of brokered deposits, some migration of non-interest bearing deposits to interest bearing products, and higher cost short-term borrowings due to the rising interest rate environment in 2022. The 6 basis point increase in loan yield was largely due to higher yielding new loan volumes and adjustable rate loans in our portfolio. See the "Executive Summary" and the "Net Interest Income" sections above for more details on our loans, deposits and other borrowings.

The return on average interest earning assets before income taxes for the consumer banking segment was 0.80 percent for 2022 compared to 1.90 percent for 2021.

Commercial Banking. Commercial Banking is comprised of floating rate and adjustable rate commercial and industrial loans and construction loans, as well as fixed rate owner occupied and commercial real estate loans. Due to the portfolio's interest rate characteristics, Commercial Banking is Valley's business segment that is most sensitive to movements in market interest rates. Commercial and industrial loans totaled approximately \$8.8 billion and represented 18.8 percent of the total loan portfolio at December 31, 2022. Commercial real estate loans and construction loans totaled \$29.4 billion and represented 62.7 percent of the total loan portfolio at December 31, 2022.

Average interest earning assets in Commercial Banking increased \$8.2 billion to \$33.8 billion for the year ended December 31, 2022 as compared to the same period in 2021. This increase was primarily due to the strong organic loan growth

over the 12-month period ended December 31, 2022, as well as commercial loans acquired from Bank Leumi USA and Westchester.

For the year ended December 31, 2022, income before income taxes for Commercial Banking increased \$234.7 million to \$787.0 million as compared 2021 mainly driven by increases in net interest income and non-interest income, partially offset by higher internal transfer expense. Net interest income increased \$401.8 million to \$1.4 billion for the year ended December 31, 2022 as compared to 2021 mainly due to higher average commercial loan balances and new and adjustable loan yields during 2022. Non-interest income increased \$44.1 million for the year ended December 31, 2022 as compared to 2021 mainly due to higher service charges on commercial deposit accounts, a \$16.2 million increase in fee income related to derivative interest rate swaps executed with commercial loan customers and a \$5.6 million increase in foreign exchange fees. Internal transfer expense increased \$205.2 million to \$491.5 million for the year ended December 31, 2022 as compared to the same period in 2021 largely due to the significant acquired and organic expansion of our operations over the last 12-month period. The provision for credit losses decreased \$4.2 million to \$35.5 million during the year ended December 31, 2022 as compared to \$39.7 million for 2021. See the "Allowance for Credit Losses for Loans" section below for further details.

The net interest margin for this segment increased 27 basis points to 4 percent for the year ended December 31, 2022 as compared to the same period in 2021 due to a 61 basis point increase in the yield on average loans, partially offset by a 34 basis point increase in the cost of our funding sources.

The return on average interest earning assets before income taxes for the consumer banking segment was 2.33 percent for 2022 compared to 2.16 percent for 2021.

Treasury and Corporate Other. Treasury and Corporate Other largely consists of the Treasury managed held to maturity and available for sale debt securities portfolios mainly utilized in the liquidity management needs of our lending segments and income and expense items resulting from support functions not directly attributable to a specific segment. Interest income is generated through investments in various types of securities (mainly comprised of fixed rate securities) and interest-bearing deposits with other banks (primarily the Federal Reserve Bank of New York). Expenses related to the branch network, all other components of retail banking, along with the back office departments of the Bank are allocated from Treasury and Corporate Other to the Consumer and Commercial Banking segments. Interest expense and internal transfer expense (for general corporate expenses) are allocated to each business segment utilizing a transfer pricing methodology, which involves the allocation of operating and funding costs based on each segment's respective mix of average earning assets and/or liabilities outstanding for the period. Other items disclosed in this segment include net gains and losses on available for sale and held to maturity securities transactions, interest expense related to subordinated notes, amortization (and impairment) of tax credit investments, as well as other non-core items, including merger expenses.

Treasury and Corporate Other's average interest earning assets increased \$726.2 million to \$6.1 billion for the year ended December 31, 2022 as compared to 2021. Within the category, a \$1.5 billion increase in investment securities was partially offset by a \$738.7 million decrease in average interest bearing deposits with banks. The increase in average investment securities was mainly due to \$1.3 billion of investment securities acquired from Bank Leumi USA. The lower level of excess liquidity carried within interest bearing deposits with banks during 2022 was mainly due to the strong organic loan growth over the last 12-month period and a reduction in the surge of customer deposits experienced in 2021.

For the year ended December 31, 2022, loss before income taxes in this segment totaled \$71.1 million for the year ended December 31, 2022 compared to \$49.8 million for 2021. The \$21.3 million increase in pre-tax loss was mainly due to higher non-interest expense, partially offset by increases in internal transfer income and net interest income. Non-interest expense increased \$328.8 million to \$832.9 million for the year ended December 31, 2022 as compared to the same period in 2021, partially due to a \$62.3 million increase in merger related expenses, as well as other additional expenses related to our expanded banking operations and organic business growth including higher salary and employee benefits expense, net occupancy, professional and legal fees and other. However, the comparative 2021 period also included an \$8.4 million pre-tax loss on extinguishment of debt. See further details in the "Non-Interest Expense" section in this MD&A. Internal transfer income increased \$245.0 million to \$612.7 million for the year ended December 31, 2022 as compared to the same period in 2021 due to the higher allocation of non-interest expense over the same period.

Treasury and Corporate Other's net interest margin increased 65 basis points to 1.81 percent for the year ended December 31, 2022 as compared to the same period in 2021 due to a 99 basis point increase in the yield on average investments, partially offset by a 34 basis point increase in cost of our funding sources. The increase in the yield on average investments as compared to the same period in 2021 was largely driven by new higher yielding investments and lower premium amortization expense caused, in part, by slower principal repayments in the rising interest rate environment of 2022.

ASSET/LIABILITY MANAGEMENT

Interest Rate Sensitivity

Our success is largely dependent upon our ability to manage interest rate risk. Interest rate risk can be defined as the exposure of our interest rate sensitive assets and liabilities to the movement in interest rates. Our Asset/Liability Management Committee is responsible for managing such risks and establishing policies that monitor and coordinate our sources and uses of funds. Asset/Liability management is a continuous process due to the constant change in interest rate risk factors. In assessing the appropriate interest rate risk levels for us, management weighs the potential benefit of each risk management activity within the desired parameters of liquidity, capital levels and management's tolerance for exposure to income fluctuations. Many of the actions undertaken by management utilize fair value analysis and attempt to achieve consistent accounting and economic benefits for financial assets and their related funding sources. We have predominately focused on managing our interest rate risk by attempting to match the inherent risk and cash flows of financial assets and liabilities. Specifically, management employs multiple risk management activities such as optimizing the level of new residential mortgage originations retained in our mortgage portfolio through increasing or decreasing loan sales in the secondary market, product pricing levels, the desired maturity levels for new originations, the composition levels of both our interest earning assets and interest bearing liabilities, as well as several other risk management activities.

We use a simulation model to analyze net interest income sensitivity to movements in interest rates. The simulation model projects net interest income based on various interest rate scenarios over a 12-month and 24-month period. The model is based on the actual maturity and re-pricing characteristics of rate sensitive assets and liabilities. The model incorporates certain assumptions which management believes to be reasonable regarding the impact of changing interest rates and the prepayment assumptions of certain assets and liabilities as of December 31, 2022. The model assumes immediate changes in interest rates without any proactive change in the composition or size of the balance sheet, or other future actions that management might undertake to mitigate this risk. In the model, the forecasted shape of the yield curve remains static as of December 31, 2022. The impact of interest rate derivatives, such as interest rate swaps, is also included in the model.

Our simulation model is based on market interest rates and prepayment speeds prevalent in the market as of December 31, 2022. Although the size of Valley's balance sheet is forecasted to remain static as of December 31, 2022, in our model, the composition is adjusted to reflect new interest earning assets and funding originations coupled with rate spreads utilizing our actual originations during 2022. The model utilizes an immediate parallel shift in the market interest rates at December 31, 2022.

The assumptions used in the net interest income simulation are inherently uncertain. Actual results may differ significantly from those presented in the table below, due to the frequency and timing of changes in interest rates, and changes in spreads between maturity and re-pricing categories. Overall, our net interest income is affected by changes in interest rates and cash flows from our loan and investment portfolios. We actively manage these cash flows in conjunction with our liability mix, duration and interest rates to optimize the net interest income, while structuring the balance sheet in response to actual or potential changes in interest rates. Additionally, our net interest income is impacted by the level of competition within our marketplace. Competition can negatively impact the level of interest rates attainable on loans and increase the cost of deposits, which may result in downward pressure on our net interest margin in future periods. Other factors, including, but not limited to, the slope of the yield curve and projected cash flows will impact our net interest income results and may increase or decrease the level of asset sensitivity of our balance sheet.

Convexity is a measure of how the duration of a financial instrument changes as market interest rates change. Potential movements in the convexity of bonds held in our investment portfolio, as well as the duration of the loan portfolio may have a positive or negative impact on our net interest income in varying interest rate environments. As a result, the increase or decrease in forecasted net interest income may not have a linear relationship to the results reflected in the table below. Management cannot provide any assurance about the actual effect of changes in interest rates on our net interest income.

The following table reflects management's expectations of the change in our net interest income over the next 12-month period considering the aforementioned assumptions. While an instantaneous and severe shift in interest rates was used in this simulation model, we believe that any actual shift in interest rates would likely be more gradual and would therefore have a more modest impact than shown in the table below.

Changes in Interest Rates (in basis points)	Estimated Change in Future Net Interest Income	
	Dollar Change	Percentage Change
	(\$ in thousands)	
+300	\$ 136,745	7.17 %
+200	95,056	4.98
+100	49,793	2.61
- 100	(42,380)	(2.22)
- 200	(92,003)	(4.82)
- 300	(124,661)	(6.54)

As noted in the table above, a 100 basis point immediate increase in interest rates combined with a static balance sheet where the size, mix, and proportions of assets and liabilities remain unchanged is projected to increase net interest income over the next 12-month period by 2.61 percent. Management believes the interest rate sensitivity remains within an expected tolerance range at December 31, 2022. However, the level of net interest income sensitivity may increase or decrease in the future as a result of several factors, including potential changes in our balance sheet strategies, the slope of the yield curve and projected cash flows.

The following table sets forth the amounts of interest earning assets and interest bearing liabilities that were outstanding at December 31, 2022 and their associated fair values. The expected cash flows are categorized based on each financial instrument's anticipated maturity or interest rate reset date in each of the future periods presented.

INTEREST RATE SENSITIVITY ANALYSIS

	Rate	2023	2024	2025	2026	2027	Thereafter	Total Balance	Fair Value
(\$ in thousands)									
Interest sensitive assets:									
Interest bearing deposits with banks	4.40 %	\$ 503,622	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 503,622	\$ 503,622
Equity securities	2.79	48,731	—	—	—	—	—	48,731	48,731
Trading debt securities	1.89	13,438	—	—	—	—	—	13,438	13,438
Available for sale debt securities	2.42	98,586	73,547	273,664	56,640	197,796	561,164	1,261,397	1,261,397
Held to maturity debt securities	3.01	339,646	279,212	303,435	252,929	187,722	2,466,040	3,828,984	3,329,470
Loans held for sale, at fair value	6.12	18,118	—	—	—	—	—	18,118	18,118
Loans	5.65	15,778,635	7,909,854	5,101,410	3,980,533	2,899,166	11,247,602	46,917,200	44,910,049
Total interest sensitive assets	5.37 %	\$ 16,800,776	\$ 8,262,613	\$ 5,678,509	\$ 4,290,102	\$ 3,284,684	\$ 14,274,806	\$ 52,591,490	\$ 50,084,825
Interest sensitive liabilities:									
Deposits:									
Savings, NOW and money market	1.84 %	\$ 23,616,812	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 23,616,812	\$ 23,616,812
Time	3.14	7,187,385	2,168,998	58,251	56,456	52,564	32,803	9,556,457	9,443,253
Short-term borrowings	1.71	138,729	—	—	—	—	—	138,729	138,729
Long-term borrowings	2.34	475,000	538,000	—	—	—	530,058	1,543,058	1,395,991
Junior subordinated debentures	2.68	—	—	—	—	—	56,760	56,760	50,923
Total interest sensitive liabilities	2.22 %	\$ 31,417,926	\$ 2,706,998	\$ 58,251	\$ 56,456	\$ 52,564	\$ 619,621	\$ 34,911,816	\$ 34,645,708
Interest sensitivity gap		\$ (14,617,150)	\$ 5,555,615	\$ 5,620,258	\$ 4,233,646	\$ 3,232,120	\$ 13,655,185	\$ 17,679,674	\$ 15,439,117
Ratio of interest sensitive assets to interest sensitive liabilities		0.53:1	3.05:1	97.48:1	75.99:1	62.49:1	23.04:1	1.51:1	1.45:1

The above table provides an approximation of the projected re-pricing of assets and liabilities at December 31, 2022 based on the contractual maturities, adjusted for anticipated prepayments of principal (including anticipated call dates on long-

term borrowings and junior subordinated debentures), and scheduled rate adjustments. The prepayment experience reflected herein is based on historical experience combined with market consensus expectations derived from independent external sources. The actual repayments of these instruments could vary substantially if future prepayments differ from historical experience or current market expectations. While all non-maturity deposit liabilities are reflected in the 2023 column in the table above, management controls the re-pricing of the vast majority of the interest-bearing instruments within these liabilities.

During 2022, we executed \$600 million of cash flow interest rate swaps. These derivatives are designed to protect us from the impact of potential downward movements in interest rates on certain variable rate loans. The interest rate sensitivity table reflects the sensitivity at current interest rates. As a result, the notional amount of our derivatives is not included in the table. We use various assumptions to estimate fair values. See Note 3 to the consolidated financial statements for further discussion of fair value measurements.

The total gap re-pricing within one year as of December 31, 2022 was a negative \$14.6 billion, representing a ratio of interest sensitive assets to interest sensitive liabilities of 0.53:1. The total gap re-pricing position, as reported in the table above, reflects the projected interest rate sensitivity of our principal cash flows based on market conditions as of December 31, 2022. As the market level of interest rates and associated prepayment speeds move, the total gap re-pricing position will change accordingly, but not likely in a linear relationship. Management does not view our one-year gap position as of December 31, 2022 as presenting an unusually high risk potential, although no assurances can be given that we are not at risk from interest rate increases or decreases.

Liquidity and Cash Requirements

Bank Liquidity. Liquidity measures the ability to satisfy current and future cash flow needs as they become due. A bank's liquidity reflects its ability to meet loan demand, to accommodate possible outflows in deposits and to take advantage of interest rate opportunities in the marketplace. Liquidity management is carefully performed and reported by our Treasury Department to two board committees. Among other actions, Treasury reviews historical funding requirements, our current liquidity position, sources and stability of funding, marketability of assets, options for attracting additional funds, and anticipated future funding needs, including the level of unfunded commitments. Our goal is to maintain sufficient liquidity to cover current and potential funding requirements.

The Bank has no required regulatory liquidity ratios to maintain; however, it adheres to an internal liquidity policy. The current policy requires that we may not have a ratio of loans to deposits in excess of 110 percent or reliance on wholesale funding greater than 25 percent of total funding. The Bank was in compliance with the foregoing policies at December 31, 2022.

At December 31, 2022, the Bank had various contractual obligations totaling \$7.9 billion and \$3.9 billion of maturing liabilities due in 12 months or less and greater than 1 year, respectively.

The following table summarizes maturities of contractual obligations of the Bank at December 31, 2022:

	One Year or Less	One to Three Years	Three to Five Years	Over Five Years	Total
	(in thousands)				
Time deposits	\$ 7,187,385	\$ 2,227,249	\$ 109,020	\$ 32,803	\$ 9,556,457
Short-term borrowings	138,729	—	—	—	138,729
Long-term borrowings	475,000	538,000	—	565,000	1,578,000
Junior subordinated debentures issued to capital trusts	—	—	—	60,827	60,827
Lease obligations	45,644	87,082	82,076	144,082	358,884
Capital expenditures	49,621	—	—	—	49,621
Other purchase obligations	34,740	11,792	283	628	47,443
Total	<u>\$ 7,931,119</u>	<u>\$ 2,864,123</u>	<u>\$ 191,379</u>	<u>\$ 803,340</u>	<u>\$ 11,789,961</u>

In the ordinary course of operations, the Bank enters into various financial obligations, including contractual obligations that may require future cash payments. As a financial services provider, we routinely enter into commitments to extend credit, including loan commitments, standby and commercial letters of credit. Such commitments are subject to the same credit policies and approval process accorded to loans made by the Bank. We enter into forward commitments for the future delivery of residential mortgage loans when interest rate lock commitments are entered into in order to economically hedge the effect of

future changes in interest rates on Bank's commitments to fund the loans, as well as on its portfolio of mortgage loans held for sale. Commitments to extend credit and standby letters of credit are subject to change since many of these commitments are expected to expire unused or only partially used based upon our historical experience, the total amounts of these commitments do not necessarily reflect future cash requirements. At December 31, 2022 our off-balance sheet commitments totaled \$13.2 billion, inclusive of commitments of \$7.0 billion due in 12 months or less. See Note 15 to the consolidated financial statements for further details.

Management believes the Bank has the ability to generate and obtain adequate amounts of cash to meet its short-term and long-term obligations as they come due by utilizing various cash resources described below.

On the asset side of the balance sheet, the Bank has numerous sources of liquid funds in the form of cash and due from banks, interest bearing deposits with banks (including the Federal Reserve Bank of New York), investment securities held to maturity that are maturing within 90 days or would otherwise qualify as maturities if sold (i.e., 85 percent of original cost basis has been repaid), investment securities classified as trading and available for sale, loans held for sale, and, from time to time, federal funds sold and receivables related to unsettled securities transactions. Liquid assets totaled approximately \$2.4 billion, representing 4.6 percent of earning assets, at December 31, 2022 and \$3.5 billion, representing 8.7 percent of earning assets, at December 31, 2021. Of the \$2.4 billion of liquid assets at December 31, 2022, approximately \$333.3 million of various investment securities were pledged to counterparties to support our earning asset funding strategies. We anticipate the receipt of approximately \$583.1 million in principal from securities in the total investment portfolio over the next 12-month period due to normally scheduled principal repayments and expected prepayments of certain securities, primarily residential mortgage-backed securities.

Additional liquidity is derived from scheduled loan payments of principal and interest, as well as prepayments received. Loan principal payments (including loans held for sale at December 31, 2022) are projected to be approximately \$15.8 billion over the next 12-month period. As a contingency plan for any liquidity constraints, liquidity could also be derived from the sale of conforming residential mortgages from our loan portfolio, or alleviated from the temporary curtailment of lending activities.

On the liability side of the balance sheet, we utilize multiple sources of funds to meet liquidity needs, including retail and commercial deposits, brokered and municipal deposits and short-term and long-term borrowings. Our core deposit base, which generally excludes fully insured brokered deposits and both retail and brokered certificates of deposit over \$250 thousand, represents the largest of these sources. Average core deposits totaled approximately \$38.1 billion and \$29.4 billion for the years ended December 31, 2022 and 2021, respectively, representing 79.2 percent and 78.3 percent of average earning assets at December 31, 2022 and 2021, respectively. The level of interest bearing deposits is affected by interest rates offered, which is often influenced by our need for funds and the need to match the maturities of assets and liabilities.

The following table lists, by maturity, all certificates of deposit of \$250 thousand and over at December 31, 2022:

	2022	
	(in thousands)	
Less than three months	\$	400,981
Three to six months		239,629
Six to twelve months		467,683
More than twelve months		736,011
Total	\$	<u>1,844,304</u>

Additional funding may be provided through deposit gathering networks and in the form of federal funds purchased obtained through our well established relationships with several correspondent banks. While these lending lines are uncommitted, management believes that we could borrow approximately \$1.9 billion for a short time from these banks on a collective basis. The Bank is also a member of the Federal Home Loan Bank of New York and has the ability to borrow from them in the form of FHLB advances secured by pledges of certain eligible collateral, including but not limited to U.S. government and agency mortgage-backed securities and a blanket assignment of qualifying first lien mortgage loans, consisting of both residential mortgage and commercial real estate loans. Additionally, Valley's collateral pledged to the FHLB may be used to obtain Municipal Letters of Credit (MULOC) to collateralize certain municipal deposits held by Valley. At December 31, 2022, Valley had \$2.6 billion of MULOCs outstanding for this purpose. Furthermore, we are able to obtain overnight borrowings from the Federal Reserve Bank of New York via the discount window as a contingency for additional liquidity. At December 31, 2022, our borrowing capacity under the Federal Reserve Bank's discount window was approximately \$2.1 billion.

We also have access to other short-term and long-term borrowing sources to support our asset base, such as repos (i.e., securities sold under agreements to repurchase). Short-term borrowings (consisting of FHLB advances, repos, and from time to time, federal funds purchased) decreased \$517.0 million to \$138.7 million at December 31, 2022 from December 31, 2021 largely due to the maturity of FHLB advances during 2022 and lower repo balances at December 31, 2022.

Corporation Liquidity. Valley's recurring cash requirements primarily consist of dividends to preferred and common shareholders and interest expense on subordinated notes and junior subordinated debentures issued to capital trusts. As part of our ongoing asset/liability management strategies, Valley could also use cash to repurchase shares of its outstanding common stock under its share repurchase program or redeem its callable junior subordinated debentures and subordinated notes. These cash needs are routinely satisfied by dividends collected from the Bank. Projected cash flows from the Bank are expected to be adequate to pay preferred and common dividends, if declared, and interest expense payable to subordinated note holders and capital trusts, given the current capital levels and current profitable operations of the bank subsidiary. In addition to dividends received from the Bank, Valley can satisfy its cash requirements by utilizing its own cash and potential new funds borrowed from outside sources or capital issuances. Valley also has the right to defer interest payments on the junior subordinated debentures, and therefore distributions on its trust preferred securities for consecutive quarterly periods of up to five years, but not beyond the stated maturity dates, and subject to other conditions.

Investment Securities Portfolio

As of December 31, 2022, our investment securities portfolio consisted of equity and debt securities, with the debt securities classified as either trading, available for sale or held to maturity. The equity securities consisted of two publicly traded mutual funds, CRA investments and several other equity investments we have made in companies that develop new financial technologies and in a partnership that invests in such companies. Our CRA and other equity investments are a mixture of both publicly traded and privately held entities. Our trading debt securities portfolio consists of investment grade municipal bonds and U.S. Treasury securities. The available for sale and held to maturity debt securities portfolios, which comprise of the majority securities we own include: U.S. Treasury securities, U.S. government agency securities, tax-exempt and taxable issuances of state and political subdivisions, residential mortgage-backed securities, single-issuer trust preferred securities principally issued by bank holding companies, and high quality corporate bonds. Among other securities, our available for sale debt securities include securities such as bank issued, corporate, and municipal special revenue bonds which may pose a higher risk of future impairment charges to us as a result of the uncertain economic environment and its potential negative effect on the future performance of the security issuers.

The primary purpose of our held to maturity and available for sale investment portfolios is to provide a source of earnings and liquidity, as well as serve as a tool for managing interest rate risk. The decision to purchase or sell securities is based upon the current assessment of long and short-term economic and financial conditions, including the interest rate environment and other statement of financial condition components. See additional information under "Interest Rate Sensitivity," "Liquidity and Cash Requirements" and "Capital Adequacy" sections elsewhere in this MD&A.

Investment securities at December 31, 2022 and 2021 were as follows:

	2022	2021
	(in thousands)	
Equity securities	\$ 48,731	\$ 36,473
Trading debt securities	13,438	38,130
Available for sale debt securities		
U.S. Treasury securities	279,498	—
U.S. government agency securities	26,964	20,925
Obligations of states and political subdivisions:		
Obligations of states and state agencies	10,406	26,127
Municipal bonds	136,405	53,763
Total obligations of states and political subdivisions	146,811	79,890
Residential mortgage-backed securities	629,818	904,502
Corporate and other debt securities	178,306	123,492
Total available for sale debt securities	1,261,397	1,128,809
Total investment securities (fair value)	\$ 1,323,566	\$ 1,203,412
Held to maturity debt securities		
U.S. Treasury securities	\$ 66,911	\$ 67,558
U.S. government agency securities	260,392	6,265
Obligations of states and political subdivisions:		
Obligations of states and state agencies	99,238	141,015
Municipal bonds	381,060	196,947
Total obligations of states and political subdivisions	480,298	337,962
Residential mortgage-backed securities	2,909,106	2,166,142
Trust preferred securities	37,043	37,020
Corporate and other debt securities	75,234	53,750
Total investment securities held to maturity (amortized cost)	\$ 3,828,984	\$ 2,668,697
Allowance for credit losses	1,646	1,165
Total investment securities held to maturity, net of allowance for credit losses	3,827,338	2,667,532
Total investment securities	\$ 5,150,904	\$ 3,870,944

As of December 31, 2022, total investments increased \$1.3 billion or 34 percent as compared to 2021 largely due to securities acquired from Bank Leumi USA and purchases of approximately \$838 million of residential mortgage-backed securities classified as held to maturity, partially offset by repayments, prepayments and calls. We acquired \$6.2 million of equity securities, \$505.9 million of available for sale debt securities (mostly U.S. government agency securities and U.S. Treasury securities) and \$806.6 million of held to maturity debt securities (primarily U.S. government agency securities and municipal bonds) from Bank Leumi USA on April 1, 2022.

At December 31, 2022, we had \$2.9 billion and \$629.8 million of residential mortgage-backed securities classified as held to maturity and available for sale, respectively. Approximately 50.9 percent and 49.0 percent, respectively, were issued and guaranteed by Fannie Mae, and approximately 24.7 percent and 38.8 percent of these residential mortgage-backed securities, respectively, were issued and guaranteed by Ginnie Mae. The remainder of our outstanding residential mortgage-backed security balances at December 31, 2022 were issued by Freddie Mac.

The following table presents the weighted-average yields, calculated on a yield-to-maturity basis, on the remaining contractual maturities (unadjusted for expected prepayments) of held to maturity debt securities at December 31, 2022:

	0-1 year	1-5 years	5-10 years	Over 10 years	Total
Held to maturity debt securities					
U.S. Treasury securities	2.88 %	3.71 %	— %	— %	3.21 %
U.S. government agency securities	—	—	3.20	3.33	3.32
Obligations of states and political subdivisions: ⁽¹⁾					
Obligations of states and state agencies	—	3.22	4.55	4.77	4.59
Municipal bonds	2.89	3.84	3.99	4.74	4.47
Total obligations of states and political subdivisions	2.89	3.74	4.07	4.75	4.49
Residential mortgage-backed securities ⁽²⁾	—	2.81	3.04	2.64	2.64
Trust preferred securities	—	—	8.12	6.88	6.91
Corporate and other debt securities	1.86	3.50	3.34	—	3.34
Total	2.79 %	3.60 %	3.80 %	2.93 %	2.98 %

⁽¹⁾ Average yields on obligations of states and political subdivisions are generally tax-exempt and calculated on a tax-equivalent basis using a statutory federal income tax rate of 21 percent.

⁽²⁾ Residential mortgage-backed securities yields are shown using stated contractual maturity dates.

The residential mortgage-backed securities portfolio is a significant source of our liquidity through the monthly cash flow of principal and interest. Mortgage-backed securities, like all securities, are sensitive to changes in the interest rate environment, increasing and decreasing in value as interest rates fall and rise. As interest rates fall, the potential increase in prepayments can reduce the yield on the mortgage-backed securities portfolio and reinvestment of the proceeds will be at lower yields. Conversely, rising interest rates may reduce cash flows from prepayments and extend anticipated duration of these assets. We monitor the changes in interest rates, cash flows and duration, in accordance with our investment policies. Management seeks out investment securities with an attractive spread over our cost of funds.

Allowance for Credit Losses and Impairment Analysis

Available for sale debt securities. The guidance in ASC Topic 326-30 requires credit losses to be presented as an allowance, rather than as a write-down if management does not intend to sell an available for sale debt security before recovery of its amortized cost basis. Available for sale debt securities in unrealized loss positions are evaluated for impairment related to credit losses at least quarterly. In assessing whether a credit loss exists, we compare the present value of cash flows expected to be collected from the security with the amortized cost basis of the security. If the present value of cash flows expected to be collected is less than the amortized cost basis for the security, a credit loss exists and an allowance for credit losses is recorded, limited to the amount the fair value is less than amortized cost basis. Declines in fair value that have not been recorded through an allowance for credit losses, such as declines due to changes in market interest rates, are recorded through other comprehensive loss, net of applicable taxes.

We have evaluated all available for sale debt securities that are in an unrealized loss position as of December 31, 2022 and December 31, 2021 and determined that the declines in fair value are mainly attributable to changes in market volatility, due to factors such as interest rates and spread factors, but not attributable to credit quality or other factors. Based on a comparison of the present value of expected cash flows to the amortized cost, management recognized no impairment charges during the years ended December 31, 2022, 2021 and 2020, and, as a result, there was no allowance for credit losses for available for sale debt securities at December 31, 2022 and December 31, 2021.

Held to maturity debt securities. As discussed further in Note 4 to the consolidated financial statements, Valley has a zero loss expectation for certain securities within the held to maturity portfolio, including, U.S. Treasury securities, U.S. agency securities, residential mortgage-backed securities issued by Ginnie Mae, Fannie Mae and Freddie Mac, and collateralized municipal bonds. To measure the expected credit losses on held to maturity debt securities that have loss expectations, Valley estimates the expected credit losses using a discounted cash flow model developed by a third party. Assumptions used in the model for pools of securities with common risk characteristics include the historical lifetime probability of default and severity of loss in the event of default, with the model incorporating several economic cycles of loss history data to calculate expected credit losses given default at the individual security level. Held to maturity debt securities were carried net of an allowance for credit losses totaling \$1.6 million and \$1.2 million at December 31, 2022 and 2021, respectively. We recorded provisions of \$481 thousand and \$635 thousand for the years ended December 31, 2022 and 2020, respectively, and a net credit to the

provision of \$263 thousand for the year ended December 31, 2021. There were no net charge-offs of held to maturity debt securities during the years ended December 31, 2022, 2021 and 2020.

Investment grades. The investment grades in the table below reflect the most current independent analysis performed by third parties of each security as of the date presented and not necessarily the investment grades at the date of our purchase of the securities. For many securities, the rating agencies may not have performed an independent analysis of the tranches owned by us, but rather an analysis of the entire investment pool. For this and other reasons, we believe the assigned investment grades may not accurately reflect the actual credit quality of each security and should not be viewed in isolation as a measure of the quality of our investment portfolio.

The following table presents available for sale and held to maturity debt investment securities by investment grades at December 31, 2022.

	December 31, 2022			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(in thousands)			
Available for sale investment grades:*				
AAA Rated	\$ 1,093,540	\$ 111	\$ (127,901)	\$ 965,750
AA Rated	150,060	—	(30,298)	119,762
A Rated	10,088	—	(913)	9,175
BBB Rated	79,747	—	(7,844)	71,903
Not rated	104,476	—	(9,669)	94,807
Total	<u>\$ 1,437,911</u>	<u>\$ 111</u>	<u>\$ (176,625)</u>	<u>\$ 1,261,397</u>
Held to maturity investment grades:*				
AAA Rated	\$ 3,384,051	\$ 1,760	\$ (472,302)	\$ 2,913,509
AA Rated	253,511	342	(16,725)	237,128
A Rated	9,278	2	(181)	9,099
BBB Rated	6,000	—	(375)	5,625
Non-investment grade	5,497	—	(935)	4,562
Not rated	170,647	1	(11,101)	159,547
Total	<u>\$ 3,828,984</u>	<u>\$ 2,105</u>	<u>\$ (501,619)</u>	<u>\$ 3,329,470</u>

* Rated using external rating agencies. Ratings categories include entire range. For example, "A Rated" includes A+, A, and A-. Split rated securities with two ratings are categorized at the higher of the rating levels.

The unrealized losses in the AAA and AA rated categories of both the available for sale and held to maturity debt securities (in the above table) were mainly related to residential mortgage-backed securities issued by Ginnie Mae and Fannie Mae and continued to be driven by the rising interest rate environment during 2022.

Available for sale and held to maturity debt securities included \$104.5 million and \$170.6 million, respectively, of investments not rated by the rating agencies with aggregate unrealized losses of \$9.7 million and \$11.1 million, respectively, at December 31, 2022. The unrealized losses within non-rated available for sale debt securities was mostly related to several large corporate bonds negatively impacted by rising interest rates during 2022, and not changes in underlying credit. The unrealized losses within non-rated held to maturity debt securities mostly related to four single-issuer bank trust preferred issuances with a combined amortized cost of \$36.0 million.

See Note 4 to the consolidated financial statements for additional information regarding our investment securities portfolio.

Loan Portfolio

The following table reflects the composition of the loan portfolio for the years indicated.

	At December 31,	
	2022	2021
	(\$ in thousands)	
Commercial and industrial	\$ 8,771,250	\$ 5,411,601
Commercial and industrial PPP loans	33,580	435,950
Total commercial and industrial	8,804,830	5,847,551
Commercial real estate:		
Commercial real estate	25,732,033	18,935,486
Construction	3,700,835	1,854,580
Total commercial real estate	29,432,868	20,790,066
Residential mortgage	5,364,550	4,545,064
Consumer:		
Home equity	503,884	400,779
Automobile	1,746,225	1,570,036
Other consumer	1,064,843	1,000,161
Total consumer loans	3,314,952	2,970,976
Total loans *	\$ 46,917,200	\$ 34,153,657
As a percent of total loans:		
Commercial and industrial	18.8 %	17.1 %
Commercial real estate	62.7	60.9
Residential mortgage	11.4	13.3
Consumer loans	7.1	8.7
Total	100 %	100 %

* Includes net unearned discount and deferred loan fees of \$120.5 million and \$78.5 million at December 31, 2022 and 2021, respectively. Net unearned discounts and deferred loans fees at December 31, 2022 include the non-credit discount on PCD loans. Net unearned fees related to PPP loans totaled \$667 thousand and \$12.1 million at December 31, 2022 and 2021, respectively.

Total loans increased by \$12.8 billion, or 37.4 percent to \$46.9 billion at December 31, 2022 from December 31, 2021 largely due to a combination of strong organic loan growth and acquired loans from Bank Leumi USA totaling \$5.9 billion, partially offset by a \$402.4 million decline in PPP loans. Excluding acquired loans from Bank Leumi USA, commercial real estate (including construction), non-PPP commercial and industrial, residential mortgage and automobile loans increased 24.5 percent, 20.0 percent, 17.7 percent and 11.2 percent, respectively, during the year ended December 31, 2022 from December 31, 2021. During 2022, Valley also originated \$267.2 million of residential mortgage loans for sale rather than investment. Loans held for sale totaled \$18.1 million and \$139.5 million at December 31, 2022 and 2021, respectively. See additional information regarding our residential mortgage loan activities below.

Commercial and industrial loans increased \$3.0 billion to \$8.8 billion at December 31, 2022 from December 31, 2021. Excluding \$2.3 billion of loans acquired from Bank Leumi USA and the \$402.4 million decline in PPP loans due to SBA loan forgiveness, commercial and industrial loan organically increased by \$1.1 billion or 20.0 percent during 2022. The organic growth was mainly a result of the solid new loan volumes amongst our pre-existing long-term customer base across most of our geographic footprints driven by several factors, including direct calling efforts of our growing commercial banking team.

Commercial real estate loans (excluding construction loans) increased \$6.8 billion to \$25.7 billion at December 31, 2022 from December 31, 2021 reflecting solid organic growth mainly due to demand for non-owner occupied loans across our geographic footprint, as well as \$2.9 billion of acquired loans from bank Leumi USA. Our organic approach to growth is a balance of loan production through expansion of lending with our existing clients and establishing new relationships with key players in our marketplaces. During 2022, we also continued to grow our commercial lending activities from out of market expansion efforts in states such as Georgia and Tennessee, as well as our relatively new markets in California and Illinois. In addition, our commercial real estate production remained strong in loans secured by multi-family dwellings, warehouses and healthcare facilities. Construction loans totaled \$3.7 billion at December 31, 2022 and increased \$1.8 billion from December 31, 2021 mainly driven by demand for commercial and residential construction projects in New Jersey, New York and Florida. Bank Leumi USA acquisition contributed \$630.8 million of acquired loans to the construction loan portfolio during

December 2022. The growth in new construction loans was partially offset by the run-off of completed existing projects, and, to a lesser extent, migration of such completed projects to permanent financing during 2022. We continue to be strategically competitive for the strongest borrowers and projects in all our primary markets.

Residential mortgage loans totaled \$5.4 billion at December 31, 2022 and increased \$819.5 million from December 31, 2021 primarily due to new loan activity in the purchased home market and an increase in such loans originated for investment rather than sale. Residential mortgage loans acquired from Bank Leumi USA were not material. New and refinanced residential mortgage loan originations totaled \$1.7 billion for the year ended December 31, 2022 as compared to \$2.6 billion in 2021. Florida originations totaled \$604.6 million and represented 34.6 percent of total residential mortgage loan originations in 2022. Of the total originations in 2022, only \$267.2 million of residential mortgage loans were originated for sale rather than held for investment as compared to \$1.0 billion during 2021. During 2022, we retained approximately 85 percent of the total residential mortgages originations in our held for investment loan portfolio. We may continue to retain a higher percentage of new loan volumes during the first quarter 2023 due to several factors, including consumer demand and preferences for certain mortgage products and our management of the interest rate risk and the mix of the interest earning assets on our balance sheet. Additionally, the volume of both new and refinanced loan applications has continued to decline in the early stages of the first quarter 2023 due to the increase in the level of mortgage interest rates and may challenge our ability to grow this loan category. From time to time, we purchase residential mortgage loans originated by, and sometimes serviced by, other financial institutions based on several factors, including current loan origination volumes, market interest rates, excess liquidity, CRA and other asset/liability management strategies. Purchased residential mortgage loans are generally selected using Valley's normal underwriting criteria at the time of purchase and are sometimes partially or fully guaranteed by third parties or insured by government agencies such as the Federal Housing Administration. Valley purchased approximately \$38.4 million and \$58.3 million of 1-4 family loans, qualifying for CRA purposes during 2022 and 2021, respectively.

Consumer loans increased \$344.0 million to \$3.3 billion at December 31, 2022 from December 31, 2021 largely due to higher volumes of automobile loans. Consumer loans acquired from Bank Leumi USA were not material. Automobile loans increased \$176.2 million or 11.2 percent to \$1.7 billion at December 31, 2022 from December 31, 2021 as loan originations volumes outpaced loan repayments during 2022. We originated \$820 million in auto loans through our dealership network during 2022 as compared to \$872 million in 2021. Of the total originations, our Florida dealership network contributed approximately 16 percent of Valley's total new auto loan production for both 2022 and 2021, respectively. However, loan originations slowed significantly during the second half of 2022 as demand for new and used vehicle financing declined due to the higher interest rate environment. Despite increased new automobile inventories available to consumers, we anticipate that the increase in average new vehicle prices coupled with rising interest rates could have a negative impact on our ability to grow this loan category during the first quarter 2023. Home equity loans increased \$103.1 million to \$503.9 million at December 31, 2022 from \$400.8 million at December 31, 2021. However, new home equity loan volumes and customer usage of existing home equity lines of credit continue to be modest and growth in this loan category continues to be challenged by the unfavorable rising interest rate environment. Other consumer loans increased \$64.7 million to \$1.1 billion at December 31, 2022 as compared to 2021 mainly due to both higher usage and demand within our collateralized personal lines of credit portfolio.

A significant part of our lending is in northern and central New Jersey, New York City, Long Island and Florida. To mitigate our geographic risks, we make efforts to maintain a diversified portfolio as to type of borrower and loan to guard against a potential downward turn in any one economic sector.

For 2023, we anticipate organic commercial and industrial and commercial real estate loan growth to continue in the first quarter 2023. Based upon current projections, we anticipate a range of 7 to 9 percent annualized loan growth for 2023. However, there can be no assurance that those positive trends will continue, or balances will not decline from December 31, 2022 due to several factors, including, but not limited to persistently high inflation, the Federal Reserve's monetary policy tightening, and the ongoing negative impact of Russia-Ukraine war on the global economy. In addition, we anticipate that residential mortgage and other consumer loan activity will continue to slow in the early stages of the first quarter of 2023.

The following table presents the contractual maturity distribution of loans by category at December 31, 2022:

	1 Year or Less	1 to 5 Years	5 to 15 Years	Over 15 Years	Total
	(in thousands)				
Commercial and industrial	\$ 2,050,332	\$ 3,949,748	\$ 1,124,511	\$ 1,680,239	\$ 8,804,830
Commercial real estate	2,116,323	8,482,432	12,040,774	3,092,504	25,732,033
Construction	1,414,619	1,755,124	287,742	243,350	3,700,835
Residential mortgage	98,975	216,362	463,378	4,585,835	5,364,550
Consumer	48,512	1,060,030	2,143,305	63,105	3,314,952
Total loans	<u>\$ 5,728,761</u>	<u>\$ 15,463,696</u>	<u>\$ 16,059,710</u>	<u>\$ 9,665,033</u>	<u>\$ 46,917,200</u>

We may renew loans at maturity when requested by a customer. In such instances, we generally conduct a review which includes an analysis of the borrower's financial condition and, if applicable, a review of the adequacy of collateral via a new appraisal from an independent, bank approved, certified or licensed property appraiser or readily available market resources. A rollover of the loan at maturity may require a principal reduction or other modified terms.

The following table presents the contractual maturities after one year for fixed and adjustable rate loans within each loan category at December 31, 2022:

	Loans Maturing After One Year		
	Fixed Rate	Adjustable Rate	Total
	(in thousands)		
Commercial and industrial	\$ 3,022,028	\$ 3,732,470	\$ 6,754,498
Commercial real estate	9,047,359	14,568,351	23,615,710
Construction	348,087	1,938,129	2,286,216
Residential mortgage	3,690,790	1,574,785	5,265,575
Consumer	1,844,651	1,421,789	3,266,440
Total loans	<u>\$ 17,952,915</u>	<u>\$ 23,235,524</u>	<u>\$ 41,188,439</u>

Non-performing Assets

Non-performing assets (NPAs) include non-accrual loans, other real estate owned (OREO), and other repossessed assets (which consist of automobiles and taxi medallions) at December 31, 2022. Loans are generally placed on non-accrual status when they become past due in excess of 90 days as to payment of principal or interest. Exceptions to the non-accrual policy may be permitted if the loan is sufficiently collateralized and in the process of collection. OREO is acquired through foreclosure on loans secured by land or real estate. OREO and other repossessed assets are reported at the lower of cost or fair value, less cost to sell.

Non-performing assets totaling \$272.0 million at December 31, 2022 increased \$26.6 million, or 10.8 percent, from December 31, 2021 (as shown in the table below). The non-performing assets at December 31, 2022 included \$48.1 million of acquired non-accrual loans from Bank Leumi USA. Excluding the impact of the Bank Leumi USA acquisition, non-performing assets decreased \$21.5 million mainly due to lower non-accrual commercial real estate loans and residential mortgage loans caused by both loan repayments and charge-offs during 2022.

NPAs as a percentage of total loans and NPAs totaled 0.58 percent and 0.71 percent at December 31, 2022 and 2021, respectively. We believe our total NPAs has remained relatively low as a percentage of the total loan portfolio and the level of NPAs is reflective of our consistent approach to the loan underwriting criteria for both Valley originated loans and loans purchased from third parties. For additional details, see the "Credit quality indicators" section in Note 5 to the consolidated financial statements.

Our lending strategy is based on underwriting standards designed to maintain high credit quality and we remain optimistic regarding the overall future performance of our loan portfolio. During 2022, our overall credit trends have remained stable, and our business and borrowers continued to demonstrate resilience and growth despite the challenges of the global supply chain issues, high inflation and the overall uncertain economy. However, management cannot provide assurance that the non-performing assets will not materially increase from the levels reported at December 31, 2022 due to the aforementioned or other factors potentially impacting our lending customers.

The following table sets forth by loan category, accruing past due and non-performing assets on the dates indicated in conjunction with our asset quality ratios:

	At December 31,	
	2022	2021
	(\$ in thousands)	
Accruing past due loans		
30 to 59 days past due		
Commercial and industrial	\$ 11,664	\$ 6,717
Commercial real estate	6,638	14,421
Construction	—	1,941
Residential mortgage	16,146	10,999
Total consumer	9,087	6,811
Total 30 to 59 days past due	43,535	40,889
60 to 89 days past due		
Commercial and industrial	12,705	7,870
Commercial real estate	3,167	—
Residential mortgage	3,315	3,314
Total consumer	1,579	1,020
Total 60 to 89 days past due	20,766	12,204
90 or more days past due		
Commercial and industrial	18,392	1,273
Commercial real estate	2,292	32
Construction	3,990	—
Residential mortgage	1,866	677
Total consumer	47	789
Total 90 or more days past due	26,587	2,771
Total accruing past due loans	\$ 90,888	\$ 55,864
Non-accrual loans*		
Commercial and industrial	\$ 98,881	\$ 99,918
Commercial real estate	68,316	83,592
Construction	74,230	17,641
Residential mortgage	25,160	35,207
Total consumer	3,174	3,858
Total non-accrual loans	269,761	240,216
Other real estate owned (OREO)	286	2,259
Other repossessed assets	1,937	2,931
Total non-performing assets (NPAs)	\$ 271,984	\$ 245,406
Performing troubled debt restructured loans	\$ 77,530	\$ 71,330
Total non-accrual loans as a % of loans	0.57 %	0.70 %
Total NPAs as a % of loans and NPAs	0.58	0.71
Total accruing past due and non-accrual loans as a % of loans	0.77	0.87
Allowance for loan losses as a % of non-accrual loans	170.02	149.53

Loans past due 30 to 59 days increased \$2.6 million to \$43.5 million at December 31, 2022 as compared to December 31, 2021. The increase was largely driven by a few large commercial and industrial loans and higher residential mortgage loan delinquencies. We do not believe that the increased level of residential mortgage delinquencies at December 31, 2022 represents any material negative trend within our total loan portfolio.

Loans past due 60 to 89 days increased \$8.6 million to \$20.8 million at December 31, 2022 as compared to December 31, 2021 mostly due to higher commercial and industrial and commercial real estate loans in this delinquency category.

Commercial and industrial loan delinquencies increased \$4.8 million at December 31, 2022 and included several loans that are well secured. Commercial real estate loan delinquencies at December 31, 2022 included one \$2.6 million matured loan in the normal process of renewal.

Loans 90 days or more past due and still accruing increased \$23.8 million to \$26.6 million at December 31, 2022 as compared to December 31, 2021 mainly due to increases in most loan categories. Commercial and industrial loan delinquencies increased \$17.1 million as compared to 2021 mainly due to several large loans included in this category at December 31, 2021. Commercial real estate loan delinquencies within this category at December 31, 2022 consisted of one matured loan in the normal process of renewal. All the loans past due 90 days or more and still accruing are considered to be well secured and in the process of collection.

Non-accrual loans increased \$29.5 million to \$269.8 million at December 31, 2022 as compared to December 31, 2021 mainly driven by a \$56.6 million increase in construction loans mostly related to three large loan relationships. Partially offsetting this increase, non-accrual commercial real estate and residential mortgage loans decreased \$15.3 million and \$10.0 million, respectively. The decrease in non-accrual commercial real estate loans was due, in part, to the full repayment of a \$12 million loan during 2022. Although the timing of collection is uncertain, management believes that the majority of the non-accrual loans at December 31, 2022, are well secured and largely collectible based on, in part, our quarterly review of collateral dependent loans and the valuation of the underlying collateral, if applicable. Any estimated shortfall in each collateral valuation results in an allocation of specific reserves within our allowance for credit losses for loans. If interest on non-accrual loans had been accrued in accordance with the original contractual terms, such interest income would have amounted to approximately \$21.7 million, \$7.1 million and \$6.2 million for the years ended December 31, 2022, 2021 and 2020, respectively; none of these amounts were included in interest income during these periods.

Non-accrual taxi medallion loans. Valley's historical taxi medallion lending criteria was conservative in regard to capping the loan amounts in relation to the prevailing market valuations, as well as obtaining personal guarantees and other collateral in certain instances. However, the severe decline in the market valuation of taxi medallions over the last several years has adversely affected the estimated fair valuation of these loans. During 2022, we closely monitored the performance of our taxi medallion loans (primarily collateralized by New York City medallions). Due to the challenging operating environment for ride services and uncertain borrower performance, all of the taxi medallion loans remain on non-accrual status at December 31, 2022. At December 31, 2022, taxi medallion loans totaling \$66.5 million had related reserves of \$42.2 million, or 63.4 percent of such loans, within the allowance for loan losses as compared to \$86.0 million of loans with related reserves of \$58.5 million at December 31, 2021. The \$19.5 million decrease was mostly due to negotiated loan repayments during 2022 and, to a lesser extent, loan-charge-offs (See further details under the "Allowance for Credit Losses" section below). Potential further declines in the market valuation of taxi medallions and the current operating environment mainly within New York City may negatively impact the performance of this portfolio. For example, a 25 percent further decline in our current estimated market value of the taxi medallions would require additional allocated reserves of \$2.9 million within the allowance for loan losses based upon the taxi medallion loan balances at December 31, 2022.

TDRs represent loan modifications for customers experiencing financial difficulties where a concession has been granted. Performing TDRs (i.e., TDRs not reported as loans 90 days or more past due and still accruing or as non-accrual loans) increased \$6.2 million to \$77.5 million at December 31, 2022 as compared to \$71.3 million at December 31, 2021. Performing TDRs consisted of 85 loans and 98 loans (primarily in the commercial and industrial loan and commercial real estate portfolios) at December 31, 2022 and 2021, respectively. On an aggregate basis, the \$77.5 million in performing TDRs at December 31, 2022 had a modified weighted average interest rate of approximately 5.22 percent as compared to a pre-modification weighted average interest rate of 3.72 percent. See Note 5 to the consolidated financial statements for additional disclosures regarding our TDRs.

Asset Concentration and Risk Elements

Most of our lending is within our primary markets located in northern and central New Jersey, New York City, Long Island, Westchester County, New York and Florida, and, to a lesser extent, Alabama, California and Illinois. As part of our business strategy, we have expanded commercial real estate lending to new customers in a few targeted states beyond our geographic footprint. In addition to our primary markets, automobile loans are mostly originated in several other contiguous states. To mitigate our geographic risks, we make efforts to maintain a diversified portfolio as to type of borrower and loan to guard against a potential downward turn in any one economic sector. Due to the level of our underwriting standards applied to all loans, management believes the out of market loans generally present no more risk than those made within the market. However, each loan or group of loans made outside of our primary markets poses different geographic risks based upon the economy of that particular region.

For our commercial loan portfolio, comprised of commercial and industrial loans, commercial real estate loans, and construction loans, a separate credit department is responsible for risk assessment and periodically evaluating overall creditworthiness of a borrower. Additionally, efforts are made to limit concentrations of credit to minimize the impact of a downturn in any one economic sector. We believe our loan portfolio is diversified as to type of borrower and loan. However, loans collateralized by real estate represent approximately 75 percent of total loans at December 31, 2022. Most of the loans collateralized by real estate are in New Jersey, New York and Florida presenting a geographical credit risk if there was a further significant broad-based deterioration in economic conditions within these regions. See Item 1A. Risk Factors - "Risks Related to the Operating Environment and the COVID-19 Pandemic".

Consumer loans are comprised of residential mortgage loans, home equity loans, automobile loans and other consumer loans. Residential mortgage loans are secured by 1-4 family properties mostly located in New Jersey, New York and Florida. We do provide mortgage loans secured by homes beyond this primary geographic area; however, lending outside this primary area has generally consisted of loans made in support of existing customer relationships, as well as targeted purchases of certain loans guaranteed by third parties. Our mortgage loan originations are comprised of both jumbo (i.e., loans with balances above conventional conforming loan limits) and conventional loans based on underwriting standards that generally comply with Fannie Mae and/or Freddie Mac requirements. The weighted average loan-to-value ratio of all residential mortgage originations in 2022 was 64 percent while FICO® (independent objective criteria measuring the creditworthiness of a borrower) scores averaged 765. Home equity and automobile loans are secured loans and are made based on an evaluation of the collateral and the borrower's creditworthiness.

Management realizes that some degree of risk must be expected in the normal course of lending activities. Allowances are maintained to absorb such lifetime expected credit losses inherent in the portfolio.

See the "Loan Portfolio Risk Elements and Credit Risk Management" section in Note 5 to the consolidated financial statements for additional information.

Allowance for Credit Losses

The allowance for credit losses (ACL) for loans includes the allowance for loan losses and the reserve for unfunded credit commitments. Under CECL, our methodology to establish the allowance for loan losses has two basic components: (i) a collective reserve component for estimated expected credit losses for pools of loans that share common risk characteristics and (ii) an individual reserve component for loans that do not share risk characteristics, consisting of collateral dependent, TDR, and expected TDR loans. Valley also maintains a separate allowance for unfunded credit commitments mainly consisting of undisbursed non-cancellable lines of credit, new loan commitments and commercial standby letters of credit.

Valley estimated the collective ACL using a current expected credit losses methodology which is based on relevant information about historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the loan balances. In estimating the component of the allowance on a collective basis we use a transition matrix model which calculates an expected life of loan loss percentage for each loan pool by generating probability of default and loss given default metrics. The metrics are based on the migration of loans within the commercial and industrial loan categories from performing to loss by credit quality rating or delinquency categories using historical life-of-loan analysis periods for each loan portfolio pool and the severity of loss based on the aggregate net lifetime losses. The model's expected losses based on loss history are adjusted for qualitative factors. Among other things, these adjustments include and account for differences in: (i) the impact of the reasonable and supportable economic forecast, relative probability weightings and reversion period, (ii) other asset specific risks to the extent they do not exist in the historical loss information, and (iii) net expected recoveries of charged-off loan balances. These adjustments are based on qualitative factors not reflected in the quantitative model but are likely to impact the measurement of estimated credit losses. The expected lifetime loss rate is the life of loan loss percentage from the transition matrix model plus the impact of the adjustments for qualitative factors. The expected credit losses are the product of multiplying the model's expected lifetime loss rate by the exposure at default at period end on an undiscounted basis.

Valley utilizes a two-year reasonable and supportable forecast period followed by a one-year period over which estimated losses revert to historical loss experience for the remaining life of the loan on a straight-line basis. The forecasts consist of a multi-scenario economic forecast model to estimate future credit losses and is governed by a cross-functional committee. The committee meets each quarter to determine which economic scenarios developed by Moody's will be incorporated into the model, as well as the relative probability weightings of the selected scenarios, based upon all readily available information. The model projects economic variables under each scenario based on detailed statistical analyses. We have identified and selected key variables that most closely correlated to our historical credit performance, which include: GDP, unemployment and the Case-Shiller Home Price Index.

Valley maintained the majority of its probability weighting to the Moody's Baseline scenario with less emphasis on the S-3 downside and S-1 upside scenarios at December 31, 2021. The Baseline weighting and the S-1 scenario reflected the

positive economic outlook including higher GDP growth and lower unemployment levels. During 2022, we removed our modest weighting to the Moody's S-1 upside scenario and added weighting to the S-4 adverse scenario due to the greater uncertainty caused by new developments, including, but not limited to persistently high inflation, the Federal Reserve's monetary policy actions, the Russia-Ukraine war and the unknown impact of economic sanctions on Russia that could further negatively impact the supply chain in the U.S. and abroad. At December 31, 2022, our scenario weightings, as well as the standalone Moody's Baseline scenario, reflects a less optimistic outlook as compared at December 31, 2021 in terms of GDP growth, unemployment levels and potential near term negative economic impacts, given present uncertain economic conditions.

At December 31, 2022, the Moody's Baseline forecast included the following specific assumptions:

- GDP expansion by about 0.1 percent in the first quarter 2023;
- Unemployment of 3.8 percent in the first quarter 2023 and 3.9 to 4.1 percent over the remainder of the forecast period ending in the fourth quarter 2024;
- Continued concerns about increased federal debt burden pushed by rising interest rates, high inflation, and elevated house prices;
- The Federal Reserve will continue its tightening monetary policy, including an increase of 25 (to 50) basis points at its February 2023 meeting; and
- Despite inflation slowing down during the fourth quarter 2022, Federal Reserve intends to keep rates higher through 2023 with no reductions until 2024.

The allowance for credit losses for loans methodology and accounting policy are fully described in Note 1 to the consolidated financial statements.

The following table summarizes the relationship among loans, loans charged-off, loan recoveries, the provision for credit losses and the allowance for credit losses for the years indicated:

	Years Ended December 31,		
	2022	2021	2020
Allowance for credit losses for loans	(\$ in thousands)		
Beginning balance	\$ 375,702	\$ 351,354	\$ 164,604
Impact of the adoption of ASU No. 2016-13 ⁽¹⁾	—	—	99,632
Beginning balance, adjusted	375,702	351,354	264,236
Allowance for purchased credit deteriorated (PCD) loans ⁽²⁾	70,319	6,542	—
Loans charged-off:			
Commercial and industrial	(33,250)	(21,507)	(34,630)
Commercial real estate	(4,561)	(382)	(767)
Residential mortgage	(28)	(140)	(598)
Total Consumer	(4,057)	(4,303)	(9,294)
Total charge-offs	(41,896)	(26,332)	(45,289)
Charged-off loans recovered:			
Commercial and industrial	17,081	3,934	1,956
Commercial real estate	2,073	2,553	1,054
Construction	—	4	452
Residential mortgage	711	676	670
Total Consumer	2,929	4,075	3,188
Total recoveries	22,794	11,242	7,320
Net charge-offs	(19,102)	(15,090)	(37,969)
Provision charged for credit losses	56,336	32,896	125,087
Ending balance	\$ 483,255	\$ 375,702	\$ 351,354
Components of allowance for credit losses for loans:			
Allowance for loan losses	\$ 458,655	\$ 359,202	\$ 340,243
Allowance for unfunded credit commitments	24,600	16,500	11,111
Allowance for credit losses for loans	\$ 483,255	\$ 375,702	\$ 351,354
Components of provision for credit losses for loans:			
Provision for credit losses for loans	\$ 48,236	\$ 27,507	\$ 123,922
Provision for unfunded credit commitments	8,100	5,389	1,165
Provision for credit losses for loans	\$ 56,336	\$ 32,896	\$ 125,087
Allowance for credit losses for loans to total loans	1.03 %	1.10 %	1.09 %

⁽¹⁾ The adjustment for the year ended December 31, 2020 represents an increase in the allowance for credit losses for loans as a result of the adoption of ASU 2016-13 effective January 1, 2020. It includes allowance for PCD loans totaling \$61.6 million.

⁽²⁾ Represents the allowance for acquired PCD loans. For 2022, the allowance for acquired PCD loans is net of PCD loan charge-offs totaling \$62.4 million in the second quarter 2022.

The following table presents the relationship among net loans charged-off and recoveries, and average loan balances outstanding for the years indicated:

	Years Ended December 31,		
	2022	2021	2020
	(\$ in thousands)		
Net loan (charge-offs) recoveries			
Commercial and industrial	\$ (16,169)	\$ (17,573)	\$ (32,674)
Commercial real estate	(2,488)	2,171	287
Construction	—	4	452
Residential mortgage	683	536	72
Total consumer	(1,128)	(228)	(6,106)
Total	<u>\$ (19,102)</u>	<u>\$ (15,090)</u>	<u>\$ (37,969)</u>
Average loans outstanding			
Commercial and industrial	\$ 7,691,496	\$ 6,334,612	\$ 6,418,813
Commercial real estate	23,127,504	17,444,293	16,506,542
Construction	2,977,688	1,775,272	1,699,711
Residential mortgage	4,899,854	4,401,881	4,395,582
Total consumer	3,233,811	2,860,927	2,765,211
Total	<u>\$ 41,930,353</u>	<u>\$ 32,816,985</u>	<u>\$ 31,785,859</u>
Net loan charge-offs (recoveries) to average loans outstanding			
Commercial and industrial	0.21%	0.28%	0.51%
Commercial real estate	0.01	(0.01)	0.00
Construction	0.00	0.00	(0.03)
Residential mortgage	(0.01)	(0.01)	0.00
Total consumer	0.03	0.01	0.22

Our net loan charge-offs increased \$4.0 million to \$19.1 million in 2022 as compared to \$15.1 million in 2021. Gross loan charge-offs (excluding \$62.4 million of Day 1 PCD loan charge-offs related to the Bank Leumi USA acquisition) \$41.9 million for the year ended December 31, 2022 partly related to the \$20.8 million partial loan charge-off of a single non-performing commercial and industrial loan participation during the fourth quarter 2022. The partially charged-off loan had related allowance reserves totaling \$30.0 million at September 30, 2022 (i.e., prior to the fourth quarter 2022 charge-off). Gross loan charge-offs also included partial charge-offs of taxi medallion loans totaling \$6.0 million and \$4.8 million for the years ended December 31, 2022 and 2021, respectively, within the commercial and industrial loan category. The increase in gross recoveries during the year ended December 31, 2022 as compared to 2021 was mainly driven by two commercial and industrial loan relationships with combined recoveries totaling \$11.2 million.

The overall level of net loan charge-offs (as presented in the above table) continued to trend well within management's expectations for the credit quality of the loan portfolio for 2022. Given high inflation and the uncertain path of the future economy, there can be no assurance that our levels of net charge-offs will not deteriorate in 2023.

The following table summarizes the allocation of the allowance for credit losses to specific loan portfolio categories for the years ended December 31, 2022 and 2021:

	2022		2021	
	Allowance Allocation	Percent of Loan Category to total loans	Allowance Allocation	Percent of Loan Category to total loans
(\$ in thousands)				
Loan Category:				
Commercial and industrial	\$ 140,008	18.8 %	\$ 103,090	17.1 %
Commercial real estate:				
Commercial real estate	200,248	54.8	193,258	55.5
Construction	58,987	7.9	24,232	5.4
Total commercial real estate	259,235	62.7	217,490	60.9
Residential mortgage	39,020	11.4	25,120	13.3
Total consumer	20,392	7.1	13,502	8.7
Total allowance for loan losses	458,655	100.0 %	359,202	100.0 %
Allowance for unfunded credit commitments	24,600		16,500	
Total allowance for credit losses for loans	\$ 483,255		\$ 375,702	

The allowance for credit losses for loans, comprised of our allowance for loan losses and unfunded credit commitments (including letters of credit), as a percentage of total loans was 1.03 percent at December 31, 2022 and 1.10 percent at December 31, 2021. The allowance for credit losses for loans increased \$107.6 million at December 31, 2022 as compared to December 31, 2021 due, in large part, to (i) a net \$70.3 million allowance for credit losses for PCD loans acquired from Bank Leumi USA recorded at the acquisition date, (ii) higher provision for credit losses for loans during 2022, and (iii) overall, an increased economic forecast reserve component of our CECL model (driven by a more pessimistic outlook incorporated into the updated Moody's scenarios), partially offset by (iv) net charge-offs and (v) a decline in expected quantitative loss experience largely within certain segments of the commercial real estate portfolio.

The provision for credit losses for loans totaled \$56.3 million and \$32.9 million at December 31, 2022 and 2021, respectively. The increase in 2022 provision was primarily due to a \$36.3 million and \$4.7 million of provision related to non-PCD loans and unfunded credit commitments, respectively, acquired from Bank Leumi USA.

See Note 5 to the consolidated financial statements for additional information regarding our allowance for credit losses for loans.

Loan Repurchase Contingencies

We engage in the origination of residential mortgages for sale into the secondary market. Our loan sales totaled approximately \$385.5 million, \$1.2 billion and \$1.0 billion for 2022, 2021 and 2020, respectively. The level of loan sales is impacted by several factors, including consumer demand and preferences for certain mortgage products and our management of the interest rate risk and the mix of the interest earning assets on our balance sheet. During 2021 and 2020, loan sales were significantly higher than 2022, as new and refinanced loan originations were heavily supported by the favorably low interest rate environment.

In connection with loan sales, we make representations and warranties, which, if breached, may require us to repurchase such loans, substitute other loans or indemnify the purchasers of such loans for actual losses incurred due to such loans. However, the performance of our loans sold has been historically strong due to our strict underwriting standards and procedures. Over the past several years, we have experienced a nominal amount of repurchase requests, only a few of which have actually resulted in repurchases by Valley (only nine loan repurchases in 2022 and five loan repurchases in 2021). None of the loan repurchases resulted in material loss. Accordingly, no reserves pertaining to loans sold were established on our consolidated financial statements at December 31, 2022 and 2021. See Item 1A. Risk Factors - "We may incur future losses in connection with repurchases and indemnification payments related to mortgages that we have sold into the secondary market" of this report for additional information.

Capital Adequacy

A significant measure of the strength of a financial institution is its shareholders' equity. At December 31, 2022 and 2021, shareholders' equity totaled approximately \$6.4 billion and \$5.1 billion, or 11.1 percent and 11.7 percent of total assets, respectively. During 2022, total shareholders' equity increased by \$1.3 billion primarily due to (i) net income of \$568.9 million,

(ii) the additional capital issued in the Bank Leumi USA acquisition totaling \$1.1 billion, (iii) an \$18.3 million increase attributable to the effect of share issuances under our stock incentive plan. These positive changes were partially offset by (i) cash dividends declared on common and preferred stock totaling a combined \$228.7 million (ii) a net loss of \$146.1 million recorded in accumulated comprehensive loss and (ii) repurchases of \$13.5 million of our common stock with these shares held as treasury stock.

Valley and Valley National Bank are subject to the regulatory capital requirements administered by the Federal Reserve Bank and the OCC. Quantitative measures established by regulation to ensure capital adequacy require Valley and Valley National Bank to maintain minimum amounts and ratios of common equity Tier 1 capital, total and Tier 1 capital to risk-weighted assets, and Tier 1 capital to average assets, as defined in the regulations.

We are required to maintain common equity Tier 1 capital to risk-weighted assets ratio of 4.5 percent, Tier 1 capital to risk-weighted assets of 6.0 percent, ratio of total capital to risk-weighted assets of 8.0 percent, and minimum leverage ratio of 4.0 percent, plus a 2.5 percent capital conservation buffer added to the minimum requirements for capital adequacy purposes. As of December 31, 2022 and 2021, Valley and Valley National Bank exceeded all capital adequacy requirements. See Note 17 to the consolidated financial statements for Valley's and Valley National Bank's regulatory capital positions and capital ratios at December 31, 2022 and 2021.

For regulatory capital purposes, in accordance with the Federal Reserve Board's final interim rule as of April 3, 2020, we deferred 100 percent of the CECL Day 1 impact to shareholders' equity plus 25 percent of the reserve build (i.e., provision for credit losses less net charge-offs) for a two-year period ending January 1, 2022. On January 1, 2022, the deferral amount totaling \$47.3 million after-tax started to be phased-in by 25 percent and will increase 25 percent per year until fully phased-in on January 1, 2025. As of December 31, 2022, approximately \$11.8 million of the \$47.3 million deferral amount was recognized as a reduction to regulatory capital and, as a result, decreased our risk-based capital ratios by approximately 3 basis points.

Typically, our primary source of capital growth is through retention of earnings. Our rate of earnings retention is derived by dividing undistributed earnings per common share by earnings (or net income available to common shareholders) per common share. Our retention ratio was 61.4 percent and 60.7 percent for the years ended December 31, 2022 and 2021, respectively.

Cash dividends declared amounted to \$0.44 per common share for both years ended December 31, 2022 and 2021. The Board is committed to examining and weighing relevant facts and considerations, including its commitment to shareholder value, each time it makes a cash dividend decision. The Federal Reserve has cautioned all bank holding companies about distributing dividends which may reduce the level of capital or not allow capital to grow considering the increased capital levels as required under the Basel III rules. Prior to the date of this filing, Valley has received no objection or adverse guidance from the FRB or the OCC regarding the current level of its quarterly common stock dividend. However, the FRB has reiterated its long-standing guidance that banking organizations should consult them before declaring dividends in excess of earnings for the corresponding quarter. The renewed guidance was largely due to the increased risk of the COVID-19 pandemic negatively impacting the future level of bank earnings. See Item 1A. Risk Factors of this report for additional information.

Valley maintains an effective shelf registration statement with the SEC that allows us to periodically offer and sell in one or more offerings, individually or in any combination, our common stock, preferred stock and other non-equity securities. The shelf registration statement provides Valley with capital raising flexibility and enables Valley to promptly access the capital markets in order to pursue growth opportunities that may become available in the future and permits Valley to comply with any changes in the regulatory environment that call for increased capital requirements. Valley's ability, and any decision to issue and sell securities pursuant to the shelf registration statement, is subject to market conditions and Valley's capital needs at such time. Additional equity offerings may dilute the holdings of our existing shareholders or reduce the market price of our common stock, or both. Such offerings may be necessary in the future due to several reasons beyond management's control, including numerous external factors that could negatively impact the strength of the U.S. economy or our ability to maintain or increase the level of our net income. See Note 18 to the consolidated financial statements for additional information on Valley's preferred stock issuances.

Item 7A. *Quantitative and Qualitative Disclosures About Market Risk*

Information regarding Quantitative and Qualitative Disclosures About Market Risk is discussed in the "Interest Rate Sensitivity" section contained in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations and it is incorporated herein by reference.

Item 8. Financial Statements and Supplementary Data

VALLEY NATIONAL BANCORP
CONSOLIDATED STATEMENTS OF FINANCIAL CONDITION

	December 31,	
	2022	2021
	(in thousands except for share data)	
Assets		
Cash and due from banks	\$ 444,325	\$ 205,156
Interest bearing deposits with banks	503,622	1,844,764
Investment securities:		
Equity securities	48,731	36,473
Trading debt securities	13,438	38,130
Available for sale debt securities	1,261,397	1,128,809
Held to maturity debt securities (net of allowance for credit losses of \$1,646 at December 31, 2022 and \$1,165 at December 31, 2021)	3,827,338	2,667,532
Total investment securities	5,150,904	3,870,944
Loans held for sale, at fair value	18,118	139,516
Loans	46,917,200	34,153,657
Less: Allowance for loan losses	(458,655)	(359,202)
Net loans	46,458,545	33,794,455
Premises and equipment, net	358,556	326,306
Lease right of use assets	306,352	259,117
Bank owned life insurance	717,177	566,770
Accrued interest receivable	196,606	96,882
Goodwill	1,868,936	1,459,008
Other intangible assets, net	197,456	70,386
Other assets	1,242,152	813,139
Total Assets	\$ 57,462,749	\$ 43,446,443
Liabilities		
Deposits:		
Non-interest bearing	\$ 14,463,645	\$ 11,675,748
Interest bearing:		
Savings, NOW and money market	23,616,812	20,269,620
Time	9,556,457	3,687,044
Total deposits	47,636,914	35,632,412
Short-term borrowings	138,729	655,726
Long-term borrowings	1,543,058	1,423,676
Junior subordinated debentures issued to capital trusts	56,760	56,413
Lease liabilities	358,884	283,106
Accrued expenses and other liabilities	1,327,602	311,044
Total Liabilities	51,061,947	38,362,377
Shareholders' Equity		
Preferred stock, no par value; authorized 50,000,000 shares:		
Series A (4,600,000 shares issued at December 31, 2022 and December 31, 2021)	111,590	111,590
Series B (4,000,000 shares issued at December 31, 2022 and December 31, 2021)	98,101	98,101
Common stock (no par value, authorized 650,000,000 shares; issued 507,896,910 shares at December 31, 2022 and 423,034,027 shares at December 31, 2021)	178,185	148,482
Surplus	4,980,231	3,883,035
Retained earnings	1,218,445	883,645
Accumulated other comprehensive loss	(164,002)	(17,932)
Treasury stock, at cost (1,522,432 common shares at December 31, 2022 and 1,596,959 common shares at December 31, 2021)	(21,748)	(22,855)
Total Shareholders' Equity	6,400,802	5,084,066
Total Liabilities and Shareholders' Equity	\$ 57,462,749	\$ 43,446,443

See accompanying notes to consolidated financial statements.

VALLEY NATIONAL BANCORP
CONSOLIDATED STATEMENTS OF INCOME

	Years Ended December 31,		
	2022	2021	2020
	(in thousands, except for share data)		
Interest Income			
Interest and fees on loans	\$ 1,828,477	\$ 1,257,389	\$ 1,284,707
Interest and dividends on investment securities:			
Taxable	105,716	56,026	70,249
Tax-exempt	17,958	11,716	14,563
Dividends	11,468	7,357	11,644
Interest on federal funds sold and other short-term investments	13,064	1,738	2,556
Total interest income	1,976,683	1,334,226	1,383,719
Interest Expense			
Interest on deposits:			
Savings, NOW and money market	186,709	42,879	76,169
Time	69,691	25,094	106,067
Interest on short-term borrowings	17,453	5,374	11,372
Interest on long-term borrowings and junior subordinated debentures	47,190	50,978	71,207
Total interest expense	321,043	124,325	264,815
Net Interest Income	1,655,640	1,209,901	1,118,904
Provision (credit) for credit losses for held to maturity securities	481	(263)	635
Provision for credit losses for loans	56,336	32,896	125,087
Net Interest Income After Provision for Credit Losses	1,598,823	1,177,268	993,182
Non-Interest Income			
Wealth management and trust fees	34,709	14,910	12,415
Insurance commissions	11,975	7,810	7,398
Capital markets	52,362	27,377	58,962
Service charges on deposit accounts	36,930	21,424	18,257
(Losses) gains on securities transactions, net	(1,230)	1,758	524
Fees from loan servicing	11,273	11,651	10,352
Gains on sales of loans, net	6,418	26,669	42,251
Bank owned life insurance	8,040	8,817	10,083
Other	46,316	34,597	22,790
Total non-interest income	206,793	155,013	183,032
Non-Interest Expense			
Salary and employee benefits expense	526,737	375,865	333,221
Net occupancy expense	94,352	79,355	81,538
Technology, furniture and equipment expense	161,752	89,221	76,889
FDIC insurance assessment	22,836	14,183	18,949
Amortization of other intangible assets	37,825	21,827	24,645
Professional and legal fees	82,618	38,432	32,348
Loss on extinguishment of debt	—	8,406	12,036
Amortization of tax credit investments	12,407	10,910	13,335
Other	86,422	53,343	53,187
Total non-interest expense	1,024,949	691,542	646,148
Income Before Income Taxes	780,667	640,739	530,066
Income tax expense	211,816	166,899	139,460
Net Income	568,851	473,840	390,606
Dividends on preferred stock	13,146	12,688	12,688
Net Income Available to Common Shareholders	\$ 555,705	\$ 461,152	\$ 377,918
Earnings Per Common Share:			
Basic	\$ 1.14	\$ 1.13	\$ 0.94
Diluted	1.14	1.12	0.93

See accompanying notes to consolidated financial statements.

VALLEY NATIONAL BANCORP
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Years Ended December 31,		
	2022	2021	2020
	(in thousands)		
Net income	\$ 568,851	\$ 473,840	\$ 390,606
Other comprehensive (loss) income, net of tax:			
Unrealized gains and losses on debt securities available for sale			
Net (losses) gains arising during the period	(136,981)	(23,613)	27,845
Less reclassification adjustment for net gains included in net income	(23)	(491)	(377)
Total	(137,004)	(24,104)	27,468
Unrealized gains and losses on derivatives (cash flow hedges)			
Net gains (losses) on derivatives arising during the period	3,362	127	(2,251)
Less reclassification adjustment for net losses included in net income	203	2,447	2,074
Total	3,565	2,574	(177)
Defined benefit pension and postretirement benefit plans			
Net (losses) gains arising during the period	(13,175)	10,306	(3,418)
Amortization of prior service credit	(100)	(96)	(98)
Amortization of actuarial net loss	644	1,106	721
Total	(12,631)	11,316	(2,795)
Total other comprehensive (loss) income	(146,070)	(10,214)	24,496
Total comprehensive income	\$ 422,781	\$ 463,626	\$ 415,102

See accompanying notes to consolidated financial statements.

VALLEY NATIONAL BANCORP
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

	Common Stock				Accumulated			
	Preferred Stock	Shares	Amount	Surplus	Retained Earnings	Other Comprehensive Loss	Treasury Stock	Total Shareholders' Equity
	(\$ in thousands)							
Balance - December 31, 2019	\$ 209,691	403,278	\$ 141,423	\$ 3,622,208	\$ 443,559	\$ (32,214)	\$ (479)	\$ 4,384,188
Adjustment due to the adoption of ASU No. 2016-13	—	—	—	—	(28,187)	—	—	(28,187)
Balance - January 1, 2020	209,691	403,278	141,423	3,622,208	415,372	(32,214)	(479)	4,356,001
Net income	—	—	—	—	390,606	—	—	390,606
Other comprehensive income, net of tax	—	—	—	—	—	24,496	—	24,496
Cash dividends declared:								
Preferred stock, Series A, \$1.56 per share	—	—	—	—	(7,188)	—	—	(7,188)
Preferred stock, Series B, \$1.38 per share	—	—	—	—	(5,500)	—	—	(5,500)
Common Stock, \$0.44 per share	—	—	—	—	(179,277)	—	—	(179,277)
Effect of stock incentive plan, net	—	581	323	15,260	(2,855)	—	254	12,982
Balance - December 31, 2020	209,691	403,859	141,746	3,637,468	611,158	(7,718)	(225)	4,592,120
Net income	—	—	—	—	473,840	—	—	473,840
Other comprehensive loss, net of tax	—	—	—	—	—	(10,214)	—	(10,214)
Cash dividends declared:								
Preferred stock, Series A, \$1.56 per share	—	—	—	—	(7,188)	—	—	(7,188)
Preferred stock, Series B, \$1.38 per share	—	—	—	—	(5,500)	—	—	(5,500)
Common Stock, \$0.44 per share	—	—	—	—	(182,370)	—	—	(182,370)
Effect of stock incentive plan, net	—	3,484	1,238	39,931	(6,295)	—	484	35,358
Common stock issued in acquisition	—	15,709	5,498	205,636	—	—	—	211,134
Purchase of treasury stock	—	(1,615)	—	—	—	—	(23,114)	(23,114)
Balance - December 31, 2021	209,691	421,437	148,482	3,883,035	883,645	(17,932)	(22,855)	5,084,066
Net income	—	—	—	—	568,851	—	—	568,851
Other comprehensive loss, net of tax	—	—	—	—	—	(146,070)	—	(146,070)
Cash dividends declared:								
Preferred stock, Series A, \$1.56 per share	—	—	—	—	(7,188)	—	—	(7,188)
Preferred stock, Series B, \$1.49 per share	—	—	—	—	(5,958)	—	—	(5,958)
Common Stock, \$0.44 per share	—	—	—	—	(215,513)	—	—	(215,513)
Effect of stock incentive plan, net	—	1,089	1	9,069	(5,392)	—	14,624	18,302
Common stock issued in acquisition	—	84,863	29,702	1,088,127	—	—	—	1,117,829
Purchase of treasury stock	—	(1,015)	—	—	—	—	(13,517)	(13,517)
Balance - December 31, 2022	\$ 209,691	506,374	\$ 178,185	\$ 4,980,231	\$ 1,218,445	\$ (164,002)	\$ (21,748)	\$ 6,400,802

See accompanying notes to consolidated financial statements.

VALLEY NATIONAL BANCORP
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2022	2021	2020
	(in thousands)		
Cash flows from operating activities:			
Net income	\$ 568,851	\$ 473,840	\$ 390,606
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	72,709	54,934	57,615
Stock-based compensation	28,788	20,887	16,154
Provision for credit losses	56,817	32,633	125,722
Net amortization of premiums and accretion of discounts on securities and borrowings	10,653	30,251	38,315
Amortization of other intangible assets	37,825	21,827	24,645
Losses (gains) on securities transactions, net	1,230	(1,758)	(524)
Proceeds from sales of loans held for sale	389,666	1,180,912	1,019,841
Gains on sales of loans, net	(6,418)	(26,669)	(42,251)
Originations of loans held for sale	(267,158)	(1,003,818)	(1,211,227)
(Gains) losses on sales of assets, net	(897)	(901)	1,891
Loss on extinguishment of debt	—	8,406	12,036
Net deferred income tax expense (benefit)	7,485	26,827	(5,060)
Net change in:			
Fair value of borrowings hedged by derivative transactions	(28,907)	(3,397)	—
Trading debt securities	24,692	(38,130)	—
Cash surrender value of bank owned life insurance	(8,040)	(8,817)	(10,083)
Accrued interest receivable	(74,007)	11,527	(593)
Other assets	(259,690)	122,241	(311,760)
Accrued expenses and other liabilities	874,880	(63,653)	58,234
Net cash provided by operating activities	<u>1,428,479</u>	<u>837,142</u>	<u>163,561</u>
Cash flows from investing activities:			
Net loan originations and purchases	(6,868,735)	(1,036,949)	(2,490,937)
Equity securities:			
Purchases	(11,209)	(4,051)	(8,337)
Sales	3,118	2,233	28,439
Held to maturity debt securities:			
Purchases	(838,569)	(1,311,973)	(682,509)
Maturities, calls and principal repayments	475,327	802,167	824,477
Available for sale debt securities:			
Purchases	(54,618)	(387,210)	(333,971)
Sales	12,846	91,978	30,020
Maturities, calls and principal repayments	225,942	462,273	555,589
Death benefit proceeds from bank owned life insurance	4,680	5,128	15,043
Proceeds from sales of real estate property and equipment	10,832	8,935	19,111
Proceeds from sales of loans held for investments	—	4,498	30,020
Purchases of real estate property and equipment	(68,935)	(39,428)	(24,607)
Cash and cash equivalents acquired in acquisitions, net	321,540	321,618	—
Net cash used in investing activities	<u>\$ (6,787,781)</u>	<u>\$ (1,080,781)</u>	<u>\$ (2,037,662)</u>

VALLEY NATIONAL BANCORP
CONSOLIDATED STATEMENTS OF CASH FLOWS—(Continued)

	Years Ended December 31,		
	2022	2021	2020
	(in thousands)		
Cash flows from financing activities:			
Net change in deposits	\$ 4,974,505	\$ 2,534,826	\$ 2,749,765
Net change in short-term borrowings	(620,791)	(492,232)	54,678
Proceeds from issuance of long-term borrowings, net	147,508	295,922	838,388
Repayments of long-term borrowings	—	(1,168,465)	(679,775)
Cash dividends paid to preferred shareholders	(13,146)	(12,688)	(12,688)
Cash dividends paid to common shareholders	(205,999)	(179,667)	(177,965)
Purchase of common shares to treasury	(24,123)	(23,907)	(5,374)
Common stock issued, net	120	11,245	2,202
Other, net	(745)	(680)	(612)
Net cash provided by financing activities	4,257,329	964,354	2,768,619
Net change in cash and cash equivalents	(1,101,973)	720,715	894,518
Cash and cash equivalents at beginning of year	2,049,920	1,329,205	434,687
Cash and cash equivalents at end of year	\$ 947,947	\$ 2,049,920	\$ 1,329,205
Supplemental disclosures of cash flow information:			
Cash payments for:			
Interest on deposits and borrowings	\$ 281,137	\$ 138,364	\$ 279,042
Federal and state income taxes	172,102	163,370	148,383
Supplemental schedule of non-cash investing activities:			
Transfer of loans to other real estate owned	\$ —	\$ 141	\$ 4,040
Loans transferred to loans held for sale	—	—	30,020
Lease right of use assets obtained in exchange for operating lease liabilities	32,604	48,453	16,062
Acquisitions:			
Non-cash assets acquired:			
Equity securities	\$ 6,239	\$ —	\$ —
Available for sale debt securities	505,928	—	—
Held to maturity debt securities	806,627	9,197	—
Loans, net	5,844,070	908,023	—
Premises and equipment	38,827	1,356	—
Lease right of use assets	49,434	6,745	—
Bank owned life insurance	126,861	28,756	—
Accrued interest receivable	25,717	2,179	—
Goodwill	409,928	76,566	—
Other intangible assets	159,587	10,277	—
Other assets	155,945	23,093	—
Total non-cash assets acquired	\$ 8,129,163	\$ 1,066,192	\$ —
Liabilities assumed:			
Deposits	\$ 7,029,997	\$ 1,161,984	\$ —
Short-term borrowings	103,794	—	—
Lease liabilities	79,844	—	—
Accrued expenses and other liabilities	119,240	14,692	—
Total liabilities assumed	\$ 7,332,875	\$ 1,176,676	\$ —
Net (liabilities assumed) non-cash assets acquired	\$ 796,288	\$ (110,484)	\$ —
Cash and cash equivalents acquired in acquisitions, net	\$ 321,540	\$ 321,618	\$ —
Common stock issued in acquisition	\$ 1,117,829	\$ 211,134	\$ —

See accompanying notes to consolidated financial statements.

VALLEY NATIONAL BANCORP
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Note 1)

Business

Valley National Bancorp, a New Jersey Corporation (Valley), is a financial holding company whose commercial bank subsidiary, Valley National Bank (the Bank) and its subsidiaries provide a full range of commercial, retail and trust and investment services largely through its offices and ATM network throughout northern and central New Jersey, the New York City boroughs of Manhattan, Brooklyn and Queens, Long Island, Westchester County, New York, Florida, Alabama, California and Illinois.

In addition to the Bank, Valley's consolidated subsidiaries include, but are not limited to: an insurance agency offering property and casualty, life and health insurance; an asset management adviser that is a registered investment adviser with the Securities and Exchange Commission (SEC); registered securities broker-dealers with the SEC and members of the Financial Industry Regulatory Authority (FINRA); a title insurance agency in New York, which also provides services in New Jersey; an advisory firm specializing in the investment and management of tax credits; and a subsidiary which specializes in health care equipment lending and other commercial equipment leases.

Basis of Presentation

The consolidated financial statements of Valley include the accounts of the Bank and all other entities in which Valley has a controlling financial interest. All inter-company transactions and balances have been eliminated. The accounting and reporting policies of Valley conform to U.S. generally accepted accounting principles (U.S. GAAP) and general practices within the financial services industry. In accordance with applicable accounting standards, Valley does not consolidate statutory trusts established for the sole purpose of issuing trust preferred securities and related trust common securities. See Note 11 for more details. Certain prior period amounts have been reclassified to conform to the current presentation, including changes to our operating segment reporting structure, as further discussed in Note 8 and Note 21.

In the opinion of management, all adjustments (which include only normal recurring adjustments) necessary to present fairly Valley's financial position, results of operations, changes in shareholders' equity and cash flows at December 31, 2022 and for all periods presented have been made.

Significant Estimates. In preparing the consolidated financial statements in conformity with U.S. GAAP, management has made estimates and assumptions that affect the reported amounts of assets and liabilities as of the date of the consolidated statements of financial condition and results of operations for the periods indicated. Material estimates that require application of management's most difficult, subjective or complex judgment and are particularly susceptible to change include: the allowance for credit losses, the evaluation of goodwill and other intangible assets for impairment, and income taxes. Estimates and assumptions are reviewed periodically, and the effects of revisions are reflected in the consolidated financial statements in the period they are deemed necessary. While management uses its best judgment, actual amounts or results could differ significantly from those estimates. The current economic environment has increased the degree of uncertainty inherent in these material estimates. Actual results may differ from those estimates. Also, future amounts and values could differ materially from those estimates due to changes in values and circumstances after the balance sheet date.

Cash and Cash Equivalents

For purposes of reporting cash flows, cash and cash equivalents include cash on hand, amounts due from banks, interest bearing deposits in other banks (including the Federal Reserve Bank of New York) and, from time to time, overnight federal funds sold. Federal funds sold essentially represents an uncollateralized loan. Therefore, Valley regularly evaluates the credit risk associated with the other financial institutions to ensure that the Bank does not become exposed to any significant credit risk on these cash equivalents.

Investment Securities

Debt securities are classified at the time of purchase based on management's intention, as securities held-to-maturity, securities available-for-sale or trading securities. Investment securities classified as held-to-maturity are those that management has the positive intent and ability to hold until maturity. Investment securities held-to-maturity are carried at amortized cost, adjusted for amortization of premiums and accretion of discounts using the level-yield method over the contractual term of the securities, adjusted for actual prepayments, or to call date if the security was purchased at premium. Investment securities classified as available-for-sale are carried at fair value with unrealized holding gains and losses reported as a component of

other comprehensive income or loss, net of tax. Realized gains or losses on the available-for-sale securities are recognized by the specific identification method and are included in net gains and losses on securities transactions within non-interest income.

Trading debt securities, consisting of municipal bonds and U.S. Treasury securities, are reported at fair value with the unrealized gains or losses due to changes in fair value reported within non-interest income. Net trading gains and losses are included in net gains and losses on securities transactions within non-interest income.

Equity securities are presented on the statements of financial condition at fair value with any unrealized and realized gains and losses reported in non-interest income. See Notes 3 and 4 for additional information.

Investments in Federal Home Loan Bank and Federal Reserve Bank stock, which have limited marketability, are carried at cost in other assets. Security transactions are recorded on a trade-date basis.

Interest income on investments includes amortization of purchase premiums and discounts. Valley discontinues the recognition of interest on debt securities if the securities meet both of the following criteria: (i) regularly scheduled interest payments have not been paid or have been deferred by the issuer, and (ii) full collection of all contractual principal and interest payments is not deemed to be the most likely outcome.

Allowance for Credit Losses for Held to Maturity Debt Securities

Effective January 1, 2020, Valley estimates and recognizes an allowance for credit losses for held to maturity debt securities using the current expected credit loss methodology (CECL). Valley's CECL model includes a zero loss expectation for certain securities within the held to maturity portfolio, and therefore Valley is not required to estimate an allowance for credit losses related to these securities. After an evaluation of qualitative factors, Valley identified the following securities types which it believes qualify for this exclusion: U.S. Treasury securities, U.S. agency securities, residential mortgage-backed securities issued by Ginnie Mae, Fannie Mae and Freddie Mac, and collateralized municipal bonds commonly referred to as Tax Exempt Mortgage Securities (TEMS).

To measure the expected credit losses on held to maturity debt securities that have loss expectations, Valley estimates the expected credit losses using a discounted cash flow model developed by a third-party. Assumptions used in the model for pools of securities with common risk characteristics include the historical lifetime probability of default and severity of loss in the event of default, with the model incorporating several economic cycles of loss history data to calculate expected credit losses given default at the individual security level. The model is adjusted for a probability weighted multi-scenario economic forecast to estimate future credit losses. Valley uses a two-year reasonable and supportable forecast period, followed by a one-year period over which estimated losses revert to historical loss experience for the remaining life of the investment security. The economic forecast methodology and governance for debt securities is aligned with Valley's economic forecast used for the loan portfolio. Accrued interest receivable is excluded from the estimate of credit losses. See Note 4 for additional information.

Impairment of Available for Sale Debt Securities

The impairment model for available for sale debt securities differs from the CECL methodology applied to held to maturity debt securities because the available for sale debt securities are measured at fair value rather than amortized cost. Available for sale debt securities in unrealized loss positions are evaluated for impairment related to credit losses on a quarterly basis. In performing an assessment of whether any decline in fair value is due to a credit loss, Valley considers the extent to which the fair value is less than the amortized cost, changes in credit ratings, any adverse economic conditions, as well as all relevant information at the individual security level, such as credit deterioration of the issuer or collateral underlying the security. In assessing the impairment, Valley compares the present value of cash flows expected to be collected with the amortized cost basis of the security. If it is determined that the decline in fair value was due to credit losses, an allowance for credit losses is recorded, limited to the amount the fair value is less than amortized cost basis. The non-credit related decrease in the fair value, such as a decline due to changes in market interest rates, is recorded in other comprehensive income, net of tax. Valley also assesses the intent to sell the securities (as well as the likelihood of a near-term recovery). If Valley intends to sell an available for sale debt security or it is more likely than not that Valley will be required to sell the security before recovery of its amortized cost basis, the debt security is written down to its fair value and the write down is charged to the debt security's fair value at the reporting date with any incremental impairment reported in earnings. See Note 4 for additional information.

Loans Held for Sale

Loans held for sale generally consist of residential mortgage loans originated and intended for sale in the secondary market and are carried at their estimated fair value on an instrument-by-instrument basis as permitted by the fair value option election under U.S. GAAP. Changes in fair value are recognized in non-interest income in the accompanying consolidated statements of income as a component of net gains on sales of loans. Origination fees and costs related to loans originated for

sale (and carried at fair value) are recognized as earned and as incurred. Loans held for sale are generally sold with loan servicing rights retained by Valley. Gains recognized on loan sales include the value assigned to the rights to service the loan. See the “Loan Servicing Rights” section below.

Loans and Loan Fees

Loans are reported at their outstanding principal balance net of any unearned income, charge-offs, unamortized deferred fees and costs on originated loans and premium or discounts on purchased loans, except for purchased credit deteriorated (PCD) loans recorded at the purchase price, including non-credit discounts, plus the allowance for credit losses expected at the time of acquisition. Loan origination and commitment fees, net of related costs are deferred and amortized as an adjustment of loan yield over the estimated life of the loans approximating the effective interest method.

Loans are deemed to be past due when the contractually required principal and interest payments have not been received as they become due. Loans are placed on non-accrual status generally, when they become 90 days past due and the full and timely collection of principal and interest becomes uncertain. When a loan is placed on non-accrual status, interest accruals cease and uncollected accrued interest is reversed and charged against current income. Cash collections from non-accrual loans are generally credited to the loan balance, and no interest income is recognized on these loans until the principal balance has been determined to be fully collectible. A loan in which the borrowers’ obligation has not been released in bankruptcy courts may be restored to an accruing basis when it becomes well secured and is in the process of collection, or all past due amounts become current under the loan agreement and collectability is no longer doubtful.

Purchased Credit-Deteriorated Loans

Loans classified as purchased credit-deteriorated (PCD) loans are acquired loans, mainly through bank acquisitions, where there is evidence of more than insignificant credit deterioration since their origination. We consider various factors in connection with this determination, including past due or non-accrual status, credit risk rating declines, and any write downs recorded based on the collectability of the asset, among other factors. PCD loans are recorded at their purchase price plus an allowance estimated at the time of acquisition, which represents the amortized cost basis of the asset. The difference between this amortized cost basis and the par value of the loan is the non-credit discount or premium, which is amortized into interest income over the life of the loan. Subsequent increases and decreases in the allowance for credit losses related to purchased loans is recorded as provision expense.

Allowance for Credit Losses for Loans

Effective January 1, 2020, Valley uses the CECL methodology to estimate an allowance for credit losses for loans. The allowance for credit losses (ACL) is a valuation account that is deducted from the amortized cost basis to present the net amount expected to be collected on the loans. Loans are charged off against the allowance when management believes the uncollectibility of a loan balance is confirmed. Provisions for credit losses for loans and recoveries on loan previously charged-off by Valley are added back to the allowance.

Under CECL, Valley’s methodology to establish the allowance for credit losses for loans has two basic components: (1) a collective reserve component for estimated lifetime expected credit losses for pools of loans that share common risk characteristics and (2) an individual reserve component for loans that do not share common risk characteristics.

Reserves for loans that share common risk characteristics. Valley estimated the collective ACL using a current expected credit losses methodology which is based on relevant information about historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the loan balances. In estimating the component of the allowance on a collective basis, Valley uses a transition matrix model which calculates an expected life of loan loss percentage for each loan pool by generating probability of default and loss given default metrics. The metrics are based on the migration of loans from performing to loss by credit quality rating or delinquency categories using historical life-of-loan analysis periods for each loan portfolio pool, and the severity of loss, based on the aggregate net lifetime losses. The model’s expected losses based on loss history are adjusted for qualitative factors. Among other things, these adjustments include and account for differences in: (i) the impact of the reasonable and supportable economic forecast, probability weightings and reversion period, (ii) other asset specific risks to the extent they do not exist in the historical loss information, and (iii) net expected recoveries of charged off loan balances. These adjustments are based on qualitative factors not reflected in the quantitative model but are likely to impact the measurement of estimated credit losses. The expected lifetime loss rate is the life of loan loss percentage from the transition matrix model plus the impact of the adjustments for qualitative factors. The expected credit losses are the product of multiplying the model’s expected lifetime loss rate by the exposure at default at period end on an undiscounted basis.

Valley utilizes a two-year reasonable and supportable forecast period followed by a one-year period over which estimated losses revert to historical loss experience for the remaining life of the loan on a straight-line basis. The forecasts consist of a

multi-scenario economic forecast model to estimate future credit losses that is governed by a cross-functional committee. The committee meets each quarter to determine which economic scenarios developed by Moody's will be incorporated into the model, as well as the relative probability weightings of the selected scenarios, based upon all readily available information. The model projects economic variables under each scenario based on detailed statistical analyses. Valley has identified and selected key variables that most closely correlated to its historical credit performance, which include: GDP, unemployment and the Case-Shiller Home Price Index.

The loan credit quality data utilized in the transition matrix model is based on an internal credit risk rating system for the commercial and industrial loan and commercial real estate loan portfolio segments and delinquency aging status for the residential and consumer loan portfolio segments. Loans are risk-rated based on an internal credit risk grading process that evaluates, among other things: (i) the obligor's ability to repay; (ii) the underlying collateral, if any; and (iii) the economic environment and industry in which the borrower operates. This analysis is performed at the relationship manager level for all commercial and industrial loans and commercial real estate loans, and evaluated by the Loan Review Department on a test basis. Loans with a grade that are below a "Pass" grade are adversely classified. Once a loan becomes adversely classified, it automatically transitions from the "Pass" segment of the model to the corresponding adversely rated pool segment. Within the transition matrix model, each adverse classification or segment (Special Mention, Substandard, Doubtful, and Loss) has its own lifetime expected credit loss rate derived from loan-level historical transitions between the different loan risk ratings categories.

Reserves for loans that do not share common risk characteristics. Valley measures specific reserves for individual loans that do not share common risk characteristics with other loans, consisting of collateral dependent, troubled debt restructured (TDR) loans, and expected TDR loans, based on the amount of lifetime expected credit losses calculated on those loans and charge-offs of those amounts determined to be uncollectible. Factors considered by Valley in measuring the extent of expected credit loss include payment status, collateral value, borrower financial condition, guarantor support and the probability of collecting scheduled principal and interest payments when due. Collateral dependent loan balances are written down to the estimated current fair value (less estimated selling costs) of each loan's underlying collateral resulting in an immediate charge-off to the allowance, excluding any consideration for personal guarantees that may be pursued in the Bank's collection process. If repayment is based upon future expected cash flows, the present value of the expected future cash flows discounted at the loan's original effective interest rate is compared to the carrying value of the loan, and any shortfall is recorded as the allowance for credit losses. The effective interest rate used to discount expected cash flows is adjusted to incorporate expected prepayments, if applicable.

Valley elected to exclude accrued interest on loans from the amortized cost of loans held for investment. The accrued interest is presented separately in the consolidated statements of financial condition.

Loans charge-offs. Loans rated as "loss" within Valley's internal rating system are charged-off. Commercial loans are generally assessed for full or partial charge-off to the net realizable value for collateral dependent loans when a loan is between 90 or 120 days past due or sooner if it is probable that a loan may not be fully collectable. Residential loans and home equity loans are generally charged-off to net realizable value when the loan is 120 days past due (or sooner when the borrowers' obligation has been released in bankruptcy). Automobile loans are fully charged-off when the loan is 120 days past due or partially charged-off to the net realizable value of collateral, if the collateral is recovered prior to such time. Unsecured consumer loans are generally fully charged-off when the loan is 150 days past due.

Allowance for Unfunded Credit Commitments

The allowance for unfunded credit commitments consists of undisbursed non-cancellable lines of credit, new loan commitments and commercial letters of credit valued using a similar CECL methodology as used for loans. Management's estimate of expected losses inherent in these off-balance sheet credit exposures also incorporates estimated utilization rate over the commitment's contractual period or an expected pull-through rate for new loan commitments. The allowance for unfunded credit commitments is included in accrued expenses and other liabilities on the consolidated statements of financial condition.

See Note 5 for a discussion of Valley's loan credit quality and additional allowance for credit losses.

Leases

Lessor Arrangements. Valley's lessor arrangements primarily consist of direct financing and sales-type leases for equipment included in the commercial and industrial loan portfolio. Direct financing and sales-type leases are carried at the aggregate of lease payments receivable plus estimated residual value of the leased assets, net of unearned income, charge-offs and unamortized deferred costs of origination. Lease agreements may include options to renew and for the lessee to purchase the leased equipment at the end of the lease term.

Lessee Arrangements. Valley's lessee arrangements predominantly consist of operating and finance leases for premises and equipment. The majority of the operating leases include one or more options to renew that can significantly extend the lease terms. Valley's leases have a wide range of lease expirations through the year 2062.

Operating and finance leases are recognized as right of use (ROU) assets and lease liabilities in the consolidated statements of financial position. The ROU assets represent the right to use underlying assets for the lease terms and lease liabilities represent Valley's obligations to make lease payments arising from the lease. The ROU assets include any prepaid lease payments and initial direct costs, less any lease incentives. At the commencement dates of leases, ROU assets and lease liabilities are initially recognized based on their net present values with the lease terms including options to extend or terminate the lease when Valley is reasonably certain that the options will be exercised to extend. ROU assets are amortized into net occupancy and equipment expense over the expected lives of the leases.

Lease liabilities are discounted to their net present values on the balance sheet based on incremental borrowing rates as determined at the lease commencement dates using quoted interest rates for readily available borrowings, such as fixed rate FHLB borrowings, with similar terms as the lease obligations. Lease liabilities are reduced by actual lease payments.

See Note 6 for additional information on Valley's lease related assets and obligations.

Premises and Equipment, Net

Premises and equipment are stated at cost less accumulated depreciation computed using the straight-line method over the estimated useful lives of the related assets. Estimated useful lives range from 3 years for capitalized software to up to 40 years for buildings. Leasehold improvements are amortized over the term of the lease or estimated useful life of the asset, whichever is shorter. Major improvements are capitalized, while repairs and maintenance costs are charged to operations as incurred. Upon retirement or disposition, any gain or loss is credited or charged to operations. See Note 7 for further details.

Bank Owned Life Insurance

Valley owns bank owned life insurance (BOLI) to help offset the cost of employee benefits. BOLI is recorded at its cash surrender value. Valley's BOLI is invested primarily in U.S. Treasury securities and residential mortgage-backed securities issued by government sponsored enterprises and Ginnie Mae. The change in the cash surrender value is included as a component of non-interest income and is exempt from federal and state income taxes as long as the policies are held until the death of the insured individuals.

Other Real Estate Owned

Valley acquires other real estate owned (OREO) through foreclosure on loans secured by real estate. OREO is reported at the lower of cost or fair value, as established by a current appraisal (less estimated costs to sell) and it is included in other assets. Any write-downs at the date of foreclosure are charged to the allowance for loan losses. Expenses incurred to maintain these properties, unrealized losses resulting from valuation write-downs after the date of foreclosure, and realized gains and losses upon sale of the properties are included in other non-interest expense. OREO totaled \$286 thousand and \$2.3 million at December 31, 2022 and 2021, respectively. There were no foreclosed residential real estate properties included in OREO at December 31, 2022 and 2021, respectively.

Residential mortgage and consumer loans secured by residential real estate properties for which formal foreclosure proceedings are in process totaled \$2.6 million and \$2.5 million at December 31, 2022 and 2021, respectively.

Goodwill

Intangible assets resulting from acquisitions under the acquisition method of accounting consist of goodwill and other intangible assets (see "Other Intangible Assets" below). Goodwill represents the excess of the cost of businesses acquired over the fair value of the net assets acquired and is not amortized. The initial recording of goodwill and other intangible assets requires subjective judgments concerning estimates of the fair value of the acquired assets and assumed liabilities. Goodwill is not amortized and is subject, at a minimum, to an annual impairment assessment, or more often, if events or circumstances indicate it may be impaired. An impairment loss is recognized if the carrying value of the net assets assigned to the reporting unit exceeds the fair value of the reporting unit, with the impairment loss not to exceed the amount of goodwill allocated to the unit. Goodwill is allocated to Valley's reporting unit, which is an operating segment or one level below, at the date goodwill is recorded. Under current accounting guidance, Valley may choose to perform an optional qualitative assessment to determine whether it is necessary to perform the quantitative goodwill impairment test for one or more reporting units each annual period.

Valley reviews goodwill for impairment annually during the second quarter using a quantitative test, or more frequently if a triggering event indicates impairment may have occurred. Our determination of whether or not goodwill is impaired requires

us to make judgments, and use significant estimates and assumptions regarding estimated future cash flows. If we change our strategy or if market conditions shift, our judgments may change, which may result in adjustments to the recorded goodwill balance.

During the second quarter 2022, Valley re-evaluated its segment reporting due to a bank acquisition discussed in Note 2 and other factors. Goodwill balances were reallocated across the new operating segments and reporting units based on their relative fair values using the valuation performed during the second quarter 2022. See Notes 8 and 21 for additional details.

Other Intangible Assets

Other intangible assets primarily consist of loan servicing rights (largely generated from loan servicing retained by the Bank on residential mortgage loan originations sold in the secondary market to government sponsored enterprises), core deposits (the portion of an acquisition purchase price which represents value assigned to the existing deposit base) and, to a much lesser extent, various other types of intangibles obtained through acquisitions. Other intangible assets are amortized using various methods over their estimated lives and are periodically evaluated for impairment whenever events or changes in circumstances indicate the carrying amount of the assets may not be recoverable from future undiscounted cash flows. If impairment is deemed to exist, an adjustment is recorded to earnings in the current period for the difference between the fair value of the asset and its carrying amount. See further details regarding loan servicing rights below.

Loan Servicing Rights

Loan servicing rights are recorded when originated mortgage loans are sold with servicing rights retained, or when servicing rights are purchased. Valley initially records the loan servicing rights at fair value. Subsequently, the loan servicing rights are carried at the lower of unamortized cost or market (i.e., fair value). The fair values of the loan servicing rights for each risk-stratified group of loan servicing rights are calculated using a fair value model from a third party vendor that uses various inputs and assumptions, including but not limited to, prepayment speeds, internal rate of return ("discount rate"), servicing cost, ancillary income, float rate, tax rate, and inflation. The prepayment speed and the discount rate are considered two of the most significant inputs in the model.

Unamortized costs associated with acquiring loan servicing rights, net of any valuation allowances, are included in other intangible assets in the consolidated statements of financial condition and are accounted for using the amortization method. Valley amortizes the loan servicing assets in proportion to and over the period of estimated net servicing revenues. On a quarterly basis, Valley stratifies its loan servicing assets into groupings based on risk characteristics and assesses each group for impairment based on fair value. A valuation allowance is established through an impairment charge to earnings to the extent the unamortized cost of a stratified group of loan servicing rights exceeds its estimated fair value. Increases in the fair value of impaired loan servicing rights are recognized as a reduction of the valuation allowance, but not in excess of such allowance. The amortization of loan servicing rights is recorded in non-interest income.

Stock-Based Compensation

Compensation expense for restricted stock units, restricted stock and stock option awards (i.e., non-vested stock awards) is based on the fair value of the award on the date of the grant and is recognized ratably over the service period of the award. Valley's long-term incentive compensation plan includes a service period requirement for award grantees who are eligible for retirement pursuant to which an award will vest at one-twelfth per month after the grant date and requires the grantees to continue service with Valley for one year in order for the award to fully vest. Compensation expense for these awards is amortized monthly over a one year period after the grant date. The service period for non-retirement eligible employees is the shorter of the stated vesting period of the award or the period until the employee's retirement eligibility date. The fair value of each option granted is estimated using a binomial option pricing model. The fair value of restricted stock units and awards is based upon the last sale price reported for Valley's common stock on the date of grant or the last sale price reported preceding such date, except for performance-based stock awards with a market condition. The grant date fair value of a performance-based stock award that vests based on a market condition is determined by a third party specialist using a Monte Carlo valuation model. See Note 12 for additional information.

Business Combinations

Business combinations are accounted for under the acquisition method of accounting. Acquired assets, including separately identifiable intangible assets, and assumed liabilities are recorded at their acquisition-date estimated fair values. The excess of the cost of acquisition over these fair values is recognized as goodwill. During the measurement period, which cannot exceed one year from the acquisition date, changes to estimated fair values are recognized as an adjustment to goodwill. Certain transaction costs are expensed as incurred. See Note 2 for additional information.

Fair Value Measurements

In general, fair values of financial instruments are based upon quoted market prices, where available. When observable market prices and parameters are not fully available, management uses valuation techniques based upon internal and third party models requiring more management judgment to estimate the appropriate fair value measurements. Valuation adjustments may be made to ensure that financial instruments are recorded at fair value, including adjustments based on internal cash flow model projections that utilize assumptions similar to those incorporated by market participants. Other adjustments may include amounts to reflect counterparty credit quality and Valley's creditworthiness, among other things, as well as unobservable parameters. Any such valuation adjustments are applied consistently over time. See Note 3 for additional information.

Revenue From Contracts With Customers

Certain revenues included in Valley's non-interest income relates to fee-based revenue from contracts with customers. Revenue from contracts with customers within the scope of Accounting Standards Codification (ASC) Topic 606 is recognized when performance obligations, under the terms of the contract, are satisfied. This income is measured as the amount of consideration expected to be received in exchange for the providing of services. Contracts with customers can include multiple services, which are accounted for as separate "performance obligations" if they are determined to be distinct.

Valley's revenue contracts generally have a single performance obligation, as the promise to transfer the individual goods or services is not separately identifiable, or distinct from other obligations within the contracts. Valley does not have a material amount of long-term customer agreements that include multiple performance obligations requiring price allocation and differences in the timing of revenue recognition.

The following describes revenue within scope of ASC Topic 606:

Wealth management and trust fees. Wealth management and trust fees include brokerage fees and fees from investment management, investment advisory, trust, custody and other products. Brokerage fees are commissions related to the execution of market trades. Brokerage fee revenue is recognized on trade date, as the performance obligation is satisfied when the trade is executed. Trust and investment management fee income is received for providing wealth management and investment advisory services and is typically calculated based on a percentage of client assets under management and recognized over the term of the investment management agreement as services are provided to the client. Certain investment advisory success fees are earned when the related performance criteria have been satisfied and it is probable that the fees will be earned.

Insurance commissions. Insurance commissions are received on insurance product sales. Valley acts in the capacity of an agent between Valley's customer and the insurance carrier. Valley's performance obligation is satisfied when the terms of the policy have been agreed upon and the insurance policy becomes effective.

Service charges on deposit accounts. Service charges on deposit accounts include maintenance fees, overdraft fees, and other account related charges. Deposit account related fees are typically recognized at the time these services are performed for the customer, or on a monthly basis.

Other income. Revenue within the other category of non-interest income that is within the scope of ASC Topic 606 includes credit card and interchange fees, fees from wire transfers, ACH, and various other products and services income. These fees are either recognized immediately at the transaction date or over the period in which the related service is provided.

Revenue from capital markets transactions (including interest rate swap fees, foreign exchange fees and loan syndication fees), net gains and losses on securities transactions, fees from loan servicing, net gains on sales of loans, bank owned life insurance income, and certain fees within other income are excluded from the scope of ASC Topic 606 and are recognized under other applicable accounting guidance.

Income Taxes

Valley uses the asset and liability method to provide income taxes on all transactions recorded in the consolidated financial statements. This method requires that income taxes reflect the expected future tax consequences of temporary differences between the carrying amounts of assets or liabilities for book and tax purposes. Accordingly, a deferred tax asset or liability for each temporary difference is determined based on the enacted tax rates that will be in effect when the underlying items of income and expense are expected to be realized.

Valley's expense for income taxes includes the current and deferred portions of that expense. Deferred tax assets are recognized if, in management's judgment, their realizability is determined to be more likely than not. A valuation allowance is established to reduce deferred tax assets to the amount we expect to realize. Deferred income tax expense or benefit results from

differences between assets and liabilities measured for financial reporting versus income-tax return purposes. The effect on deferred taxes of a change in tax rates is recognized in income tax expense in the period that includes the enactment date.

Valley maintains a reserve related to certain tax positions that management believes contain an element of uncertainty. An uncertain tax position is measured based on the largest amount of benefit that management believes is more likely than not to be realized. Periodically, Valley evaluates each of its tax positions and strategies to determine whether the reserve continues to be appropriate. See Note 13 for additional disclosures.

Comprehensive Income

Comprehensive income or loss is defined as the change in equity of a business entity during a period due to transactions and other events and circumstances, excluding those resulting from investments by and distributions to shareholders. Comprehensive income consists of net income and other comprehensive income or loss. Valley's components of other comprehensive income or loss, net of deferred tax, include: (i) unrealized gains and losses on debt securities available for sale; (ii) unrealized gains and losses on derivatives used in cash flow hedging relationships; and (iii) the benefit adjustment for the unfunded portion of its various employee, officer, and director pension plans and other post-employment benefits. Income tax effects are released from accumulated other comprehensive income on an individual unit of account basis. Valley presents comprehensive income and its components in the consolidated statements of comprehensive income for all periods presented. See Note 19 for additional disclosures.

Earnings Per Common Share

In Valley's computation of the earnings per common share, the numerator of both the basic and diluted earnings per common share is net income available to common shareholders (which is equal to net income less dividends on preferred stock). The weighted average number of common shares outstanding used in the denominator for basic earnings per common share is increased to determine the denominator used for diluted earnings per common share by the effect of potentially dilutive common stock equivalents utilizing the treasury stock method.

The following table shows the calculation of both basic and diluted earnings per common share for the years ended December 31, 2022, 2021 and 2020:

	2022	2021	2020
	(in thousands, except for share data)		
Net income available to common shareholders	\$ 555,705	\$ 461,152	\$ 377,918
Basic weighted-average number of common shares outstanding	485,434,918	407,445,379	403,754,356
Plus: Common stock equivalents	2,382,792	2,572,949	1,291,851
Diluted weighted-average number of common shares outstanding	487,817,710	410,018,328	405,046,207
Earnings per common share:			
Basic	\$ 1.14	\$ 1.13	\$ 0.94
Diluted	1.14	1.12	0.93

Common stock equivalents represent the dilutive effect of additional common shares issuable upon the assumed vesting or exercise, if applicable, of restricted stock units and common stock options to purchase Valley's common shares. Common stock options with exercise prices that exceed the average market price of Valley's common stock during the periods presented may have an anti-dilutive effect on the diluted earnings per common share calculation and therefore are excluded from the diluted earnings per share calculation along with restricted stock units. Potential anti-dilutive weighted common shares were immaterial for the years ended December 31, 2022 and 2021 and totaled approximately 1.7 million for the year ended December 31, 2020.

Preferred and Common Stock Dividends

Valley issued 4.6 million and 4.0 million shares of non-cumulative perpetual preferred stock in June 2015 and August 2017, respectively, which were initially recorded at fair value. See Note 18 for additional details on the preferred stock issuances. The preferred shares are senior to Valley common stock, whereas the current year dividends must be paid before Valley can pay dividends to its common shareholders. Preferred dividends declared are deducted from net income for computing income available to common shareholders and earnings per common share computations.

Cash dividends to both preferred and common shareholders are payable and accrued when declared by Valley's Board of Directors.

Treasury Stock

Treasury stock is recorded using the cost method and accordingly is presented as a reduction of shareholders' equity.

Derivative Instruments and Hedging Activities

As part of its asset/liability management strategies and to accommodate commercial borrowers, Valley has used interest rate swaps to hedge variability in cash flows or fair values caused by changes in interest rates. Valley also uses derivatives not designated as hedges for non-speculative purposes to (1) manage its exposure to interest rate movements related to a service for commercial lending customers, (2) share the risk of default on the interest rate swaps related to certain purchased or sold loan participations through the use of risk participation agreements, (3) manage the interest rate risk of mortgage banking activities with customer interest rate lock commitments and forward contracts to sell residential mortgage loans and (4) manage the exposure of foreign currency exchange rate fluctuation with foreign currency forward and option contracts primarily to accommodate our customers.

Valley also has hybrid instruments, consisting of market linked certificates of deposit with an embedded swap contract. Valley records all derivatives including embedded derivatives as assets or liabilities at fair value on the consolidated statements of financial condition. Derivatives used to hedge the exposure to variability in expected future cash flows, or other types of forecasted transactions, are considered cash flow hedges. Derivatives used to hedge the exposure to changes in the fair value of an asset, liability, or firm commitment attributable to a particular risk, such as interest rate risk, are considered fair value hedges.

Cash Flow Hedges. For derivatives designated as cash flow hedges, the effective portion of changes in the fair value of the derivative is initially reported in other comprehensive income or loss and subsequently reclassified to earnings when the hedged transaction affects earnings, and the ineffective portion of changes in the fair value of the derivative is recognized directly in earnings. Valley calculates the credit valuation adjustments to the fair value of derivatives designated as fair value hedges on a net basis by counterparty portfolio, as an accounting policy election.

Fair Value Hedges. For derivatives designated as fair value hedges, changes in the fair value of the derivative and the hedged item related to the hedged risk are recognized in earnings. On a quarterly basis, Valley assesses the effectiveness of each hedging relationship by comparing the changes in cash flows or fair value of the derivative hedging instrument with the changes in cash flows or fair value of the designated hedged item or transaction. If a hedging relationship is terminated due to ineffectiveness, and the derivative instrument is not re-designated to a new hedging relationship, the subsequent change in fair value of such instrument is charged directly to earnings.

See Notes 15 and 16 for additional information on our derivative instruments.

Interest Rate Contracts and Other Non-designated Hedges. Derivatives not designated as hedges do not meet the hedge accounting requirements under U.S. GAAP. Contracts in an asset position are included in other assets and contracts in a liability position are included in other liabilities. Changes in fair value of derivatives not designated in hedging relationships are recorded directly in earnings within other non-interest expense.

New Authoritative Accounting Guidance

New Accounting Guidance Adopted in 2022. Accounting Standards Update (ASU) No. 2021-01 "Reference Rate Reform (Topic 848)" extends some of Accounting Standards Codification Topic 848's optional expedients to derivative contracts impacted by the discounting transition, including for derivatives that do not reference LIBOR or other reference rates that are expected to be discontinued. ASU No. 2021-01 is effective for all entities immediately upon issuance and may be elected retrospectively to eligible modifications as of any date from the beginning of the interim period that includes March 12, 2020, or prospectively to new modifications made on or after any date within the interim period including January 7, 2021 and it can be applied through December 31, 2022, similar to the other reference rate reform relief provided under Topic 848. ASU No. 2021-01 had no significant impact on Valley's consolidated financial statements.

ASU No. 2021-05 "Lessors – Certain Leases with Variable Lease Payments" updates guidance in ASC Topic 842, Leases and requires a lessor to classify a lease with variable lease payments that do not depend on an index or rate as an operating lease at lease commencement if: (i) the lease would have been classified as a sales-type lease or direct financing lease under ASC 842 classification criteria; and (ii) the lessor would have recognized a selling loss at lease commencement. Valley adopted ASU No. 2021-05 on January 1, 2022, and the new guidance did not have a significant impact on Valley's consolidated financial statements.

New Accounting Guidance Issued in 2022. ASU No. 2022-01, “Derivatives and Hedging (Topic 815): Fair Value Hedging –Portfolio Layer Method” expands and clarifies the current guidance on accounting for fair value hedge basis adjustments under the portfolio layer method for both single-layer and multiple-layer hedges. This method allows entities to designate multiple hedging relationships with a single closed portfolio, and therefore a larger portion of the interest rate risk associated with such a portfolio is eligible to be hedged. ASU No. 2022-01 also clarifies that no assets may be added to a closed portfolio once it is designated in a portfolio layer method hedge. ASU No. 2022-01 will be effective for Valley on January 1, 2023. Valley is currently evaluating the impact of ASU No. 2022-01, but it is not expected to have a significant impact on Valley's consolidated financial statements.

ASU No. 2022-02, “Financial Instruments – Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures” eliminates the troubled debt restructuring (TDR) accounting model for creditors, such as Valley, that have adopted Topic 326, “Financial Instruments – Credit Losses.” ASU No. 2022-02 will require all loan modifications to be accounted for under the general loan modification guidance in Subtopic 310-20. On a prospective basis, entities will also be subject to new disclosure requirements covering modifications of receivables to borrowers experiencing financial difficulty. Public business entities within the scope of the Topic 326 vintage disclosure requirements also will be required to prospectively disclose current-period gross write-off information by vintage. However, gross recoveries will not be required. Entities can elect to adopt the guidance on TDRs using either a prospective or modified retrospective transition method. ASU No. 2022-02 was effective for Valley on January 1, 2023. Valley elected to apply the modified retrospective transition method by recording a cumulative-effect adjustment to the opening retained earnings and the allowance for loan losses as of January 1, 2023 related to expected credit losses on TDR's under ASC Topic 310-40. While the guidance will result in expanded disclosures, the adoption of ASU No. 2022-02 and the resulting adjustments to retained earnings and the allowance for loan losses did not have a significant impact on Valley's consolidated financial statements.

ASU No. 2022-03, “Fair Value Measurement of Equity Securities subject to Contractual Sale Restrictions” updates guidance in ASC Topic 820, Fair Value Measurement and clarifies that a contractual sale restriction should not be considered in measuring fair value. It also requires entities with investments in equity securities subject to contractual sale restrictions to disclose certain qualitative and quantitative information about such securities including (i) the nature and remaining duration of the restriction; (ii) the circumstances that could cause a lapse in restrictions; and (iii) the fair value of the securities with contractual sale restrictions. ASU No. 2022-03 will be effective for Valley on January 1, 2024, and it can be applied prospectively, with any adjustments resulting from adoption recognized in earnings on the date of adoption. The adoption of ASU No. 2022-03 did not have a significant impact on Valley's consolidated financial statements.

BUSINESS COMBINATIONS (Note 2)

Acquisitions

Bank Leumi Le-Israel Corporation.

On April 1, 2022, Valley completed its acquisition of Bank Leumi Le-Israel Corporation, the U.S. subsidiary of Bank Leumi Le-Israel B.M., and parent company of Bank Leumi USA, collectively referred to as “Bank Leumi USA”. Bank Leumi USA maintained its headquarters in New York City with commercial banking offices in Chicago, Los Angeles, Palo Alto, and Aventura, Florida. The common shareholders of Bank Leumi USA received 3.8025 shares of Valley common stock and \$5.08 in cash for each Bank Leumi USA common share that they owned. As a result, Valley issued approximately 85 million shares of common stock and paid \$113.4 million in cash in the transaction. Based on Valley's closing stock price on March 31, 2022, the transaction was valued at \$1.2 billion, inclusive of the value of options. As a result of the acquisition, Bank Leumi Le-Israel B.M. owned approximately 14 percent of Valley's common stock as of April 1, 2022.

The transaction was accounted for under the acquisition method of accounting and accordingly the results of Bank Leumi USA's operations have been included in Valley's consolidated financial statements for the year ended December 31, 2022 from the date of acquisition.

During 2022, Valley revised the estimated fair values of certain acquired assets as of the acquisition date of Bank Leumi USA based upon additional information obtained that existed as of April 1, 2022. The adjustments mainly related to the fair value of deferred tax assets and other assets and resulted in a \$2.6 million reduction in goodwill (see Note 8 for more information).

The following table sets forth assets acquired and liabilities assumed in the Bank Leumi USA acquisition, at their estimated fair values as of the closing date of the transaction:

	April 1, 2022
	(in thousands)
Assets acquired:	
Cash and cash equivalents	\$ 443,588
Equity securities	6,239
Available for sale debt securities	505,928
Held to maturity debt securities	806,627
Loans	5,914,389
Allowance for loan losses	(70,319)
Loans, net	5,844,070
Premises and equipment	38,827
Lease right of use assets	49,273
Bank owned life insurance	126,861
Accrued interest receivable	25,717
Goodwill	400,582
Other intangible assets	153,380
Other assets	160,921
Total assets acquired	\$ 8,562,013
Liabilities assumed:	
Deposits:	
Non-interest bearing	\$ 4,511,537
Interest bearing:	
Savings, NOW and money market	2,224,834
Time	293,626
Total deposits	7,029,997
Short-term borrowings	103,794
Lease liabilities	79,683
Accrued expense and other liabilities	117,269
Total liabilities assumed	\$ 7,330,743
Common stock issued in acquisition	1,117,829
Cash paid in acquisition	113,441

The determination of the fair value of the assets acquired and liabilities assumed required management to make estimates about discount rates, future expected cash flows, market conditions, and other future events that are highly subjective in nature and subject to change. The fair value estimates are subject to change for up to one year after the closing date of the transaction if additional information (existing at the date of closing) relative to closing date fair values becomes available.

Fair Value Measurement of Assets Acquired and Liabilities Assumed

Described below are the methods used to determine the fair values of the significant assets acquired and liabilities assumed in the Bank Leumi USA acquisition.

Cash and cash equivalents. The estimated fair values of cash and cash equivalents approximate their stated face amounts, as these financial instruments are either due on demand or have short-term maturities.

Investment securities. The estimated fair value of equity securities, which represents a privately held Community Reinvestment Act (CRA) fund, was measured at net asset value (NAV). Other investment securities acquired from Bank Leumi

USA were classified as available for sale and held to maturity debt securities based on Valley's intent at the acquisition date. Their estimated fair values were calculated utilizing Level 2 inputs similar to the valuation techniques used for Valley's investment portfolios detailed in Note 3.

Loans. The acquired loan portfolio was recorded at its estimated fair value based on a discounted cash flow methodology. The acquired loan portfolio was segregated into categories for valuation purposes primarily based on loan type and loan risk rating. The estimated fair value incorporates adjustments related to market loss assumptions and prevailing market interest rates for comparable assets and other market factors such as liquidity from a market participant perspective. Management estimated the cash flows expected to be collected at the acquisition date by using valuation models that incorporated loan contractual characteristics (such as payment type, amortization type, and term to maturity) as well as estimates of key valuation assumptions (such as prepayment speeds, default rates, and loss severity rates).

The expected cash flows from the acquired loan portfolios were discounted to present value based on estimated market rates. The market rates were estimated using a buildup approach based on the following components: funding cost, servicing cost, and consideration of liquidity premium. In addition, coupon rates for recently originated loans and available market data regarding origination rates were also considered in the analysis. The methods used to estimate the Level 3 fair values of loans are sensitive to the assumptions and estimates used. While management attempted to use assumptions and estimates that best reflected the acquired loan portfolios and current market conditions, a greater degree of subjectivity is inherent in these values than in those determined in active markets.

The acquired loans were also evaluated upon acquisition to determine whether they represented PCD loans, defined as loans which have experienced a more-than-insignificant deterioration in credit quality since origination. Valley considered a variety of factors in assessing loans the PCD classification, including but not limited to risk grades, delinquency, non-performing status, current or previous troubled debt restructurings, watch list credits and other qualitative factors that indicated a deterioration in credit quality since origination.

For PCD loans, an initial allowance was determined based on Valley's CECL methodology and was added to the acquisition date fair value of each PCD loan to establish its initial amortized cost basis. The difference between the unpaid principal balance of loans and the calculated amortized cost basis resulted in a net non-credit discount totaling \$18.8 million. This net discount will be accreted into interest income over the loan's remaining life using the effective interest method.

The following table provides a reconciliation of the unpaid principal balance and fair value of loans identified as PCD acquired from Bank Leumi USA at the acquisition date:

	April 1, 2022
	(\$ in thousands)
Unpaid Principal Balance of PCD loans	\$ 1,922,272
Allowance for credit losses at acquisition *	(70,319)
Non-credit discount at acquisition	(18,814)
Fair value of acquired PCD loans	<u>\$ 1,833,139</u>

* Represents the initial reserve for PCD loans, reported net of an additional \$62.4 million charge-offs recognized at the date of acquisition in accordance with Valley's charge-off policy.

Other intangible assets. Other intangible assets recorded consist of core deposit intangibles (CDI) and other acquired client relationships. CDI assets are measures of the value of non-maturity checking, savings, NOW and money market customer deposits that are acquired in a business combination. The fair value for CDI was estimated based on a discounted cash flow methodology considering expected customer attrition rates, net maintenance cost of the deposit base, alternative costs of funds, and the interest costs associated with the customer deposits. The CDI is amortized using an accelerated amortization method over an estimated useful life of 10 years. For other acquired client relationships, fair value is measured using the multi-period excess earnings methodology under the income approach. This method measures the future economic income that can be attributed to the existing client relationships acquired, after considering revenue and expense assumptions, expected client attrition rates, and subtracting returns for other complementary assets that contribute to the income over their expected remaining useful lives. The resulting net cash flows are discounted to present value using an estimated intangible asset discount rate. The other acquired client relationships are amortized using an accelerated amortization method over an estimated remaining useful life of 14 years.

Deposits. The fair values of deposit liabilities with no stated maturity (i.e., non-interest bearing accounts and savings, NOW and money market accounts) are equal to the carrying amounts payable on demand. The fair values of certificates of deposit represent contractual cash flows, discounted to present value using interest rates currently offered on deposits with similar characteristics and remaining maturities.

Supplemental Pro Forma Financial Information (Unaudited). The following table summarizes supplemental pro forma financial information giving effect to the merger as if it had been completed on January 1, 2021:

	December 31,	
	2022	2021
	(in thousands)	
Net interest income	\$ 1,729,034	\$ 1,487,190
Non-interest income	228,284	217,204
Net income	623,052	486,225

Other Recent Acquisitions

Landmark Insurance of the Palm Beaches. On February 1, 2022, the Bank's insurance agency subsidiary, Valley Insurance Services, acquired Landmark Insurance of the Palm Beaches Inc. (Landmark) agency. The purchase price included \$8.6 million in cash and \$1.0 million in contingent consideration. Goodwill and other intangible assets totaled \$4.4 million and \$6.2 million, respectively. The transaction was accounted for under the acquisition method of accounting and accordingly the results of Landmark's operations have been included in Valley's consolidated financial statements for the year ended December 31, 2022 from the date of acquisition.

The Westchester Bank Holding Corporation. On December 1, 2021, Valley completed its acquisition of The Westchester Bank Holding Corporation (Westchester) and its principal subsidiary, The Westchester Bank, which was headquartered in White Plains, New York. As of December 1, 2021, Westchester had approximately \$1.4 billion in assets, \$915.0 million in loans, and \$1.2 billion in deposits, after purchase accounting adjustments, and a branch network of seven locations in Westchester County, New York. The common shareholders of Westchester received 229.645 shares of Valley common stock for each Westchester share they owned prior to the merger. The total consideration for the merger was \$211.1 million, consisting of approximately 15.7 million shares of Valley common stock.

During the first quarter 2022, Valley revised the estimated fair values of the acquired assets as of the acquisition date of Westchester based upon additional information obtained that existed as of December 1, 2021. The adjustments related to the fair value of deferred tax assets and resulted in a \$5.0 million increase in goodwill. See Note 8 for details.

Dudley Ventures. On October 8, 2021, Valley acquired certain subsidiaries of Arizona-based Dudley Ventures (DV), an advisory firm specializing in the investment and management of tax credits. The transaction included the acquisition of DV Fund Advisors and DV Advisory Services, which were both subsequently merged and renamed Dudley Ventures, as well as DV's community development entity, DV Community Investment. The transaction price included \$11.3 million of cash at the closing date and fixed future stock consideration totaling \$3.75 million, which resulting in the issuance of 327,083 shares of our common stock to the former principals of Dudley Ventures in February 2023. On November 16, 2021, Valley also acquired DV Financial Services, a registered broker-dealer regulated by FINRA, which is largely inactive.

Merger expenses for all acquisition related activities totaled \$71.2 million, \$8.9 million and \$1.9 million for the years ended December 31, 2022, 2021 and 2020, respectively. The merger expenses largely consisted of salaries and benefits expense; technology, furniture and equipment expense; and professional and legal fees within non-interest expense on the consolidated statements of income.

FAIR VALUE MEASUREMENT OF ASSETS AND LIABILITIES (Note 3)

ASC Topic 820, "Fair Value Measurement" establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy are described below:

- **Level 1** - Unadjusted exchange quoted prices in active markets for identical assets or liabilities, or identical liabilities traded as assets that the reporting entity has the ability to access at the measurement date.

- **Level 2** - Quoted prices in markets that are not active, or inputs that are observable either directly or indirectly (i.e., quoted prices on similar assets) for substantially the full term of the asset or liability.
- **Level 3** - Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e., supported by little or no market activity).

Assets and Liabilities Measured at Fair Value on a Recurring Basis and Non-Recurring Basis

The following tables present the assets and liabilities that are measured at fair value on a recurring and non-recurring basis by level within the fair value hierarchy as reported on the consolidated statements of financial condition at December 31, 2022 and 2021. The assets presented under “non-recurring fair value measurements” in the table below are not measured at fair value on an ongoing basis but are subject to fair value adjustments under certain circumstances (e.g., when an impairment loss is recognized).

	Fair Value Measurements at Reporting Date Using:			
	December 31, 2022	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
		(in thousands)		
Recurring fair value measurements:				
Assets				
Investment securities:				
Equity securities	\$ 23,494	\$ 23,494	\$ —	\$ —
Equity securities at net asset value (NAV)	10,099	—	—	—
Trading debt securities	13,438	3,282	10,156	—
Available for sale debt securities:				
U.S. Treasury securities	279,498	279,498	—	—
U.S. government agency securities	26,964	—	26,964	—
Obligations of states and political subdivisions	146,811	—	146,811	—
Residential mortgage-backed securities	629,818	—	629,818	—
Corporate and other debt securities	178,306	—	178,306	—
Total available for sale debt securities	1,261,397	279,498	981,899	—
Loans held for sale ⁽¹⁾	18,118	—	18,118	—
Other assets ⁽²⁾	467,127	—	467,127	—
Total assets	\$ 1,793,673	\$ 306,274	\$ 1,477,300	\$ —
Liabilities				
Other liabilities ⁽²⁾	\$ 607,237	\$ —	\$ 607,237	\$ —
Total liabilities	\$ 607,237	\$ —	\$ 607,237	\$ —
Non-recurring fair value measurements:				
Collateral dependent loans, net	\$ 92,923	\$ —	\$ —	\$ 92,923
Foreclosed assets	1,937	—	—	1,937
Total	\$ 94,860	\$ —	\$ —	\$ 94,860

	Fair Value Measurements at Reporting Date Using:			
	December 31, 2021	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(in thousands)			
Recurring fair value measurements:				
Assets				
Investment securities:				
Equity securities	\$ 21,284	\$ 21,284	\$ —	\$ —
Equity securities at net asset value (NAV)	11,560	—	—	—
Trading debt securities	38,130	—	38,130	—
Available for sale debt securities:				
U.S. government agency securities	20,925	—	20,925	—
Obligations of states and political subdivisions	79,890	—	79,890	—
Residential mortgage-backed securities	904,502	—	904,502	—
Corporate and other debt securities	123,492	—	123,492	—
Total available for sale debt securities	1,128,809	—	1,128,809	—
Loans held for sale ⁽¹⁾	139,516	—	139,516	—
Other assets ⁽²⁾	181,500	—	181,500	—
Total assets	\$ 1,520,799	\$ 21,284	\$ 1,487,955	\$ —
Liabilities				
Other liabilities ⁽²⁾	\$ 52,376	\$ —	\$ 52,376	\$ —
Total liabilities	\$ 52,376	\$ —	\$ 52,376	\$ —
Non-recurring fair value measurements:				
Collateral dependent impaired loans, net	\$ 47,871	\$ —	\$ —	\$ 47,871
Foreclosed assets	2,931	—	—	2,931
Total	\$ 50,802	\$ —	\$ —	\$ 50,802

(1) Represents residential mortgage loans held for sale that are carried at fair value and had contractual unpaid principal balances totaling approximately \$17.9 million and \$136.3 million at December 31, 2022 and 2021, respectively.

(2) Derivative financial instruments are included in this category.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

The following valuation techniques were used for financial instruments measured at fair value on a recurring basis. All of the valuation techniques described below apply to the unpaid principal balance, excluding any accrued interest or dividends at the measurement date. Interest income and expense are recorded within the consolidated statements of income depending on the nature of the instrument using the effective interest method based on acquired discount or premium.

Equity securities. The fair value of equity securities consists of a publicly traded mutual fund, Community Reinvestment Act (CRA) investment fund and an investment related to the development of new financial technologies that are carried at quoted prices in active markets.

Equity securities at NAV. Valley also has privately held CRA funds at fair value measured at NAV using the most recently available financial information from the investee. Investments measured at NAV (or its equivalent) as a practical expedient are excluded from fair value hierarchy levels in the tables above.

Trading debt securities. The fair value of trading debt securities, consisting of U.S. Treasury securities and municipal bonds reported at fair value utilizing Level 1 and Level 2 inputs, respectively. The prices for municipal bonds investments are derived from market quotations and matrix pricing obtained through an independent pricing service. Management reviews the data and assumptions used in pricing the securities by its third-party provider to ensure the highest level of significant inputs are derived from market observable data.

Available for sale debt securities. U.S. Treasury securities are reported at fair value utilizing Level 1 inputs. The majority of other investment securities are reported at fair value utilizing Level 2 inputs. The prices for these instruments are obtained through an independent pricing service or dealer market participants with whom Valley has historically transacted both purchases and sales of investment securities. Prices obtained from these sources include prices derived from market quotations and matrix pricing. The fair value measurements consider observable data that may include dealer quotes, market spreads, cash flows, the U.S. Treasury yield curve, live trading levels, trade execution data, market consensus prepayment speeds, credit information and the bond's terms and conditions, among other things. Management reviews the data and assumptions used in pricing the securities by its third party provider to ensure the highest level of significant inputs are derived from market observable data. In addition, Valley reviews the volume and level of activity for all available for sale debt securities and attempts to identify transactions which may not be orderly or reflective of a significant level of activity and volume.

Loans held for sale. Residential mortgage loans originated for sale are reported at fair value using Level 2 inputs. The fair values were calculated utilizing quoted prices for similar assets in active markets. The market prices represent a delivery price, which reflects the underlying price each institution would pay Valley for an immediate sale of an aggregate pool of mortgages. Non-performance risk did not materially impact the fair value of mortgage loans held for sale at December 31, 2022 and 2021 based on the short duration these assets were held and the credit quality of these loans.

Derivatives. Derivatives are reported at fair value utilizing Level 2 inputs. The fair values of Valley's derivatives are determined using third party prices that are based on discounted cash flow analysis using observed market inputs, such as the LIBOR, Overnight Index Swap and Secured Overnight Financing Rate (SOFR) curves for all cleared derivatives. The fair value of mortgage banking derivatives, consisting of interest rate lock commitments to fund residential mortgage loans and forward commitments for the future delivery of such loans (including certain loans held for sale at December 31, 2022 and 2021), is determined based on the current market prices for similar instruments. The fair values of most of the derivatives incorporate credit valuation adjustments, which consider the impact of any credit enhancements to the contracts, to account for potential nonperformance risk of Valley and its counterparties. The credit valuation adjustments were not significant to the overall valuation of Valley's derivatives at December 31, 2022 and 2021.

Assets and Liabilities Measured at Fair Value on a Non-recurring Basis

The following valuation techniques were used for certain non-financial assets measured at fair value on a non-recurring basis, including collateral dependent loans reported at the fair value of the underlying collateral, loan servicing rights and foreclosed assets, which are reported at fair value upon initial recognition or subsequent impairment as described below.

Collateral dependent loans. Collateral dependent loans are loans where foreclosure of the collateral is probable, or where the borrower is experiencing financial difficulty and substantially all of the repayment is expected from the collateral. Collateral values are estimated using Level 3 inputs, consisting of individual third-party appraisals that may be adjusted based on certain discounting criteria. Certain real estate appraisals may be discounted based on specific market data by location and property type. At December 31, 2022, collateral dependent loans were individually re-measured and reported at fair value through direct loan charge-offs to the allowance for loan losses based on the fair value of the underlying collateral. At December 31, 2022, collateral dependent loans with a total amortized cost of \$172.2 million and \$114.8 million at December 31, 2022 and 2021, respectively, including our taxi medallion loan portfolio, were reduced by specific allowance for loan losses allocations totaling \$79.2 million and \$66.9 million to a reported total net carrying amount of \$92.9 million and \$47.9 million at December 31, 2022 and 2021, respectively.

Foreclosed assets. Certain foreclosed assets (consisting of other real estate owned and other repossessed assets included in other assets), upon initial recognition and transfer from loans, are re-measured and reported at fair value using Level 3 inputs, consisting of a third-party appraisal less estimated cost to sell. When an asset is acquired, the excess of the loan balance over fair value, less estimated selling costs, is charged to the allowance for loan losses. If further declines in the estimated fair value of an asset occur, the asset is re-measured and reported at fair value through a write-down recorded in non-interest expense. At December 31, 2022 and 2021, the adjustments to appraisals of foreclosed assets were not material.

Other Fair Value Disclosures

ASC Topic 825, "Financial Instruments," requires disclosure of the fair value of financial assets and financial liabilities, including those financial assets and financial liabilities that are not measured and reported at fair value on a recurring basis or non-recurring basis.

The fair value estimates presented in the following table were based on pertinent market data and relevant information on the financial instruments available as of the valuation date. These estimates do not reflect any premium or discount that could result from offering for sale at one time the entire portfolio of financial instruments. Because no market exists for a portion of

the financial instruments, fair value estimates may be based on judgments regarding future expected loss experience, current economic conditions, risk characteristics of various financial instruments and other factors. These estimates are subjective in nature and involve uncertainties and matters of significant judgment and therefore cannot be determined with precision. Changes in assumptions could significantly affect the estimates.

Fair value estimates are based on existing balance sheet financial instruments without attempting to estimate the value of anticipated future business and the value of assets and liabilities that are not considered financial instruments. For instance, Valley has certain fee-generating business lines (e.g., its mortgage servicing operations, trust and investment management departments) that were not considered in these estimates since these activities are not financial instruments. In addition, the tax implications related to the realization of the unrealized gains and losses can have a significant effect on fair value estimates and have not been considered in any of the estimates.

The carrying amounts and estimated fair values of financial instruments not measured and not reported at fair value on the consolidated statements of financial condition at December 31, 2022 and 2021 were as follows:

		2022		2021	
	Fair Value Hierarchy	Carrying Amount	Fair Value	Carrying Amount	Fair Value
(in thousands)					
Financial assets					
Cash and due from banks	Level 1	\$ 444,325	\$ 444,325	\$ 205,156	\$ 205,156
Interest bearing deposits with banks	Level 1	503,622	503,622	1,844,764	1,844,764
Equity securities ⁽¹⁾	Level 3	15,138	15,138	3,629	3,629
Held to maturity debt securities:					
U.S. Treasury securities	Level 1	66,911	65,889	67,558	71,661
U.S. government agency securities	Level 2	260,392	212,712	6,265	6,378
Obligations of states and political subdivisions	Level 2	480,298	453,195	337,962	344,164
Residential mortgage-backed securities	Level 2	2,909,106	2,495,797	2,166,142	2,152,301
Trust preferred securities	Level 2	37,043	31,106	37,020	31,916
Corporate and other debt securities	Level 2	75,234	70,771	53,750	54,185
Total held to maturity debt securities ⁽²⁾		3,828,984	3,329,470	2,668,697	2,660,605
Net loans	Level 3	46,458,545	44,910,049	33,794,455	33,283,251
Accrued interest receivable	Level 1	196,606	196,606	96,882	96,882
Federal Reserve Bank and Federal Home Loan Bank stock ⁽³⁾	Level 2	238,056	238,056	206,450	206,450
Financial liabilities					
Deposits without stated maturities	Level 1	38,080,457	38,080,457	31,945,368	31,945,368
Deposits with stated maturities	Level 2	9,556,457	9,443,253	3,687,044	3,670,113
Short-term borrowings	Level 1	138,729	138,729	655,726	637,490
Long-term borrowings	Level 2	1,543,058	1,395,991	1,423,676	1,404,184
Junior subordinated debentures issued to capital trusts	Level 2	56,760	50,923	56,413	46,306
Accrued interest payable ⁽⁴⁾	Level 1	45,617	45,617	4,909	4,909

(1) Represents equity securities without a readily determinable fair value measured at costs less impairment, if any.

(2) The carrying amount is presented gross without the allowance for credit losses.

(3) Included in other assets.

(4) Included in accrued expenses and other liabilities.

INVESTMENT SECURITIES (Note 4)***Equity Securities***

Equity securities totaled \$48.7 million and \$36.5 million at December 31, 2022 and 2021, respectively. See Note 3 for further details on equity securities.

Trading Debt Securities

The fair value of trading debt securities totaled \$13.4 million and \$38.1 million at December 31, 2022 and 2021, respectively. Net trading gains were included in net gains and losses on securities transactions within non-interest income. See the “Realized Gains and Losses” section below.

Available for Sale Debt Securities

The amortized cost, gross unrealized gains and losses and fair value of available for sale debt securities at December 31, 2022 and 2021 were as follows:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(in thousands)			
December 31, 2022				
U.S. Treasury securities	\$ 308,137	\$ —	\$ (28,639)	\$ 279,498
U.S. government agency securities	29,494	47	(2,577)	26,964
Obligations of states and political subdivisions:				
Obligations of states and state agencies	10,899	—	(493)	10,406
Municipal bonds	171,586	—	(35,181)	136,405
Total obligations of states and political subdivisions	182,485	—	(35,674)	146,811
Residential mortgage-backed securities	719,868	64	(90,114)	629,818
Corporate and other debt securities	197,927	—	(19,621)	178,306
Total	<u>\$ 1,437,911</u>	<u>\$ 111</u>	<u>\$ (176,625)</u>	<u>\$ 1,261,397</u>
December 31, 2021				
U.S. government agency securities	\$ 20,323	\$ 608	\$ (6)	\$ 20,925
Obligations of states and political subdivisions:				
Obligations of states and state agencies	26,088	132	(93)	26,127
Municipal bonds	53,530	349	(116)	53,763
Total obligations of states and political subdivisions	79,618	481	(209)	79,890
Residential mortgage-backed securities	895,279	14,986	(5,763)	904,502
Corporate and other debt securities	120,871	3,177	(556)	123,492
Total	<u>\$ 1,116,091</u>	<u>\$ 19,252</u>	<u>\$ (6,534)</u>	<u>\$ 1,128,809</u>

The age of unrealized losses and fair value of related available for sale debt securities at December 31, 2022 and 2021 were as follows:

	Less than Twelve Months		More than Twelve Months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
(in thousands)						
December 31, 2022						
U.S. Treasury securities	\$ 279,498	\$ (28,639)	\$ —	\$ —	\$ 279,498	\$ (28,639)
U.S. government agency securities	\$ 22,831	\$ (2,538)	\$ 1,116	\$ (39)	\$ 23,947	\$ (2,577)
Obligations of states and political subdivisions:						
Obligations of states and state agencies	2,943	(54)	7,462	(439)	10,405	(493)
Municipal bonds	112,029	(26,044)	24,127	(9,137)	136,156	(35,181)
Total obligations of states and political subdivisions	114,972	(26,098)	31,589	(9,576)	146,561	(35,674)
Residential mortgage-backed securities	311,836	(27,152)	314,834	(62,962)	626,670	(90,114)
Corporate and other debt securities	144,924	(12,581)	33,382	(7,040)	178,306	(19,621)
Total	\$ 874,061	\$ (97,008)	\$ 380,921	\$ (79,617)	\$ 1,254,982	\$ (176,625)
December 31, 2021						
U.S. government agency securities	\$ —	\$ —	\$ 1,326	\$ (6)	\$ 1,326	\$ (6)
Obligations of states and political subdivisions:						
Obligations of states and state agencies	10,549	(93)	—	—	10,549	(93)
Municipal bonds	19,100	(116)	—	—	19,100	(116)
Total obligations of states and political subdivisions	29,649	(209)	—	—	29,649	(209)
Residential mortgage-backed securities	371,256	(4,770)	25,960	(993)	397,216	(5,763)
Corporate and other debt securities	59,039	(556)	—	—	59,039	(556)
Total	\$ 459,944	\$ (5,535)	\$ 27,286	\$ (999)	\$ 487,230	\$ (6,534)

Within the available for sale debt securities portfolio, the total number of security positions in an unrealized loss position at December 31, 2022 was 730 as compared to 139 at December 31, 2021.

As of December 31, 2022, the fair value of securities available for sale that were pledged to secure public deposits, repurchase agreements, lines of credit, and for other purposes required by law, was \$333.3 million.

The contractual maturities of available for sale debt securities at December 31, 2022 are set forth in the following table. Maturities may differ from contractual maturities in residential mortgage-backed securities because the mortgages underlying the securities may be prepaid without any penalties. Therefore, residential mortgage-backed securities are not included in the maturity categories in the following summary.

	December 31, 2022	
	Amortized Cost	Fair Value
(in thousands)		
Due in one year	\$ 3,319	\$ 3,297
Due after one year through five years	188,292	179,452
Due after five years through ten years	271,859	246,415
Due after ten years	254,573	202,415
Residential mortgage-backed securities	719,868	629,818
Total	\$ 1,437,911	\$ 1,261,397

Actual maturities of available for sale debt securities may differ from those presented above since certain obligations provide the issuer the right to call or prepay the obligation prior to scheduled maturity without penalty.

The weighted-average remaining expected life for residential mortgage-backed securities available for sale was 7.75 years at December 31, 2022.

Impairment Analysis of Available for Sale Debt Securities

Valley's available for sale debt securities portfolio includes corporate bonds and revenue bonds, among other securities. These types of securities may pose a higher risk of future impairment charges by Valley as a result of the unpredictable nature of the U.S. economy and the COVID-19 pandemic, and their potential negative effect on the future performance of the security issuers.

Available for sale debt securities in unrealized loss positions are evaluated for impairment related to credit losses on a quarterly basis. See Note 1 for further information regarding Valley's accounting policy. Valley has evaluated available for sale debt securities that are in an unrealized loss position as of December 31, 2022 included in the tables above and has determined that the declines in fair value are mainly attributable to interest rates, credit spreads, market volatility and liquidity conditions, not credit quality or other factors. Based on a comparison of the present value of expected cash flows to the amortized cost, management recognized no impairment during the years ended December 31, 2022, 2021 and 2020, and, as a result, there was no allowance for credit losses for available for sale debt securities at December 31, 2022 and 2021.

Held to Maturity Debt Securities

The amortized cost, gross unrealized gains and losses and fair value of debt securities held to maturity at December 31, 2022 and 2021 were as follows:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Allowance for Credit Losses	Net Carrying Value
	(in thousands)					
December 31, 2022						
U.S. Treasury securities	\$ 66,911	\$ —	\$ (1,022)	\$ 65,889	\$ —	\$ 66,911
U.S. government agency securities	260,392	—	(47,680)	212,712	—	260,392
Obligations of states and political subdivisions:						
Obligations of states and state agencies	99,238	305	(3,869)	95,674	252	98,986
Municipal bonds	381,060	76	(23,615)	357,521	41	381,019
Total obligations of states and political subdivisions	480,298	381	(27,484)	453,195	293	480,005
Residential mortgage-backed securities	2,909,106	1,723	(415,032)	2,495,797	—	2,909,106
Trust preferred securities	37,043	1	(5,938)	31,106	888	36,155
Corporate and other debt securities	75,234	—	(4,463)	70,771	465	74,769
Total	<u>\$ 3,828,984</u>	<u>\$ 2,105</u>	<u>\$ (501,619)</u>	<u>\$ 3,329,470</u>	<u>\$ 1,646</u>	<u>\$ 3,827,338</u>
December 31, 2021						
U.S. Treasury securities	\$ 67,558	\$ 4,103	\$ —	\$ 71,661	\$ —	\$ 67,558
U.S. government agency securities	6,265	113	—	6,378	—	6,265
Obligations of states and political subdivisions:						
Obligations of states and state agencies	141,015	3,065	(312)	143,768	267	140,748
Municipal bonds	196,947	3,536	(87)	200,396	15	196,932
Total obligations of states and political subdivisions	337,962	6,601	(399)	344,164	282	337,680
Residential mortgage-backed securities	2,166,142	14,599	(28,440)	2,152,301	—	2,166,142
Trust preferred securities	37,020	5	(5,109)	31,916	531	36,489
Corporate and other debt securities	53,750	559	(124)	54,185	352	53,398
Total	<u>\$ 2,668,697</u>	<u>\$ 25,980</u>	<u>\$ (34,072)</u>	<u>\$ 2,660,605</u>	<u>\$ 1,165</u>	<u>\$ 2,667,532</u>

The age of unrealized losses and fair value of related debt securities held to maturity at December 31, 2022 and 2021 were as follows:

	Less than Twelve Months		More than Twelve Months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
(in thousands)						
December 31, 2022						
U.S. Treasury securities	\$ 65,889	\$ (1,022)	\$ —	\$ —	\$ 65,889	\$ (1,022)
U.S. government agency securities	209,863	(47,508)	1,673	(172)	211,536	(47,680)
Obligations of states and political subdivisions:						
Obligations of states and state agencies	62,443	(2,020)	18,231	(1,849)	80,674	(3,869)
Municipal bonds	251,970	(20,457)	15,534	(3,158)	267,504	(23,615)
Total obligations of states and political subdivisions	314,413	(22,477)	33,765	(5,007)	348,178	(27,484)
Residential mortgage-backed securities	962,690	(109,532)	1,413,590	(305,500)	2,376,280	(415,032)
Trust preferred securities	—	—	30,105	(5,938)	30,105	(5,938)
Corporate and other debt securities	57,245	(2,989)	13,525	(1,474)	70,770	(4,463)
Total	<u>\$ 1,610,100</u>	<u>\$ (183,528)</u>	<u>\$ 1,492,658</u>	<u>\$ (318,091)</u>	<u>\$ 3,102,758</u>	<u>\$ (501,619)</u>
December 31, 2021						
Obligations of states and state agencies	\$ 17,000	\$ (254)	\$ 5,517	\$ (58)	\$ 22,517	\$ (312)
Municipal bonds	9,403	(87)	—	—	9,403	(87)
Total obligations of states and political subdivisions	26,403	(341)	5,517	(58)	31,920	(399)
Residential mortgage-backed securities	1,381,405	(22,365)	206,520	(6,075)	1,587,925	(28,440)
Trust preferred securities	—	—	30,912	(5,109)	30,912	(5,109)
Corporate and other debt securities	32,627	(124)	—	—	32,627	(124)
Total	<u>\$ 1,440,435</u>	<u>\$ (22,830)</u>	<u>\$ 242,949</u>	<u>\$ (11,242)</u>	<u>\$ 1,683,384</u>	<u>\$ (34,072)</u>

Within the securities held to maturity portfolio, the total number of security positions in an unrealized loss position was 802 and 108 at December 31, 2022 and 2021, respectively.

As of December 31, 2022, the fair value of debt securities held to maturity that were pledged to secure public deposits, repurchase agreements, lines of credit, and for other purposes required by law was \$771.8 million.

The contractual maturities of investments in debt securities held to maturity at December 31, 2022 are set forth in the table below. Maturities may differ from contractual maturities in residential mortgage-backed securities because the mortgages underlying the securities may be prepaid without any penalties. Therefore, residential mortgage-backed securities are not included in the maturity categories in the following summary.

	December 31, 2022	
	Amortized Cost	Fair Value
(in thousands)		
Due in one year	\$ 61,885	\$ 61,217
Due after one year through five years	140,907	138,074
Due after five years through ten years	85,773	80,934
Due after ten years	631,313	553,448
Residential mortgage-backed securities	2,909,106	2,495,797
Total	<u>\$ 3,828,984</u>	<u>\$ 3,329,470</u>

Actual maturities of held to maturity debt securities may differ from those presented above since certain obligations provide the issuer the right to call or prepay the obligation prior to scheduled maturity without penalty.

The weighted-average remaining expected life for residential mortgage-backed securities held to maturity was 10.2 years at December 31, 2022.

Credit Quality Indicators

Valley monitors the credit quality of the held to maturity debt securities utilizing the most current credit ratings from external rating agencies. The following table summarizes the amortized cost of held to maturity debt securities by external credit rating at December 31, 2022 and 2021.

	AAA/AA/A Rated	BBB rated	Non-investment grade rated	Non-rated	Total
(in thousands)					
December 31, 2022					
U.S. Treasury securities	\$ 66,911	\$ —	\$ —	\$ —	\$ 66,911
U.S. government agency securities	260,392	—	—	—	260,392
Obligations of states and political subdivisions:					
Obligations of states and state agencies	74,943	—	5,497	18,798	99,238
Municipal bonds	333,488	—	—	47,572	381,060
Total obligations of states and political subdivisions	408,431	—	5,497	66,370	480,298
Residential mortgage-backed securities	2,909,106	—	—	—	2,909,106
Trust preferred securities	—	—	—	37,043	37,043
Corporate and other debt securities	2,000	6,000	—	67,234	75,234
Total	<u>\$ 3,646,840</u>	<u>\$ 6,000</u>	<u>\$ 5,497</u>	<u>\$ 170,647</u>	<u>\$ 3,828,984</u>
December 31, 2021					
U.S. Treasury securities	\$ 67,558	\$ —	\$ —	\$ —	\$ 67,558
U.S. government agency securities	6,265	—	—	—	6,265
Obligations of states and political subdivisions:					
Obligations of states and state agencies	118,368	—	5,576	17,071	141,015
Municipal bonds	148,854	—	—	48,093	196,947
Total obligations of states and political subdivisions	267,222	—	5,576	65,164	337,962
Residential mortgage-backed securities	2,166,142	—	—	—	2,166,142
Trust preferred securities	—	—	—	37,020	37,020
Corporate and other debt securities	2,000	6,000	—	45,750	53,750
Total	<u>\$ 2,509,187</u>	<u>\$ 6,000</u>	<u>\$ 5,576</u>	<u>\$ 147,934</u>	<u>\$ 2,668,697</u>

Obligations of states and political subdivisions include municipal bonds and revenue bonds issued by various municipal corporations. At December 31, 2022, most of the obligations of states and political subdivisions were rated investment grade and a large portion of the “non-rated” category included TEMS securities secured by Ginnie Mae securities. Trust preferred securities consist of non-rated single-issuer securities, issued by bank holding companies. Corporate bonds consist of debt primarily issued by banks.

Allowance for Credit Losses for Held to Maturity Debt Securities

Valley has a zero loss expectation for certain securities within the held to maturity portfolio, and therefore it is not required to estimate an allowance for credit losses related to these securities under the CECL standard. After an evaluation of qualitative factors, Valley identified the following security types which it believes qualify for this exclusion: U.S. Treasury securities, U.S. government agency securities, residential mortgage-backed securities issued by Ginnie Mae, Fannie Mae and Freddie Mac, and collateralized municipal bonds called TEMS. To measure the expected credit losses on held to maturity debt securities that have loss expectations, Valley estimates the expected credit losses using a discounted cash flow model developed by a third-party. See Note 1 for further details.

Held to maturity debt securities are carried net of an allowance for credit losses. The following table details the activity in the allowance for credit losses for the years ended December 31, 2022, 2021 and 2020:

	2022	2021	2020
	(in thousands)		
Beginning balance	\$ 1,165	\$ 1,428	\$ —
Adoption of ASU No. 2016-13 on January 1, 2020	—	—	793
Provision (credit) for credit losses	481	(263)	635
Ending balance	<u>\$ 1,646</u>	<u>\$ 1,165</u>	<u>\$ 1,428</u>

There were no net charge-offs of held to maturity debt securities in the respective periods presented in the table above.

Realized Gains and Losses

Gross gains and losses realized on sales, maturities and other securities transactions related to available for sale securities and net gains on trading debt securities included in earnings for the years ended December 31, 2022, 2021 and 2020 were as follows:

	2022	2021	2020
	(in thousands)		
Sales transactions:			
Gross gains	\$ —	\$ 1,370	\$ 665
Gross losses	—	(550)	(9)
Total	<u>\$ —</u>	<u>\$ 820</u>	<u>\$ 656</u>
Maturities and other securities transactions:			
Gross gains	\$ 171	\$ 10	\$ 34
Gross losses	(76)	(285)	(166)
Total	<u>95</u>	<u>(275)</u>	<u>(132)</u>
Net (losses) gains on trading debt securities	<u>(1,325)</u>	<u>1,213</u>	<u>—</u>
(Losses) gains on securities transactions, net	<u>\$ (1,230)</u>	<u>\$ 1,758</u>	<u>\$ 524</u>

LOANS AND ALLOWANCE FOR CREDIT LOSSES FOR LOANS (Note 5)

The detail of the loan portfolio as of December 31, 2022 and 2021 was as follows:

	2022	2021
	(in thousands)	
Loans:		
Commercial and industrial:		
Commercial and industrial	\$ 8,771,250	\$ 5,411,601
Commercial and industrial PPP loans *	33,580	435,950
Total commercial and industrial loans	8,804,830	5,847,551
Commercial real estate:		
Commercial real estate	25,732,033	18,935,486
Construction	3,700,835	1,854,580
Total commercial real estate loans	29,432,868	20,790,066
Residential mortgage	5,364,550	4,545,064
Consumer:		
Home equity	503,884	400,779
Automobile	1,746,225	1,570,036
Other consumer	1,064,843	1,000,161
Total consumer loans	3,314,952	2,970,976
Total loans	\$ 46,917,200	\$ 34,153,657

* Represents SBA Paycheck Protection Program (PPP) loans, net of unearned fees totaling \$667 thousand and \$12.1 million at December 31, 2022 and 2021, respectively.

Total loans include net unearned discounts and deferred loan fees of \$120.5 million and \$78.5 million at December 31, 2022 and 2021, respectively. The increase in total loans at December 31, 2022 is partially attributed to \$5.9 billion of loans acquired in the Bank Leumi USA acquisition, which was inclusive of a \$98.6 million net purchase discount at the acquisition date. Net unearned discounts and deferred loan fees include the non-credit discount on acquired PCD loans and net unearned fees related to PPP loans at December 31, 2022 and 2021.

Accrued interest on loans, which is excluded from the amortized cost of loans held for investment, totaled \$175.9 million and \$83.7 million at December 31, 2022 and 2021, respectively, and is presented within total accrued interest receivable on the consolidated statements of financial condition.

There were no sales of loans from the held for investment portfolio during the years December 31, 2022 and 2021.

Related Party Loans

In the ordinary course of business, Valley has granted loans to certain directors, executive officers and their affiliates (collectively referred to as “related parties”). These loans were made on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other unaffiliated persons and do not involve more than normal risk of collectability. All loans to related parties are performing as of December 31, 2022.

The following table summarizes the changes in the total amounts of loans and advances to the related parties during the year ended December 31, 2022:

	2022
	(in thousands)
Outstanding at beginning of year	\$ 233,439
New loans and advances	41,987
Repayments	(67,328)
Outstanding at end of year	\$ 208,098

Loan Portfolio Risk Elements and Credit Risk Management

Credit risk management. For all loan types discussed below, Valley adheres to a credit policy designed to minimize credit risk while generating the maximum income given the level of risk appetite. Management reviews and approves these policies and procedures on a regular basis with subsequent approval by the Board of Directors annually. Credit authority relating to a significant dollar percentage of the overall portfolio is centralized and controlled by the Credit Risk Management Division and by the Credit Committee. A reporting system supplements the management review process by providing management with frequent reports concerning loan production, loan quality, internal loan classification, concentrations of credit, loan delinquencies, non-performing, and potential problem loans. Loan portfolio diversification is an important factor utilized by Valley to manage its risk across business sectors and through cyclical economic circumstances. Additionally, Valley does not accept crypto assets as loan collateral for any of its loan portfolio classes discussed further below.

Commercial and industrial loans. A significant portion of Valley's commercial and industrial loan portfolio is granted to long standing customers of proven ability, strong repayment performance, and high character. Underwriting standards are designed to assess the borrower's ability to generate recurring cash flow sufficient to meet the debt service requirements of loans granted. While such recurring cash flow serves as the primary source of repayment, a significant number of the loans are collateralized by borrower assets intended to serve as a secondary source of repayment should the need arise. Anticipated cash flows of borrowers, however, may not be as expected and the collateral securing these loans may fluctuate in value, or in the case of loans secured by accounts receivable, the ability of the borrower to collect all amounts due from its customers. Short-term loans may be made on an unsecured basis based on a borrower's financial strength and past performance. Whenever possible, Valley will obtain the personal guarantee of the borrower's principals to mitigate the risk. Unsecured loans, when made, are generally granted to the Bank's most creditworthy borrowers. Unsecured commercial and industrial loans totaled \$555.3 million and \$1.0 billion at December 31, 2022 and 2021, respectively (including \$33.6 million and \$436.0 million of SBA guaranteed PPP loans, respectively). The commercial portfolio also includes taxi medallion loans totaling approximately \$66.5 million with related reserves of \$42.2 million at December 31, 2022. All of these loans are on non-accrual status due to ongoing weakness exhibited in the taxi industry caused by strong competition from alternative ride-sharing services and the economic stress caused by the COVID-19 pandemic and other factors.

Commercial real estate loans. Commercial real estate loans are subject to underwriting standards and processes similar to commercial and industrial loans but generally they involve larger principal balances and longer repayment periods as compared to commercial and industrial loans. Commercial real estate loans are viewed primarily as cash flow loans and secondarily as loans secured by real property. Repayment of most loans is dependent upon the cash flow generated from the property securing the loan or the business that occupies the property. Commercial real estate loans may be more adversely affected by conditions in the real estate markets or in the general economy and accordingly, conservative loan to value ratios are required at origination, as well as stress tested to evaluate the impact of market changes relating to key underwriting elements. The properties securing the commercial real estate portfolio represent diverse types, with most properties located within Valley's primary markets.

Construction loans. With respect to loans to developers and builders, Valley originates and manages construction loans structured on either a revolving or non-revolving basis, depending on the nature of the underlying development project. These loans are generally secured by the real estate to be developed and may also be secured by additional real estate to mitigate the risk. Non-revolving construction loans often involve the disbursement of substantially all committed funds with repayment substantially dependent on the successful completion and sale, or lease, of the project. Sources of repayment for these types of loans may be from pre-committed permanent loans from other lenders, sales of developed property, or an interim loan commitment from Valley until permanent financing is obtained elsewhere. Revolving construction loans (generally relating to single-family residential construction) are controlled with loan advances dependent upon the presale of housing units financed. These loans are closely monitored by on-site inspections and are considered to have higher risks than other real estate loans due to their ultimate repayment being sensitive to interest rate changes, governmental regulation of real property, general economic conditions and the availability of long-term financing.

Residential mortgages. Valley originates residential, first mortgage loans based on underwriting standards that generally comply with Fannie Mae and/or Freddie Mac requirements. Appraisals and valuations of real estate collateral are contracted directly with independent appraisers or from valuation services and not through appraisal management companies. The Bank's appraisal management policy and procedure is in accordance with regulatory requirements and guidance issued by the Bank's primary regulator. Credit scoring, using FICO® and other proprietary credit scoring models are employed in the ultimate, judgmental credit decision by Valley's underwriting staff. Valley does not use third party contract underwriting services. Residential mortgage loans include fixed and variable interest rate loans secured by one to four family homes mostly located in northern and central New Jersey, the New York City metropolitan area, and Florida. Valley's ability to be repaid on such loans is closely linked to the economic and real estate market conditions in these regions. In deciding whether to originate each residential mortgage, Valley considers the qualifications of the borrower as well as the value of the underlying property.

Home equity loans. Home equity lending consists of both fixed and variable interest rate products. Valley mainly provides home equity loans to its residential mortgage customers within the footprint of its primary lending territory. Valley generally will not exceed a combined (i.e., first and second mortgage) loan-to-value ratio of 80 percent when originating a home equity loan.

Automobile loans. Valley uses both judgmental and scoring systems in the credit decision process for automobile loans. Automobile originations (including light truck and sport utility vehicles) are largely produced via indirect channels, originated through approved automobile dealers. Automotive collateral is generally a depreciating asset and there are times in the life of an automobile loan where the amount owed on a vehicle may exceed its collateral value. Additionally, automobile charge-offs will vary based on the strength or weakness of the used vehicle market, original advance rate, when in the life cycle of a loan a default occurs and the condition of the collateral being liquidated. Where permitted by law, and subject to the limitations of the bankruptcy code, deficiency judgments are sought and acted upon to ultimately collect all money owed, even when a default resulted in a loss at collateral liquidation. Valley uses a third party to actively track collision and comprehensive risk insurance required of the borrower on the automobile and this third party provides coverage to Valley in the event of an uninsured collateral loss.

Other consumer loans. Valley's other consumer loan portfolio includes direct consumer term loans, both secured and unsecured. The other consumer loan portfolio includes exposures in personal lines of credit (mainly those secured by cash surrender value of life insurance), credit card loans and personal loans. Unsecured consumer loans totaled approximately \$63.8 million and \$54.0 million, including \$16.8 million and \$12.8 million of credit card loans, at December 31, 2022 and 2021, respectively. Management believes the aggregate risk exposure to unsecured loans and lines of credit was not significant at December 31, 2022.

Credit Quality

The following table presents past due, current and non-accrual loans without an allowance for loan losses by loan portfolio class at December 31, 2022 and 2021:

	Past Due and Non-Accrual Loans					Current Loans	Total Loans	Non-Accrual Loans Without Allowance for Loan Losses
	30-59 Days Past Due Loans	60-89 Days Past Due Loans	90 Days or More Past Due Loans	Non-Accrual Loans	Total Past Due Loans			
	(in thousands)							
December 31, 2022								
Commercial and industrial	\$ 11,664	\$ 12,705	\$ 18,392	\$ 98,881	\$ 141,642	\$ 8,663,188	\$ 8,804,830	\$ 5,659
Commercial real estate:								
Commercial real estate	6,638	3,167	2,292	68,316	80,413	25,651,620	25,732,033	66,066
Construction	—	—	3,990	74,230	78,220	3,622,615	3,700,835	16,120
Total commercial real estate loans	6,638	3,167	6,282	142,546	158,633	29,274,235	29,432,868	82,186
Residential mortgage	16,146	3,315	1,866	25,160	46,487	5,318,063	5,364,550	14,224
Consumer loans:								
Home equity	955	254	—	2,810	4,019	499,865	503,884	117
Automobile	5,974	630	1	271	6,876	1,739,349	1,746,225	—
Other consumer	2,158	695	46	93	2,992	1,061,851	1,064,843	—
Total consumer loans	9,087	1,579	47	3,174	13,887	3,301,065	3,314,952	117
Total	\$ 43,535	\$ 20,766	\$ 26,587	\$ 269,761	\$ 360,649	\$ 46,556,551	\$ 46,917,200	\$ 102,186

	Past Due and Non-Accrual Loans						Current Loans	Total Loans	Non-Accrual Loans Without Allowance for Loan Losses
	30-59 Days Past Due Loans	60-89 Days Past Due Loans	90 Days or More Past Due Loans	Non-Accrual Loans	Total Past Due Loans				
	(in thousands)								
December 31, 2021									
Commercial and industrial	\$ 6,717	\$ 7,870	\$ 1,273	\$ 99,918	\$ 115,778	\$ 5,731,773	\$ 5,847,551	\$ 9,066	
Commercial real estate:									
Commercial real estate	14,421	—	32	83,592	98,045	18,837,441	18,935,486	70,719	
Construction	1,941	—	—	17,641	19,582	1,834,998	1,854,580	—	
Total commercial real estate loans	16,362	—	32	101,233	117,627	20,672,439	20,790,066	70,719	
Residential mortgage	10,999	3,314	677	35,207	50,197	4,494,867	4,545,064	20,401	
Consumer loans:									
Home equity	242	98	—	3,517	3,857	396,922	400,779	4	
Automobile	6,391	656	271	240	7,558	1,562,478	1,570,036	—	
Other consumer	178	266	518	101	1,063	999,098	1,000,161	—	
Total consumer loans	6,811	1,020	789	3,858	12,478	2,958,498	2,970,976	4	
Total	\$ 40,889	\$ 12,204	\$ 2,771	\$ 240,216	\$ 296,080	\$ 33,857,577	\$ 34,153,657	\$ 100,190	

If interest on non-accrual loans had been accrued in accordance with the original contractual terms, such interest income would have amounted to approximately \$21.7 million, \$7.1 million, and \$6.2 million for the years ended December 31, 2022, 2021 and 2020, respectively; none of these amounts were included in interest income during these periods.

Credit quality indicators. Valley utilizes an internal loan classification system as a means of reporting problem loans within commercial and industrial, commercial real estate, and construction loan portfolio classes. Under Valley's internal risk rating system, loan relationships could be classified as "Pass," "Special Mention," "Substandard," "Doubtful," and "Loss." Substandard loans include loans that exhibit well-defined weakness and are characterized by the distinct possibility that Valley will sustain some loss if the deficiencies are not corrected. Loans classified as Doubtful have all the weaknesses inherent in those classified as Substandard with the added characteristic that the weaknesses present make collection or liquidation in full, based on currently existing facts, conditions and values, highly questionable and improbable. Loans classified as Loss are those considered uncollectible with insignificant value and are charged-off immediately to the allowance for loan losses, and, therefore, not presented in the table below. Loans that do not currently pose a sufficient risk to warrant classification in one of the aforementioned categories but pose weaknesses that deserve management's close attention are deemed Special Mention. Pass rated loans do not currently pose any identified risk and can range from the highest to average quality, depending on the degree of potential risk. Risk ratings are updated any time the situation warrants.

The following table presents the internal loan classification risk by loan portfolio class by origination year based on the most recent analysis performed at December 31, 2022 and 2021:

December 31, 2022	Term Loans Amortized Cost Basis by Origination Year						Revolving Loans Amortized Cost Basis	Revolving Loans Converted to Term Loans	Total
	2022	2021	2020	2019	2018	Prior to 2018			
(in thousands)									
Commercial and industrial									
Risk Rating:									
Pass	\$ 1,600,747	\$ 1,089,386	\$ 590,406	\$ 322,564	\$ 250,031	\$ 386,085	\$ 4,307,163	\$ 144	\$ 8,546,526
Special Mention	31,557	3,367	19,492	4,732	4,369	3,558	51,021	7	118,103
Substandard	288	1,734	4,121	1,412	4,256	4,879	31,698	—	48,388
Doubtful	886	20,844	—	2,692	—	64,158	3,233	—	91,813
Total commercial and industrial	\$ 1,633,478	\$ 1,115,331	\$ 614,019	\$ 331,400	\$ 258,656	\$ 458,680	\$ 4,393,115	\$ 151	\$ 8,804,830
Commercial real estate									
Risk Rating:									
Pass	\$ 6,815,115	\$ 5,168,127	\$ 3,246,885	\$ 2,672,223	\$ 1,536,327	\$ 5,027,128	\$ 452,461	\$ 3,504	\$ 24,921,770
Special Mention	93,286	48,007	60,169	45,447	62,111	125,414	8,188	—	442,622
Substandard	15,088	34,475	32,630	34,622	59,337	183,341	7,986	—	367,479
Doubtful	—	—	—	—	—	162	—	—	162
Total commercial real estate	\$ 6,923,489	\$ 5,250,609	\$ 3,339,684	\$ 2,752,292	\$ 1,657,775	\$ 5,336,045	\$ 468,635	\$ 3,504	\$ 25,732,033
Construction									
Risk Rating:									
Pass	\$ 942,380	\$ 512,046	\$ 61,131	\$ 22,845	\$ 8,676	\$ 20,599	\$ 2,040,866	\$ —	\$ 3,608,543
Special Mention	—	—	—	—	—	—	14,268	—	14,268
Substandard	12,969	12,601	—	974	—	17,599	20,138	—	64,281
Doubtful	—	—	—	—	—	13,743	—	—	13,743
Total construction	\$ 955,349	\$ 524,647	\$ 61,131	\$ 23,819	\$ 8,676	\$ 51,941	\$ 2,075,272	\$ —	\$ 3,700,835

Term Loans
Amortized Cost Basis by Origination Year

December 31, 2021	2021	2020	2019	2018	2017	Prior to 2017	Revolving Loans Amortized Cost Basis	Revolving Loans Converted to Term Loans	Total
(in thousands)									
Commercial and industrial									
Risk Rating:									
Pass	\$ 1,563,050	\$ 743,165	\$ 461,022	\$ 362,748	\$ 143,753	\$ 337,713	\$ 1,968,513	\$ 247	\$ 5,580,211
Special Mention	4,182	1,195	3,217	14,143	1,726	9,869	102,145	40	136,517
Substandard	8,248	4,823	3,139	7,077	910	408	19,642	109	44,356
Doubtful	—	—	2,733	—	16,355	67,379	—	—	86,467
Total commercial and industrial	\$ 1,575,480	\$ 749,183	\$ 470,111	\$ 383,968	\$ 162,744	\$ 415,369	\$ 2,090,300	\$ 396	\$ 5,847,551
Commercial real estate									
Risk Rating:									
Pass	\$ 4,517,917	\$ 2,983,140	\$ 2,702,580	\$ 1,734,922	\$ 1,474,770	\$ 4,557,011	\$ 195,851	\$ 13,380	\$ 18,179,571
Special Mention	7,700	50,019	46,911	44,187	65,623	143,540	50,168	—	408,148
Substandard	735	34,655	29,029	41,231	70,941	169,041	1,949	—	347,581
Doubtful	—	—	—	—	—	186	—	—	186
Total commercial real estate	\$ 4,526,352	\$ 3,067,814	\$ 2,778,520	\$ 1,820,340	\$ 1,611,334	\$ 4,869,778	\$ 247,968	\$ 13,380	\$ 18,935,486
Construction									
Risk Rating:									
Pass	\$ 274,097	\$ 98,609	\$ 48,555	\$ 32,781	\$ 6,061	\$ 28,419	\$ 1,313,555	\$ —	\$ 1,802,077
Special Mention	4,131	—	1,009	—	—	—	18,449	—	23,589
Substandard	199	19	6	246	—	17,842	10,602	—	28,914
Total construction	\$ 278,427	\$ 98,628	\$ 49,570	\$ 33,027	\$ 6,061	\$ 46,261	\$ 1,342,606	\$ —	\$ 1,854,580

For residential mortgages, automobile, home equity and other consumer loan portfolio classes, Valley evaluates credit quality based on the aging status of the loan and by payment activity. The following table presents the amortized cost in those loan classes based on payment activity by origination year as of December 31, 2022 and 2021:

December 31, 2022	Term Loans Amortized Cost Basis by Origination Year						Revolving Loans Amortized Cost Basis	Revolving Loans Converted to Term Loans	Total
	2022	2021	2020	2019	2018	Prior to 2018			
	(in thousands)								
Residential mortgage									
Performing	\$ 1,302,279	\$ 1,502,622	\$ 571,390	\$ 500,197	\$ 338,062	\$ 1,073,995	\$ 66,706	\$ —	\$ 5,355,251
90 days or more past due	—	197	217	1,835	2,876	4,174	—	—	9,299
Total residential mortgage	<u>\$ 1,302,279</u>	<u>\$ 1,502,819</u>	<u>\$ 571,607</u>	<u>\$ 502,032</u>	<u>\$ 340,938</u>	<u>\$ 1,078,169</u>	<u>\$ 66,706</u>	<u>\$ —</u>	<u>\$ 5,364,550</u>
Consumer loans									
Home equity									
Performing	\$ 47,084	\$ 12,432	\$ 4,592	\$ 5,024	\$ 5,581	\$ 13,007	\$ 376,608	\$ 38,570	\$ 502,898
90 days or more past due	—	—	—	—	—	—	276	710	986
Total home equity	<u>47,084</u>	<u>12,432</u>	<u>4,592</u>	<u>5,024</u>	<u>5,581</u>	<u>13,007</u>	<u>376,884</u>	<u>39,280</u>	<u>503,884</u>
Automobile									
Performing	724,557	525,017	204,578	166,103	80,012	45,415	—	—	1,745,682
90 days or more past due	38	116	36	180	101	72	—	—	543
Total automobile	<u>724,595</u>	<u>525,133</u>	<u>204,614</u>	<u>166,283</u>	<u>80,113</u>	<u>45,487</u>	<u>—</u>	<u>—</u>	<u>1,746,225</u>
Other consumer									
Performing	24,140	10,144	8,206	7,435	7,406	15,736	991,737	—	1,064,804
90 days or more past due	—	—	—	—	—	38	1	—	39
Total other consumer	<u>24,140</u>	<u>10,144</u>	<u>8,206</u>	<u>7,435</u>	<u>7,406</u>	<u>15,774</u>	<u>991,738</u>	<u>—</u>	<u>1,064,843</u>
Total consumer	<u>\$ 795,819</u>	<u>\$ 547,709</u>	<u>\$ 217,412</u>	<u>\$ 178,742</u>	<u>\$ 93,100</u>	<u>\$ 74,268</u>	<u>\$ 1,368,622</u>	<u>\$ 39,280</u>	<u>\$ 3,314,952</u>

December 31, 2021	Term Loans Amortized Cost Basis by Origination Year						Revolving Loans Amortized Cost Basis	Revolving Loans Converted to Term Loans	Total
	2021	2020	2019	2018	2017	Prior to 2017			
	(in thousands)								
Residential mortgage									
Performing	\$ 1,448,602	\$ 635,531	\$ 572,911	\$ 425,152	\$ 368,164	\$ 1,014,190	\$ 70,342	\$ —	\$ 4,534,892
90 days or more past due	—	357	2,627	2,056	2,794	2,338	—	—	10,172
Total residential mortgage	\$ 1,448,602	\$ 635,888	\$ 575,538	\$ 427,208	\$ 370,958	\$ 1,016,528	\$ 70,342	\$ —	\$ 4,545,064
Consumer loans									
Home equity									
Performing	\$ 13,847	\$ 5,723	\$ 6,994	\$ 7,384	\$ 5,359	\$ 13,597	\$ 303,888	\$ 42,822	\$ 399,614
90 days or more past due	—	—	—	—	—	35	536	594	1,165
Total home equity	13,847	5,723	6,994	7,384	5,359	13,632	304,424	43,416	400,779
Automobile									
Performing	735,446	309,856	278,828	157,450	72,753	15,171	—	—	1,569,504
90 days or more past due	129	—	78	163	81	81	—	—	532
Total automobile	735,575	309,856	278,906	157,613	72,834	15,252	—	—	1,570,036
Other consumer									
Performing	2,949	6,717	6,468	7,017	1,009	14,483	961,027	—	999,670
90 days or more past due	—	—	—	—	—	—	491	—	491
Total other consumer	2,949	6,717	6,468	7,017	1,009	14,483	961,518	—	1,000,161
Total consumer	\$ 752,371	\$ 322,296	\$ 292,368	\$ 172,014	\$ 79,202	\$ 43,367	\$ 1,265,942	\$ 43,416	\$ 2,970,976

Troubled debt restructured loans. From time to time, Valley may extend, restructure, or otherwise modify the terms of existing loans, on a case-by-case basis, to remain competitive and retain certain customers, as well as assist other customers who may be experiencing financial difficulties. If the borrower is experiencing financial difficulties and a concession has been made at the time of such modification, the loan is classified as a troubled debt restructured loan (TDR).

Generally, the concessions made for TDRs involve lowering the monthly payments on loans through either a reduction in interest rate below a market rate, an extension of the term of the loan without a corresponding adjustment to the risk premium reflected in the interest rate, or a combination of these two methods. The concessions may also involve payment deferrals but rarely result in the forgiveness of principal or accrued interest. In addition, Valley frequently obtains additional collateral or guarantor support when modifying such loans. If the borrower has demonstrated performance under the previous terms of the loan and Valley's underwriting process shows the borrower has the capacity to continue to perform under the restructured terms, the loan will continue to accrue interest. Non-accruing restructured loans may be returned to accrual status when there has been a sustained period of repayment performance (generally six consecutive months of payments) and both principal and interest are deemed collectible.

Performing TDRs (not reported as non-accrual loans) totaled \$77.5 million and \$71.3 million as of December 31, 2022 and 2021, respectively. Non-performing TDRs totaled \$124.0 million and \$117.2 million as of December 31, 2022 and 2021, respectively.

The following table presents pre- and post-modification amortized cost of loans by loan class modified as TDRs during the years ended December 31, 2022 and 2021. Post-modification amounts are presented as of December 31, 2022 and 2021, respectively.

Troubled Debt Restructurings	Number of Contracts	Pre-Modification Outstanding Recorded Investment	Post-Modification Outstanding Recorded Investment
(\$ in thousands)			
December 31, 2022			
Commercial and industrial	95	\$ 117,429	\$ 90,259
Commercial real estate:			
Commercial real estate	5	26,375	25,608
Construction	2	11,025	9,077
Total commercial real estate	7	37,400	34,685
Residential mortgage	9	3,206	3,209
Consumer	1	125	116
Total	112	\$ 158,160	\$ 128,269
December 31, 2021			
Commercial and industrial	70	\$ 52,790	\$ 48,764
Commercial real estate:			
Commercial real estate	12	29,480	29,313
Construction	3	22,049	18,418
Total commercial real estate	15	51,529	47,731
Residential mortgage	14	9,663	9,578
Consumer	1	170	161
Total	100	\$ 114,152	\$ 106,234

The total TDRs presented in the table above had allocated a specific allowance for loan losses that totaled \$63.0 million and \$29.1 million at December 31, 2022 and 2021, respectively. There were \$26.2 million and \$6.0 million of charge-offs related to TDRs for the years ended December 31, 2022 and 2021, respectively. As of December 31, 2022 and 2021, the commercial and industrial loan category in the above table mostly consisted of non-accrual TDR tax medallion loans classified as substandard and doubtful. Valley did not extend any commitments to lend additional funds to borrowers whose loans have been modified as TDRs during the year ended December 31, 2022.

Loans modified as TDRs within the previous 12 months and for which there was a payment default (90 or more days past due) in the years ended December 31, 2022 and 2021 were as follows:

Troubled Debt Restructurings Subsequently Defaulted	Years Ended December 31,			
	2022		2021	
	Number of Contracts	Recorded Investment	Number of Contracts	Recorded Investment
(\$ in thousands)				
Commercial and industrial	1	\$ 20,844	—	\$ —
Commercial real estate:				
Commercial real estate	2	5,207	1	10,261
Construction	—	—	2	17,599
Total commercial real estate	2	5,207	3	27,860
Residential mortgage	1	1,071	—	—
Total	4	\$ 27,122	3	\$ 27,860

Collateral dependent loans. Loans are collateral-dependent when the debtor is experiencing financial difficulty and repayment is expected to be provided substantially through the sale or operation of the collateral. When Valley determines that foreclosure is probable, the collateral dependent loan balances are written down to the estimated current fair value (less estimated selling costs) resulting in an immediate charge-off to the allowance, excluding any consideration for personal guarantees that may be pursued in the Bank's collection process.

The following table presents collateral dependent loans by class as of December 31, 2022 and 2021:

	2022	2021
	(in thousands)	
Collateral dependent loans:		
Commercial and industrial *	\$ 94,433	\$ 95,335
Commercial real estate	130,199	110,174
Residential mortgage	33,865	35,745
Home equity	195	4
Total	<u>\$ 258,692</u>	<u>\$ 241,258</u>

* Commercial and industrial loans presented in the table above are primarily collateralized by taxi medallions.

Allowance for Credit Losses for Loans

The following table summarizes the allowance for credit losses for loans at December 31, 2022 and 2021:

	2022	2021
	(in thousands)	
Components of allowance for credit losses for loans:		
Allowance for loan losses	\$ 458,655	\$ 359,202
Allowance for unfunded credit commitments	24,600	16,500
Total allowance for credit losses for loans	<u>\$ 483,255</u>	<u>\$ 375,702</u>

The following table summarizes the provision for credit losses for loans for the years ended December 31, 2022, 2021 and 2020:

	2022	2021	2020
	(in thousands)		
Components of provision for credit losses for loans:			
Provision for loan losses	\$ 48,236	\$ 27,507	\$ 123,922
Provision for unfunded credit commitments	8,100	5,389	1,165
Total provision for credit losses for loans	<u>\$ 56,336</u>	<u>\$ 32,896</u>	<u>\$ 125,087</u>

The following table details the activity in the allowance for loan losses by portfolio segment for the years ended December 31, 2022 and 2021:

	Commercial and Industrial	Commercial Real Estate	Residential Mortgage	Consumer	Total
	(in thousands)				
December 31, 2022					
Allowance for loan losses:					
Beginning balance	\$ 103,090	\$ 217,490	\$ 25,120	\$ 13,502	\$ 359,202
Allowance for PCD loans ⁽¹⁾	33,452	36,618	206	43	70,319
Loans charged-off	(33,250)	(4,561)	(28)	(4,057)	(41,896)
Charged-off loans recovered	17,081	2,073	711	2,929	22,794
Net (charge-offs) recoveries	(16,169)	(2,488)	683	(1,128)	(19,102)
Provision for loan losses	19,568	7,788	13,011	7,869	48,236
Ending balance	<u>\$ 139,941</u>	<u>\$ 259,408</u>	<u>\$ 39,020</u>	<u>\$ 20,286</u>	<u>\$ 458,655</u>
December 31, 2021					
Allowance for loan losses:					
Beginning balance	\$ 131,070	\$ 164,113	\$ 28,873	\$ 16,187	\$ 340,243
Allowance for PCD loans ⁽²⁾	3,528	2,953	57	4	6,542
Loans charged-off	(21,507)	(382)	(140)	(4,303)	(26,332)
Charged-off loans recovered	3,934	2,557	676	4,075	11,242
Net (charge-offs) recoveries	(17,573)	2,175	536	(228)	(15,090)
(Credit) provision for loan losses	(13,935)	48,249	(4,346)	(2,461)	27,507
Ending balance	<u>\$ 103,090</u>	<u>\$ 217,490</u>	<u>\$ 25,120</u>	<u>\$ 13,502</u>	<u>\$ 359,202</u>

(1) The allowance for PCD loans is presented net of PCD loan charge-offs totaling \$62.4 million in the second quarter 2022 related to the Bank Leumi USA acquisition.

(2) The allowance for PCD loans related to the Westchester acquisition during the fourth quarter 2021.

The following table represents the allocation of the allowance for loan losses and the related loans by loan portfolio segment disaggregated based on the allowance measurement methodology for the years ended December 31, 2022 and 2021.

	Commercial and Industrial	Commercial Real Estate	Residential Mortgage	Consumer	Total
(in thousands)					
December 31, 2022					
Allowance for loan losses:					
Individually evaluated for credit losses	\$ 68,745	\$ 13,174	\$ 337	\$ 4,338	\$ 86,594
Collectively evaluated for credit losses	71,196	246,234	38,683	15,948	372,061
Total	<u>\$ 139,941</u>	<u>\$ 259,408</u>	<u>\$ 39,020</u>	<u>\$ 20,286</u>	<u>\$ 458,655</u>
Loans:					
Individually evaluated for credit losses	\$ 117,644	\$ 213,522	\$ 28,869	\$ 14,058	\$ 374,093
Collectively evaluated for credit losses	8,687,186	29,219,346	5,335,681	3,300,894	46,543,107
Total	<u>\$ 8,804,830</u>	<u>\$ 29,432,868</u>	<u>\$ 5,364,550</u>	<u>\$ 3,314,952</u>	<u>\$ 46,917,200</u>
December 31, 2021					
Allowance for loan losses:					
Individually evaluated for credit losses	\$ 64,359	\$ 6,277	\$ 470	\$ 390	\$ 71,496
Collectively evaluated for credit losses	38,731	211,213	24,650	13,112	287,706
Total	<u>\$ 103,090</u>	<u>\$ 217,490</u>	<u>\$ 25,120</u>	<u>\$ 13,502</u>	<u>\$ 359,202</u>
Loans:					
Individually evaluated for credit losses	\$ 119,760	\$ 134,135	\$ 42,469	\$ 2,431	\$ 298,795
Collectively evaluated for credit losses	5,727,791	20,655,931	4,502,595	2,968,545	33,854,862
Total	<u>\$ 5,847,551</u>	<u>\$ 20,790,066</u>	<u>\$ 4,545,064</u>	<u>\$ 2,970,976</u>	<u>\$ 34,153,657</u>

LEASES (Note 6)

The following table presents the components of the right of use (ROU) assets and lease liabilities in the consolidated statements of financial condition by lease type at December 31, 2022 and 2021.

	December 31,	
	2022	2021
	(in thousands)	
ROU assets:		
Operating leases	\$ 306,317	\$ 258,714
Finance leases	35	403
Total	<u>\$ 306,352</u>	<u>\$ 259,117</u>
Lease liabilities:		
Operating leases	\$ 358,851	\$ 282,339
Finance leases	33	767
Total	<u>\$ 358,884</u>	<u>\$ 283,106</u>

The following table presents the components by lease type, of total lease cost recognized in the consolidated statements of income for the years ended December 31, 2022, 2021, and 2020:

	2022	2021	2020
	(in thousands)		
Finance lease cost:			
Amortization of ROU assets	\$ 379	\$ 378	\$ 363
Interest on lease liabilities	30	91	146
Operating lease cost	42,268	34,842	36,094
Short-term lease cost	874	700	783
Variable lease cost	4,647	3,417	4,296
Sublease income	(2,982)	(3,044)	(2,520)
Total lease cost (primarily included in net occupancy expense)	<u>\$ 45,216</u>	<u>\$ 36,384</u>	<u>\$ 39,162</u>

The following table presents supplemental cash flow information related to leases for the years ended December 31, 2022, 2021, and 2020:

	2022	2021	2020
	(in thousands)		
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows from operating leases	\$ 43,768	\$ 35,173	\$ 35,943
Operating cash flows from finance leases	31	92	146
Financing cash flows from finance leases	745	681	612

The following table presents supplemental information related to leases at December 31, 2022 and 2021:

	December 31,	
	2022	2021
	(in thousands)	
Weighted-average remaining lease term		
Operating leases	10.8 years	11.7 years
Finance leases	2.3 years	1.0 year
Weighted-average discount rate		
Operating leases	3.29 %	3.28 %
Finance leases	1.39 %	7.24 %

The following table presents a maturity analysis of lessor and lessee arrangements outstanding as of December 31, 2022:

	Lessor	Lessee	
	Direct Financing and Sales-Type Leases	Operating Leases	Finance Leases
	(in thousands)		
2023	\$ 266,610	\$ 45,626	\$ 18
2024	233,309	44,370	7
2025	187,165	42,699	6
2026	138,599	43,675	2
2027	73,882	38,398	1
Thereafter	43,270	217,732	—
Total lease payments	942,835	432,500	34
Less: present value discount	(78,996)	(73,649)	(1)
Total	\$ 863,839	\$ 358,851	\$ 33

The total net investment in direct financing and sales-type leases was \$863.8 million and \$747.8 million at December 31, 2022 and 2021, respectively, comprised of \$859.3 million and \$745.2 million in lease receivables and \$4.5 million and \$2.6 million in unguaranteed residuals, respectively. Total lease income was \$34.4 million, \$28.1 million and \$25.2 million for the years ended December 31, 2022, 2021, and 2020, respectively.

PREMISES AND EQUIPMENT, NET (Note 7)

At December 31, 2022 and 2021, premises and equipment, net consisted of:

	2022	2021
	(in thousands)	
Land	\$ 84,594	\$ 89,444
Buildings	206,604	212,658
Leasehold improvements	123,278	92,186
Furniture and equipment	351,290	312,693
Total premises and equipment	765,766	706,981
Accumulated depreciation and amortization	(407,210)	(380,675)
Total premises and equipment, net	\$ 358,556	\$ 326,306

Depreciation and amortization of premises and equipment included in net occupancy expense for the years ended December 31, 2022, 2021 and 2020 was approximately \$41.2 million, \$28.8 million, and \$30.6 million, respectively.

GOODWILL AND OTHER INTANGIBLE ASSETS (Note 8)

The changes in the carrying amount of goodwill as allocated to our business segments, or reporting units thereof, for goodwill impairment analysis were:

	Business Segment / Reporting Unit*			
	Wealth Management	Consumer Lending	Commercial Lending	Total
	(in thousands)			
Balance at December 31, 2020	\$ 25,754	\$ 221,311	\$ 1,135,377	\$ 1,382,442
Goodwill from business combinations	13,097	1,079	62,390	76,566
Balance at December 31, 2021	\$ 38,851	\$ 222,390	\$ 1,197,767	\$ 1,459,008
Goodwill from business combinations	10,916	62,483	336,529	409,928
Balance at December 31, 2022	\$ 49,767	\$ 284,873	\$ 1,534,296	\$ 1,868,936

* Valley's Wealth Management and Insurance Division is comprised of trust, asset management, insurance and tax credit advisory services. This reporting unit is included in the Consumer Banking segment for financial reporting purposes.

During the second quarter 2022, Valley performed the annual goodwill impairment test at its normal assessment date. There was no impairment of goodwill recognized during the years ended December 31, 2022, 2021 and 2020.

As discussed in Note 21, Valley made changes to its operating structure and strategy during the second quarter 2022 (and subsequent to the annual goodwill impairment test), which resulted in changes in its operating segments and reporting units to reflect how the CEO, who is the chief operating decision maker, intends to manage Valley, allocate resources and measure performance. Goodwill balances were reallocated across the new operating segments and reporting units (as reflected in the table above) based on their relative fair values using the valuation performed during the second quarter 2022.

The goodwill from business combinations set forth in the table above during 2022 related to the acquisitions of Bank Leumi USA and Landmark totaled \$400.6 million and \$4.4 million, respectively. The goodwill from Landmark transaction was allocated entirely to the Wealth Management reporting unit during the year ended December 31, 2022. Valley also recorded \$5.0 million of additional goodwill during 2022 reflecting an adjustment to the deferred tax assets acquired from Westchester as of the acquisition date.

The goodwill from business combinations set forth in the table above during 2021 related to the Westchester and DV acquisitions and totaled \$63.5 million and \$13.1 million, respectively. Goodwill resulting from the DV acquisition was allocated entirely to the Wealth Management reporting unit. See Note 2 for further details related to acquisitions.

The following tables summarize other intangible assets as of December 31, 2022 and 2021:

	Gross Intangible Assets	Accumulated Amortization	Net Intangible Assets
	(in thousands)		
December 31, 2022			
Loan servicing rights	\$ 119,943	\$ (96,136)	\$ 23,807
Core deposits	223,670	(92,486)	131,184
Other	51,299	(8,834)	42,465
Total other intangible assets	<u>\$ 394,912</u>	<u>\$ (197,456)</u>	<u>\$ 197,456</u>
December 31, 2021			
Loan servicing rights	\$ 114,636	\$ (90,951)	\$ 23,685
Core deposits	109,290	(65,488)	43,802
Other	6,092	(3,193)	2,899
Total other intangible assets	<u>\$ 230,018</u>	<u>\$ (159,632)</u>	<u>\$ 70,386</u>

Core deposits are amortized using an accelerated method over a period of 10.0 years. Valley recorded \$114.4 million of core deposit intangibles resulting from the Bank Leumi USA acquisition.

The line item labeled “Other” included in the table above primarily consists of customer lists, certain financial asset servicing contracts and covenants not to compete, which are amortized over their expected lives generally using a straight-line method and have a weighted average amortization period of 13.4 years. Valley recorded \$39.0 million and \$6.2 million of other intangible assets resulting from the Bank Leumi USA and Landmark acquisitions, respectively, during year ended December 31, 2022.

Valley evaluates core deposits and other intangibles for impairment when an indication of impairment exists. No impairment was recognized during the years ended December 31, 2022, 2021 and 2020.

The following table summarizes the change in loan servicing rights during the years ended December 31, 2022, 2021 and 2020:

	2022	2021	2020
	(in thousands)		
Loan servicing rights:			
Balance at beginning of year	\$ 23,685	\$ 22,810	\$ 24,732
Origination of loan servicing rights	5,307	11,486	8,322
Amortization expense	(5,185)	(10,611)	(10,244)
Balance at end of year	<u>\$ 23,807</u>	<u>\$ 23,685</u>	<u>\$ 22,810</u>
Valuation allowance:			
Balance at beginning of year	\$ —	\$ (865)	\$ (47)
Impairment adjustment	—	865	(818)
Balance at end of year	<u>\$ —</u>	<u>\$ —</u>	<u>\$ (865)</u>
Balance at end of year, net of valuation allowance	<u>\$ 23,807</u>	<u>\$ 23,685</u>	<u>\$ 21,945</u>

Loan servicing rights are accounted for using the amortization method. There was no net impairment recognized during December 31, 2022. As shown in the above table, Valley recorded net recoveries of impairment charges totaling \$865 thousand for the year ended December 31, 2021 and net impairment charges on its loan servicing rights totaling \$818 thousand for the year ended December 31, 2020.

The Bank is a servicer of residential mortgage loan portfolios, and it is compensated for loan administrative services performed for mortgage servicing rights of loans originated and sold by the Bank, and to a lesser extent, purchased mortgage servicing rights. The aggregate principal balances of residential mortgage loans serviced by the Bank for others approximated \$3.5 billion, \$3.6 billion and \$3.5 billion at December 31, 2022, 2021 and 2020, respectively. The outstanding balance of loans serviced for others is not included in the consolidated statements of financial condition.

Valley recognized amortization expense on other intangible assets, including net (recoveries of) impairment charges on loan servicing rights (reflected in the table above), of \$37.8 million, \$21.8 million and \$24.6 million for the years ended December 31, 2022, 2021 and 2020, respectively.

The following table presents the estimated amortization expense of other intangible assets over the next five-year period:

Year	Loan Servicing Rights	Core Deposits	Other
	(in thousands)		
2023	\$ 3,182	\$ 28,746	\$ 6,522
2024	2,804	24,897	5,951
2025	2,461	21,048	5,380
2026	2,148	17,223	4,805
2027	1,869	13,544	4,205

DEPOSITS (Note 9)

Included in time deposits are certificates of deposit over \$250 thousand totaling \$1.8 billion and \$861.5 million at December 31, 2022 and 2021, respectively. Interest expense on time deposits of \$250 thousand or more totaled approximately \$3.4 million, \$1.1 million and \$4.5 million in 2022, 2021 and 2020, respectively.

The scheduled maturities of time deposits as of December 31, 2022 were as follows:

Year	Amount (in thousands)
2023	\$ 7,187,385
2024	2,168,998
2025	58,251
2026	56,456
2027	52,564
Thereafter	32,803
Total time deposits	<u>\$ 9,556,457</u>

Deposits from certain directors, executive officers and their affiliates totaled \$101.1 million and \$92.3 million at December 31, 2022 and 2021, respectively.

BORROWED FUNDS (Note 10)

Short-Term Borrowings

Short-term borrowings at December 31, 2022 and 2021 consisted of the following:

	2022	2021
FHLB advances	\$ 24,035	\$ 500,000
Securities sold under agreements to repurchase	114,694	155,726
Total short-term borrowings	<u>\$ 138,729</u>	<u>\$ 655,726</u>

The weighted average interest rate for short-term FHLB advances was 1.60 percent and 0.37 percent at December 31, 2022 and 2021, respectively. The interest payments on the FHLB advances totaling \$500 million at December 31, 2021 were hedged with interest rate swaps that expired during 2022. See Note 15 for details on our derivative hedging activities.

Long-Term Borrowings

Long-term borrowings at December 31, 2022 and 2021 consisted of the following:

	2022	2021
FHLB advances, net ⁽¹⁾	\$ 788,419	\$ 789,033
Subordinated debt, net ⁽²⁾	754,639	634,643
Total long-term borrowings	<u>\$ 1,543,058</u>	<u>\$ 1,423,676</u>

(1) FHLB advances are presented net of unamortized premiums totaling \$419 thousand and \$1.0 million at December 31, 2022 and 2021, respectively.

(2) Subordinated debt is presented net of unamortized debt issuance costs totaling \$6.9 million and \$5.8 million at December 31, 2022 and 2021, respectively.

FHLB Advances. Long-term FHLB advances had a weighted average interest rate of 1.88 percent at December 31, 2022 and 2021. FHLB advances are secured by pledges of certain eligible collateral, including but not limited to, U.S. government and agency mortgage-backed securities and a blanket assignment of qualifying first lien mortgage loans, consisting of both residential mortgage and commercial real estate loans.

In June 2021, Valley prepaid \$247.5 million of long-term FHLB advances with maturities scheduled through 2025 and a weighted average effective interest rate of 1.82 percent. The transactions were funded with excess cash liquidity and accounted for as an early debt extinguishment resulting in a loss of \$8.4 million reported within non-interest expense for the year ended December 31, 2021.

Long-Term Borrowings

The long-term FHLB advances at December 31, 2022 are scheduled for contractual balance repayments as follows:

Year	Amount (in thousands)
2023	\$ 350,000
2024	165,000
2025	273,000
Total long-term FHLB advances	<u>\$ 788,000</u>

There are no FHLB advances with scheduled repayments in years 2024 and thereafter, reported in the table above, which are callable for early redemption by the FHLB during 2023.

Subordinated Debt. At December 31, 2022, Valley had the following subordinated debt outstanding by its maturity date:

- \$125 million of 5.125 percent subordinated notes issued in September 2013 and due September 27, 2023 with no call dates or prepayments allowed, unless certain conditions exist. Interest on the subordinated debentures is payable semi-annually in arrears on March 27 and September 27 of each year. In conjunction with the issuance, Valley entered into an interest rate swap transaction used to hedge the change in the fair value of the subordinated notes. In August 2016, the fair value interest rate swap with a notional amount of \$125 million was terminated resulting in an adjusted fixed annual interest rate of 3.32 percent on the subordinated notes, after amortization of the derivative valuation adjustment recorded at the termination date. The subordinated notes had a net carrying value of \$126.6 million and \$128.6 million at December 31, 2022 and 2021, respectively.
- \$100 million of 4.55 percent subordinated debentures (notes) issued in June 2015 and due June 30, 2025 with no call dates or prepayments allowed unless certain conditions exist. Interest on the subordinated notes is payable semi-annually in arrears on June 30 and December 30 of each year. The subordinated notes had a net carrying value of \$99.7 million and \$99.6 million at December 31, 2022 and 2021, respectively.
- \$115 million of 5.25 percent Fixed-to-Floating Rate subordinated notes issued in June 2020 and due June 15, 2030 callable in whole or in part on or after June 15, 2025 or upon the occurrence of certain events. Interest on the subordinated notes during the initial five-year term through June 15, 2025 is payable semi-annually on June 15 and December 15. Thereafter, interest is expected to be set based on three-month Term SOFR plus 514 basis points and paid quarterly through maturity of the notes. The subordinated notes had a net carrying value of \$113.6 million and \$113.4 million at December 31, 2022 and 2021, respectively.
- \$300 million of 3.00 percent Fixed-to-Floating Rate subordinated notes issued in May 2021 and due June 15, 2031. The subordinated notes are callable in whole or in part on or after June 15, 2026 or upon the occurrence of certain events. Interest on the subordinated notes during the initial five-year term through June 15, 2026 is payable semi-annually on June 15 and December 15. Thereafter, interest is expected to be set based on three-month Term SOFR plus 236 basis points and paid quarterly through maturity of the notes. The subordinated notes had a carrying value of \$267.1 million and \$293.0 million, net of unamortized debt issuance costs and fair value of hedging adjustment at December 31, 2022 and 2021, respectively. During June 2021, Valley entered into an interest rate swap transaction used to hedge the change in the fair value of the \$300 million in subordinated notes. See Note 15 for additional details.
- \$150 million of 6.25 percent fixed-to-floating rate subordinated notes issued on September 20, 2022 and due September 30, 2032. Interest on the subordinated notes during the initial five year term through September 30, 2027, is payable semi-annually in arrears on March 30 and September 30, commencing on March 30, 2023. Thereafter, interest will be set based on three-month Term SOFR plus 278 basis points and paid quarterly through maturity of the notes. The subordinated notes had a net carrying value of \$147.6 million at December 31, 2022.

On April 1, 2021, Valley redeemed, at par value, \$60 million of its callable 6.25 percent subordinated notes originally due April 1, 2026. No gain or loss was incurred on this transaction.

Pledged Securities. The fair value of securities pledged to secure public deposits, repurchase agreements, lines of credit, FHLB advances and for other purposes required by law approximated \$1.1 billion and \$1.7 billion for December 31, 2022 and 2021, respectively.

JUNIOR SUBORDINATED DEBENTURES ISSUED TO CAPITAL TRUSTS (Note 11)

All of the statutory trusts presented in the table below were acquired in bank acquisitions. These trusts were established for the sole purpose of issuing trust preferred securities and related trust common securities. The proceeds from such issuances were used by the trust to purchase an equivalent amount of junior subordinated debentures issued by the acquired bank, and now assumed by Valley. The junior subordinated debentures, the sole assets of the trusts, are unsecured obligations of Valley, and are subordinate and junior in right of payment to all present and future senior and subordinated indebtedness and certain other financial obligations of Valley. Valley does not consolidate its capital trusts based on U.S. GAAP but wholly owns all of the common securities of each trust.

The table below summarizes the outstanding callable junior subordinated debentures and the related trust preferred securities issued by each trust as of December 31, 2022 and 2021:

	GCB Capital Trust III		State Bancorp Capital Trust I		State Bancorp Capital Trust II		Aliant Statutory Trust II
	(\$ in thousands)						
Junior Subordinated Debentures:							
December 31, 2022							
Carrying value ⁽¹⁾	\$	24,743	\$	9,325	\$	8,860	\$ 13,832
Contractual principal balance		24,743		10,310		10,310	15,464
December 31, 2021							
Carrying value ⁽¹⁾	\$	24,743	\$	9,225	\$	8,730	\$ 13,715
Contractual principal balance		24,743		10,310		10,310	15,464
Annual interest rate		3-mo. LIBOR+1.4%		3-mo. LIBOR+3.45%		3-mo. LIBOR+2.85%	3-mo. LIBOR+1.8%
Stated maturity date		July 30, 2037		November 7, 2032		January 23, 2034	December 15, 2036
Trust Preferred Securities:							
December 31, 2022 and 2021							
Face value	\$	24,000	\$	10,000	\$	10,000	\$ 15,000
Annual distribution rate		3-mo. LIBOR+1.4%		3-mo. LIBOR+3.45%		3-mo. LIBOR+2.85%	3-mo. LIBOR+1.8%
Issuance date		July 2, 2007		October 29, 2002		December 19, 2003	December 14, 2006
Distribution dates ⁽²⁾		Quarterly		Quarterly		Quarterly	Quarterly

⁽¹⁾ The carrying values include unamortized purchase accounting adjustments at December 31, 2022 and 2021.

⁽²⁾ All cash distributions are cumulative.

The trust preferred securities are subject to mandatory redemption, in whole or in part, upon repayment of the junior subordinated debentures at the stated maturity date or upon early redemption. The trusts' ability to pay amounts due on the trust preferred securities is solely dependent upon Valley making payments on the related junior subordinated debentures. Valley's obligation under the junior subordinated debentures and other relevant trust agreements, in aggregate, constitutes a full and unconditional guarantee by Valley of the trusts' obligations under the trust preferred securities issued. Under the junior subordinated debenture agreements, Valley has the right to defer payment of interest on the debentures and, therefore, distributions on the trust preferred securities, for up to five years, but not beyond the stated maturity dates in the table above. Currently, Valley has no intention to exercise its right to defer interest payments on the debentures.

The trust preferred securities are included in Valley's total risk-based capital (as Tier 2 capital) for regulatory purposes at December 31, 2022 and 2021.

BENEFIT PLANS (Note 12)

Defined Benefit Pension and Postretirement Benefit Plans

The Bank had offered a qualified non-contributory defined benefit plan and non-qualified supplement retirement plan to eligible employees and key executives who met certain age and service requirements, as well as a non-qualified directors' retirement plan. The qualified and non-qualified plans were frozen effective December 31, 2013. Consequently, participants in

each plan will not accrue further benefits and their pension benefits were immediately vested and determined based on their compensation and service as of December 31, 2013.

On April 1, 2022, Valley assumed a qualified non-contributory defined benefit pension plan (frozen to both benefits and new participants) covering certain former employees of Bank Leumi USA. Valley also assumed other post-employment medical and life insurance benefit (OPEB) plans from Bank Leumi USA covering certain retired employees. The OPEB plans are active, but closed to new participants.

Collectively, all qualified and non-qualified plans are referred to as the "Pension" in the tables below unless indicated otherwise.

The following table sets forth the change in the projected benefit obligation, the change in fair value of plan assets and the funded status and amounts recognized in Valley's consolidated financial statements for the Pension and OPEB plans at December 31, 2022 and 2021, if applicable:

	Pension		OPEB
	2022	2021	2022
	(in thousands)		
Change in projected benefit obligation:			
Projected benefit obligation at beginning of year	\$ 180,204	\$ 190,849	\$ —
Acquisition ⁽¹⁾	49,008	—	7,445
Interest cost	5,373	3,510	174
Actuarial loss	(48,109)	(5,418)	(975)
Benefits paid	(10,980)	(8,737)	(663)
Projected benefit obligation at end of year	<u>\$ 175,496</u>	<u>\$ 180,204</u>	<u>\$ 5,981</u>
Change in fair value of plan assets:			
Fair value of plan assets at beginning of year	\$ 278,420	\$ 260,651	\$ —
Acquisition	53,433	—	—
Actual return on plan assets	(47,029)	25,057	—
Employer contributions	1,562	1,449	663
Benefits paid	(10,980)	(8,737)	(663)
Fair value of plan assets at end of year ⁽²⁾	<u>\$ 275,406</u>	<u>\$ 278,420</u>	<u>\$ —</u>
Funded status of the plan			
Assets (liabilities) recognized	\$ 99,910	\$ 98,216	\$ (5,981)
Accumulated benefit obligation	175,496	180,204	\$ 5,981

⁽¹⁾ Beginning balances of the Pension and OPEB plans assumed from Bank Leumi USA are presented as of April 1, 2022, based on the actuarial valuation by the plan administrator.

⁽²⁾ Pension includes accrued interest receivable of \$710 thousand and \$783 thousand as of December 31, 2022 and 2021, respectively.

Amounts recognized as a component of accumulated other comprehensive loss at end of year that have not been recognized as a component of the net periodic pension expense for Valley's Pension and OPEB plans are presented in the following table:

	Pension		OPEB
	2022	2021	2022
	(in thousands)		
Net actuarial loss (gain)	\$ 53,400	\$ 34,623	\$ (881)
Prior service cost	251	286	—
Deferred (benefit) tax expense	(15,116)	(9,703)	249
Total	<u>\$ 38,535</u>	<u>\$ 25,206</u>	<u>\$ (632)</u>

The non-qualified plans presented within Pension in the tables above had a projected benefit obligation, accumulated benefit obligation, and fair value of plan assets as follows:

	2022		2021	
	(in thousands)			
Projected benefit obligation	\$	14,899	\$	18,911
Accumulated benefit obligation		14,899		18,911
Fair value of plan assets		—		—

In determining the discount rate assumptions, management looks to current rates on fixed-income corporate debt securities that receive a rating of AA or higher from either Moody's or S&P with durations equal to the expected benefit payments streams required of each plan. The weighted average discount rate used in determining the actuarial present value of benefit obligations for the Pension plans was 5.31 percent and 2.87 percent as of December 31, 2022 and 2021, respectively, and 5.29 percent for the OPEB plans as of December 31, 2022.

The net periodic benefit (income) cost for the Pension and OPEB plans were reported within other non-interest expense included the following components for the years ended December 31, 2022, 2021 and 2020:

	Pension			OPEB
	2022	2021	2020	2022
	(in thousands)			
Interest cost	\$ 5,373	\$ 3,510	\$ 4,941	174
Expected return on plan assets	(20,858)	(16,364)	(17,200)	—
Amortization of net loss (gain)	1,000	1,538	1,003	(95)
Amortization of prior service cost	135	135	135	—
Net periodic benefit (income) cost	<u>\$ (14,350)</u>	<u>\$ (11,181)</u>	<u>\$ (11,121)</u>	<u>\$ 79</u>

Valley estimated the interest cost component of net periodic benefit (income) cost (as shown in the table above) using a spot rate approach for the plans by applying the specific spot rates along the yield curve to the relevant projected cash flows. Valley believes this provides a better estimate of interest costs than a single weighted average discount rate derived from the yield curve used to measure the benefit obligation at the beginning of the applicable period.

Other changes in plan assets and benefit obligations recognized in other comprehensive loss for the years ended December 31, 2022 and 2021 were as follows:

	Pension		OPEB
	2022	2021	2022
	(in thousands)		
Net actuarial loss (gain)	\$ 19,777	\$ (14,111)	\$ (976)
Amortization of prior service cost	(135)	(135)	—
Amortization of actuarial (loss) gain	(1,000)	(1,538)	95
Total recognized in other comprehensive loss	<u>\$ 18,642</u>	<u>\$ (15,784)</u>	<u>\$ (881)</u>
Total recognized in net periodic benefit (income) cost and other comprehensive loss (before tax)	<u>\$ 4,292</u>	<u>\$ (26,965)</u>	<u>\$ (802)</u>

The benefit payments, which reflect expected future service, as appropriate, expected to be paid in future years are presented in the following table:

Year	Pension		OPEB	
		(in thousands)		
2023	\$	9,362	\$	533
2024		9,547		461
2025		9,778		421
2026		10,075		390
2027		10,179		383
Thereafter		49,889		1,784

The weighted average assumptions used to determine net periodic benefit (income) cost for the years ended December 31, 2022, 2021 and 2020 were as follows:

	Pension			OPEB
	2022	2021	2020	2022
Discount rate - projected benefit obligation	2.85 %	2.50 %	3.29 %	2.85 %
Discount rate - service cost	N/A	N/A	N/A	2.85 %
Discount rate - interest cost	2.49 %	1.88 %	2.62 %	2.85 %
Expected long-term return on plan assets	6.79 %	6.75 %	7.50 %	N/A
Rate of compensation increase	N/A	N/A	N/A	N/A
Assumed healthcare cost trend rate *	N/A	N/A	N/A	5.75 %

* The assumed healthcare cost trend rate used to measure the expected cost of benefits covered by the OPEB plans for 2023 is 5.75 percent. The rate to which the healthcare cost trend rate is assumed to decline (ultimate trend rate) along with the year that the ultimate trend rate will be reached is 4.50 percent in 2028.

The expected long-term rate of return on plans assets is the average rate of return expected to be realized on funds invested or expected to be invested to provide for the benefits included in the benefit obligation. The expected long-term rate of return on plans assets is established at the beginning of the year based upon historical and projected returns for each asset category. The expected rate of return on plan assets assumption is based on the concept that it is a long-term assumption independent of the current economic environment and changes would be made in the expected return only when long-term inflation expectations change, asset allocations change materially or when asset class returns are expected to change for the long-term.

In accordance with Section 402 (c) of ERISA, the investment management advisory firm and individual asset managers, if applicable, of both defined benefit pension plans are granted full discretion to buy, sell, invest and reinvest the portions of the portfolio assigned to them consistent with the Bank's Pension Committee's policy and guidelines. The target asset allocation set for the plans are an approximate equal weighting of 50 percent fixed income securities and 50 percent equity securities. Although much depends upon market conditions, the absolute investment objective for the equity portion is to earn at least a mid-to-high single digit return, after adjustment by the Consumer Price Index (CPI), over rolling five-year periods. Relative performance should be above the median of a suitable grouping of other equity portfolios and a suitable index over rolling three-year periods. For the fixed income portion, the absolute objective is to earn a positive annual real return, after adjustment by the CPI, over rolling five-year periods. Relative performance should be better than the median performance of bonds when judged against a suitable index of other fixed income portfolios and above the Merrill Lynch Intermediate Government/Corporate Index over rolling three-year periods. Cash equivalents will be invested in money market funds or in other high quality instruments approved by the Trustees of the qualified plan.

The risk exposure of the qualified plan assets is managed by the Bank's Pension Committee and diversification of the investments into various investment options, including plan assets managed by several asset managers. The Pension Committee engages an investment management advisory firm that regularly monitors the performance of the plan assets and the individual asset managers to ensure they are compliant with the policies adopted by the Pension Trustees. If the risk profile and overall return of assets managed are not in line with the risk objectives or expected return benchmarks for the qualified plan, the advisory firm may recommend the termination of an asset manager to the Pension Committee. In general, the plan assets of the qualified plan are investment securities that are well-diversified in terms of industry, capitalization and asset class.

The following table presents the weighted-average asset allocations by asset category for the defined benefit pension plans that are measured at fair value by level within the fair value hierarchy. See Note 3 for further details regarding the fair value hierarchy.

	% of Total Investments	December 31, 2022	Fair Value Measurements at Reporting Date Using:			
			Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
			(\$ in thousands)			
Assets:						
Investments:						
Mutual funds	30 %	\$ 78,712	\$ 78,712	\$ —	\$ —	
U.S. Treasury securities	20	57,587	57,587	—	—	
Equity securities	20	55,157	55,157	—	—	
Corporate bonds	17	46,839	—	46,839	—	
Commingled fund	9	23,395	—	23,395	—	
U.S. government agency securities	3	9,271	—	9,271	—	
Cash and money market funds	1	3,735	3,735	—	—	
Total investments	100 %	\$ 274,696	\$ 195,191	\$ 79,505	\$ —	

	% of Total Investments	December 31, 2021	Fair Value Measurements at Reporting Date Using:		
			Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
(\$ in thousands)					
Assets:					
Investments:					
Mutual funds	28 %	\$ 79,462	\$ 79,462	\$ —	\$ —
U.S. Treasury securities	22	59,931	59,931	—	—
Equity securities	21	57,987	57,987	—	—
Corporate bonds	23	64,715	—	64,715	—
U.S. government agency securities	4	10,590	—	10,590	—
Cash and money market funds	2	4,952	4,952	—	—
Total investments	100 %	\$ 277,637	\$ 202,332	\$ 75,305	\$ —

The following is a description of the valuation methodologies used for assets measured at fair value:

Equity securities, U.S. Treasury securities and cash and money market funds are valued at fair value in the tables above utilizing exchange quoted prices in active markets for identical instruments (Level 1 inputs). Mutual funds are measured at their respective net asset values, which represent fair values of the securities held in the funds based on exchange quoted prices available in active markets (Level 1 inputs).

Corporate bonds and U.S. government agency securities are reported at fair value utilizing Level 2 inputs. The prices for these investments are derived from market quotations and matrix pricing obtained through an independent pricing service. Such fair value measurements consider observable data that may include dealer quotes, market spreads, cash flows, the U.S. Treasury yield curve, live trading levels, trade execution data, market consensus prepayment speeds, credit information and the bond's terms and conditions, among other things.

Commingled funds are valued based on the NAV as reported by the trustee of the funds. The funds' underlying investments, which primarily comprise fixed-income debt securities and open-end mutual funds, are valued using quoted market prices in active markets or unobservable inputs for similar assets. Therefore, commingled funds are classified as Level 2 within the fair value hierarchy. Transactions may occur daily within the fund.

Based upon actuarial estimates, Valley does not expect to make any contributions to the defined benefit pension plans. Funding requirements for subsequent years are uncertain and will significantly depend on whether the plans' actuary changes

any assumptions used to calculate plan funding levels, the actual return on plan assets, changes in the employee groups covered by the plans, and any legislative or regulatory changes affecting plan funding requirements. For tax planning, financial planning, cash flow management or cost reduction purposes, Valley may increase, accelerate, decrease or delay contributions to the plans to the extent permitted by law.

Other Non-Qualified Plans

Valley maintains separate non-qualified plans for former directors and senior management of Merchants Bank of New York acquired in January of 2001. At December 31, 2022 and 2021, the remaining obligations under these plans were \$1.1 million and \$1.3 million, respectively, of which \$297 thousand and \$348 thousand, respectively, were funded by Valley. As of December 31, 2022 and 2021, all of the obligations were included in other liabilities and \$585 thousand (net of a \$231 thousand tax benefit) and \$660 thousand (net of a \$257 thousand tax benefit), respectively, were recorded in accumulated other comprehensive loss. The \$817 thousand in accumulated other comprehensive loss will be reclassified to expense on a straight-line basis over the remaining benefit periods of these non-qualified plans.

Valley assumed, in the Oritani acquisition on December 1, 2019, certain obligations under non-qualified retirement plans described below:

- Non-qualified benefit equalization pension plan that provided benefits to certain officers who were disallowed certain benefits under former Oritani's qualified pension plan. This plan was terminated on November 30, 2019 and the accrued benefits are payable to plan participants in five equal installments beginning annually on December 1, 2020 through December 1, 2024. The funded obligation under this plan totaled \$653 thousand and \$979 thousand at December 31, 2022 and 2021, respectively.
- Supplemental Executive Retirement Income Agreement (the SERP) for the former CEO of Oritani. The SERP is a retirement benefit with a minimum payment period of 20 years upon death, disability, normal retirement, early retirement or separation from service after a change in control. Distributions from the plan began on July 1, 2020. The funded obligation under the SERP totaled \$12.3 million and \$13.9 million at December 31, 2022 and 2021, respectively. Valley recorded net benefit income of \$1.8 million and \$357 thousand related to the valuation of the SERP for the years ended December 31, 2022 and 2021, respectively, and net benefit expense of \$1.5 million for the year ended December 31, 2020.

The above Oritani non-qualified plans are secured by investments in money market mutual funds which are held in a trust and classified as equity securities on the consolidated statements of financial condition at both December 31, 2022 and 2021.

Valley also assumed an Executive Group Life Insurance Replacement ("Split-Dollar") Plan from Oritani. The Split-Dollar plan provides life insurance benefits to certain eligible employees upon death while employed or following termination of employment due to disability, retirement or change in control. Participants in the Split-Dollar plan are entitled to up to two times their base annual salary, as defined by the plan. The accrued liability for the Split-Dollar plan totaled \$1.6 million and \$1.7 million at December 31, 2022 and 2021, respectively. Valley recorded \$121 thousand, \$104 thousand and \$812 thousand of expenses related to the Split-Dollar plan for the years ended December 31, 2022, 2021 and 2020 respectively.

Bonus Plan

Valley National Bank and its subsidiaries may award cash incentive and merit bonuses to its officers and employees based upon a percentage of the covered employees' compensation as determined by the achievement of certain performance objectives. Amounts charged to salary expense were \$54.6 million, \$29.0 million and \$25.1 million during 2022, 2021 and 2020, respectively.

Savings and Investment Plan

Valley National Bank maintains a 401(k) plan that covers eligible employees of the Bank and its subsidiaries and allows employees to contribute a percentage of their salary, with the Bank matching a certain percentage of the employee contribution in cash invested in accordance with each participant's investment elections. The Bank recorded \$14.0 million, \$10.7 million and \$10.1 million in expense for contributions to the plan for the years ended December 31, 2022, 2021 and 2020, respectively.

Deferred Compensation Plan

Valley has a non-qualified, unfunded deferred compensation plan maintained for the purpose of providing deferred compensation for selected employees participating in the 401(k) plan whose contributions are limited as a result of the limitations under Section 401(a)(17) of the Internal Revenue Code. Each participant in the plan is permitted to defer per calendar year, up to five percent of the portion of the participant's salary and cash bonus above the limit in effect under the

Company's 401(k) plan and receive employer matching contributions that become fully vested after two years of participation in the plan. Plan participants also receive an annual interest crediting on their balances held as of December 31 each year. Benefits are generally paid to a participant in a single lump sum following the participant's separation from service with Valley. Valley recorded plan expenses of \$447 thousand, \$415 thousand and \$372 thousand for the years ended December 31, 2022, 2021 and 2020, respectively. As of December 31, 2022 and 2021, Valley had an unsecured general liability of \$2.5 million and \$2.4 million, respectively, included in accrued expenses and other liabilities in connection with this plan.

Stock Based Compensation

On April 19, 2021, Valley's shareholders approved the Valley National Bancorp 2021 Incentive Compensation Plan (the 2021 Plan) administered by the Compensation and Human Capital Management Committee (the Committee) as appointed by Valley's Board of Directors. The purpose of the 2021 Plan is to provide additional incentives to officers and key employees of Valley and its subsidiaries, whose substantial contributions are essential to the continued growth and success of Valley, and to attract and retain officers, other employees and non-employee directors whose efforts will result in the continued and long-term growth of Valley's business. Upon shareholder approval of the 2021 Plan, Valley ceased granting new awards under the Valley National Bancorp 2016 Long-Term Stock Incentive Plan (the 2016 Plan).

Under the 2021 Plan, Valley may issue awards to its officers, employees and non-employee directors in amounts up to 9 million shares of common stock (less one share for every share granted after December 31, 2020 under the 2016 Plan) in the form of stock appreciation rights, both incentive and non-qualified stock options, restricted stock and restricted stock units (RSUs). If after December 31, 2020 any award granted under the 2016 Plan is forfeited, expires, settled for cash, withheld for tax obligations, or otherwise does not result in the issuance of all or a portion of the shares subject to such award, the shares will be added to the 2021 Plan's share reserve. As of December 31, 2022, 5.0 million shares of common stock were available for issuance under the 2021 Plan. The essential features of each award are described in the award agreement relating to that award. The grant, exercise, vesting, settlement or payment of an award may be based upon the fair value of Valley's common stock on the last sale price reported for Valley's common stock on such date or the last sale price reported preceding such date, except for performance-based awards with a market condition. The grant date fair values of performance-based awards that vest based on a market condition are determined by a third-party specialist using a Monte Carlo valuation model.

Valley recorded total stock-based compensation expense of \$28.8 million, \$20.9 million and \$16.5 million for the years ended December 31, 2022, 2021 and 2020, respectively. The stock-based compensation expense for 2022, 2021 and 2020 included \$2.3 million, \$1.6 million and \$1.5 million, respectively, related to stock awards granted to retirement eligible employees. Compensation expense for awards to retirement eligible employees is amortized monthly over a one year required service period after the grant date. The fair values of all other stock awards are expensed over the shorter of the vesting or required service period. As of December 31, 2022, the unrecognized amortization expense for all stock-based compensation totaled approximately \$33.6 million and will be recognized over an average remaining vesting period of approximately 1.9 years.

Restricted Stock Units (RSUs). Restricted stock units are awarded as (1) performance-based RSUs and (2) time-based RSUs. Performance based RSUs vest based on (i) growth in tangible book value per share plus dividends and (ii) total shareholder return as compared to our peer group. The performance based RSUs "cliff" vest after three years based on the cumulative performance of Valley during that time period. Generally, time-based RSUs vest ratably one-third each year over a three-year vesting period. The RSUs earn dividend equivalents (equal to cash dividends paid on Valley's common share) over the applicable performance or service period. Dividend equivalents, per the terms of the agreements, are accumulated and paid to the grantee at the vesting date, or forfeited if the applicable performance or service conditions are not met. The grant date fair value of the performance-based RSUs was \$14.72, \$12.36 and \$10.99 per share for the years ended December 31, 2022, 2021, and 2020, respectively. The grant date fair value of time-based RSUs was \$13.22, \$12.01 and \$10.29 for the years ended December 31, 2022, 2021, and 2020, respectively.

The following table sets forth the changes in RSUs outstanding for the years ended December 31, 2022, 2021 and 2020:

	Restricted Stock Units Outstanding		
	2022	2021	2020
Outstanding at beginning of year	3,889,756	3,228,659	2,158,255
Granted	3,426,181	1,999,376	2,030,026
Vested	(1,833,739)	(1,239,797)	(879,085)
Forfeited	(285,589)	(98,482)	(80,537)
Outstanding at end of year	5,196,609	3,889,756	3,228,659

Restricted Stock. Restricted stock is awarded to key employees providing for the immediate award of our common stock subject to certain vesting and restrictions under the 2016 Plan. Compensation expense is measured based on the grant-date fair value of the shares.

The following table sets forth the changes in restricted stock awards outstanding for the years ended December 31, 2022, 2021 and 2020:

	Restricted Stock Awards Outstanding		
	2022	2021	2020
Outstanding at beginning of year	213,908	413,701	1,058,681
Vested	(208,663)	(191,104)	(610,607)
Forfeited	—	(8,689)	(34,373)
Outstanding at end of year	5,245	213,908	413,701

Stock Options. The fair value of each option granted on the date of grant is estimated using a binomial option pricing model. The fair values are estimated using assumptions for dividend yield based on the annual dividend rate; the stock volatility, based on Valley's historical and implied stock price volatility; the risk-free interest rates, based on the U.S. Treasury constant maturity bonds, in effect on the actual grant dates, with a remaining term approximating the expected term of the options; and expected exercise term calculated based on Valley's historical exercise experience.

On April 1, 2022, Valley issued replacement options for the pre-existing and fully vested stock awards consisting of Bank Leumi USA options for 2.7 million shares of Valley common stock at a weighted average exercise price of \$8.47. The stock plan under which the original Bank Leumi stock awards were issued is no longer active at the acquisition date.

The following table summarizes stock options activity as of December 31, 2022, 2021 and 2020 and changes during the years ended on those dates:

	2022		2021		2020	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Stock Options						
Outstanding at beginning of year	217,555	\$ 7	2,986,347	\$ 7	3,453,516	\$ 8
Acquired in business combinations	2,726,113	8	—	—	—	—
Exercised	(16,637)	6	(2,768,792)	7	(249,308)	8
Forfeited or expired	—	—	—	—	(217,861)	11
Outstanding at end of year	2,927,031	8	217,555	7	2,986,347	7
Exercisable at year-end	2,927,031	8	217,555	7	2,986,347	7

The following table summarizes information about stock options outstanding and exercisable at December 31, 2022:

Options Outstanding and Exercisable			
Range of Exercise Prices	Number of Options	Weighted Average Remaining Contractual Life in Years	Weighted Average Exercise Price
\$4-6	48,452	3.2	\$ 6
6-8	94,866	4.2	7
8-10	2,758,113	2.9	8
10-12	25,600	5.7	10
	2,927,031	3.0	8

INCOME TAXES (Note 13)

Income tax expense for the years ended December 31, 2022, 2021 and 2020 consisted of the following:

	2022	2021	2020
	(in thousands)		
Current expense:			
Federal	\$ 132,060	\$ 92,823	\$ 96,057
State	72,271	47,249	48,463
	204,331	140,072	144,520
Deferred expense (benefit):			
Federal	7,263	19,709	(3,109)
State	222	7,118	(1,951)
	7,485	26,827	(5,060)
Total income tax expense	\$ 211,816	\$ 166,899	\$ 139,460

The tax effects of temporary differences that gave rise to the significant portions of the deferred tax assets and liabilities as of December 31, 2022 and 2021 were as follows:

	2022	2021
	(in thousands)	
Deferred tax assets:		
Allowance for credit losses	\$ 133,459	\$ 102,704
Employee benefits	39,917	22,587
Investment securities	48,598	—
Net operating loss carryforwards	13,904	15,859
Purchase accounting	66,487	8,971
Other	12,995	11,689
Total deferred tax assets	315,360	161,810
Deferred tax liabilities:		
Pension plans	30,474	30,119
Depreciation	16,625	10,343
Investment securities	—	3,728
Other investments	8,838	12,069
Core deposit intangibles	36,189	11,888
Other	27,235	14,133
Total deferred tax liabilities	119,361	82,280
Valuation Allowance	1,642	916
Net deferred tax asset (included in other assets)	\$ 194,357	\$ 78,614

Valley's federal net operating loss carryforwards totaled approximately \$47.9 million at December 31, 2022 and expire during the period from 2029 through 2034. State net operating loss carryforwards totaled approximately \$80.2 million, net of a valuation allowance of \$916 thousand at December 31, 2022, and expire during the period from 2029 through 2038.

Valley's capital loss carryforwards totaled \$2.7 million at December 31, 2022. These capital losses expire at the end of 2023. It is unlikely Valley will recognize the benefit of the deferred tax asset and therefore a full valuation allowance was established against the capital loss carryforward of \$726 thousand during 2022.

Based upon taxes paid and projections of future taxable income over the periods in which the net deferred tax assets are deductible, management believes that it is more likely than not that Valley will realize the benefits of these deductible differences and loss carryforwards.

Reconciliation between the reported income tax expense and the amount computed by multiplying consolidated income before taxes by the statutory federal income tax rate of 21 percent for the years ended December 31, 2022, 2021, and 2020 were as follows:

	2022	2021	2020
	(in thousands)		
Federal income tax at expected statutory rate	\$ 163,940	\$ 134,556	\$ 111,314
Increase (decrease) due to:			
State income tax expense, net of federal tax effect	57,276	42,950	36,744
Tax-exempt interest, net of interest incurred to carry tax-exempt securities	(2,696)	(2,298)	(2,786)
Bank owned life insurance	(1,597)	(1,759)	(2,026)
Tax credits from securities and other investments	(12,872)	(9,942)	(10,071)
Non-deductible FDIC insurance premiums	4,796	2,457	3,283
Other, net	2,969	935	3,002
Income tax expense	<u>\$ 211,816</u>	<u>\$ 166,899</u>	<u>\$ 139,460</u>

We invest in certain tax-advantaged investments that support qualified affordable housing projects, community development, and prior to 2019, renewable energy resources. Our investments in these projects are designed to generate a return primarily through the realization of federal and state income tax credits, and other tax benefits, over specified time periods. Third parties perform diligence on these investments for us on which we rely both at inception and on an on-going basis. We are subject to the risk that previously recorded tax credits, which remain subject to recapture by taxing authorities based on compliance features required to be met at the project level, may fail to meet certain government compliance requirements and may not be able to be realized.

We previously invested in mobile solar generators sold and leased back by DC Solar and its affiliates (DC Solar). DC Solar had its assets frozen in December 2018 by the U.S. Department of Justice. DC Solar and related entities are in Chapter 7 bankruptcy. A group of investors who purchased mobile solar generators from, and leased them back to, DC Solar, including us received tax credits for making these renewable resource investments. During the fourth quarter 2019, several of the co-conspirators pleaded guilty to fraud in the on-going federal investigation. Based upon this information, Valley deemed that its tax positions related to the DC Solar funds did not meet the more likely than not recognition threshold in Valley's tax reserve assessment at December 31, 2019. The principals pled guilty to fraud in early 2020.

As of December 31, 2022, 2021, and 2020, Valley believes that it was fully reserved for the renewable energy tax credits and other tax benefits previously recognized from the investments in the DC Solar funds plus interest. Valley will continue to evaluate all its existing tax positions, however, cannot provide assurance that it will not recognize additional tax provisions related to this uncertain tax liability in the future.

A reconciliation of Valley's reserve for uncertain tax liability positions for 2022, 2021 and 2020 is presented in the table below:

	2022	2021	2020
	(in thousands)		
Beginning balance	\$ 30,359	\$ 31,918	\$ 31,918
Settlements with taxing authorities	—	(1,559)	—
Ending balance	<u>\$ 30,359</u>	<u>\$ 30,359</u>	<u>\$ 31,918</u>

The entire balance of unrecognized tax benefits, if recognized, would favorably affect Valley's effective income tax rate. It is reasonably possible that the liability for unrecognized tax benefits could increase or decrease in the next 12 months due to completion of tax authorities' exams or the expiration of statutes of limitations. Management estimates that the liability for unrecognized tax benefits could decrease by \$30.4 million within the next 12 months. Valley's policy is to report interest and penalties, if any, related to unrecognized tax benefits in income tax expense. Valley had accrued liabilities of approximately \$10.5 million, \$8.7 million and \$7.6 million at December 31, 2022, 2021 and 2020, respectively, for interest expense associated with Valley's uncertain tax positions at the respective period ends.

Valley monitors its tax positions for the underlying facts, circumstances, and information available including the federal investigation of DC Solar and changes in tax laws, case law, and regulations that may necessitate subsequent de-recognition of previous tax benefits.

Valley files income tax returns in the U.S. federal and various state jurisdictions. With few exceptions, Valley is no longer subject to U.S. federal and state income tax examinations by tax authorities for years before 2018. Valley is under examination by the IRS and also under routine examination by various state jurisdictions, and we expect the examinations to be completed within the next 12 months. Valley has considered, for all open audits, any potential adjustments in establishing our reserve for unrecognized tax benefits as of December 31, 2022.

TAX CREDIT INVESTMENTS (Note 14)

Valley's tax credit investments are primarily related to investments promoting qualified affordable housing projects, and other investments related to community development and renewable energy sources. Some of these tax-advantaged investments support Valley's regulatory compliance with the Community Reinvestment Act. Valley's investments in these entities generate a return primarily through the realization of federal income tax credits, and other tax benefits, such as tax deductions from operating losses of the investments, over specified time periods. These tax credits and deductions are recognized as a reduction of income tax expense.

Valley's tax credit investments are carried in other assets on the consolidated statements of financial condition. Valley's unfunded capital and other commitments related to the tax credit investments are carried in accrued expenses and other liabilities on the consolidated statements of financial condition. Valley recognizes amortization of tax credit investments, including impairment losses, within non-interest expense in the consolidated statements of income using the equity method of accounting. After initial measurement, the carrying amounts of tax credit investments with non-readily determinable fair values are increased to reflect Valley's share of income of the investee and are reduced to reflect its share of losses of the investee, dividends received and impairments, if applicable. See the "Impairment Analysis" section below.

The following table presents the balances of Valley's affordable housing tax credit investments, other tax credit investments, and related unfunded commitments at December 31, 2022 and 2021:

	December 31,	
	2022	2021
	(in thousands)	
Other Assets:		
Affordable housing tax credit investments, net	\$ 24,198	\$ 15,343
Other tax credit investments, net	56,551	57,006
Total tax credit investments, net	<u>\$ 80,749</u>	<u>\$ 72,349</u>
Other Liabilities:		
Unfunded affordable housing tax credit commitments	\$ 1,338	\$ 1,360
Total unfunded tax credit commitments	<u>\$ 1,338</u>	<u>\$ 1,360</u>

The following table presents other information relating to Valley's affordable housing tax credit investments and other tax credit investments for the years ended December 31, 2022, 2021 and 2020:

	2022	2021	2020
	(in thousands)		
Components of Income Tax Expense:			
Affordable housing tax credits and other tax benefits	\$ 4,748	\$ 3,525	\$ 5,414
Other tax credit investment credits and tax benefits	11,617	9,320	8,065
Total reduction in income tax expense	<u>\$ 16,365</u>	<u>\$ 12,845</u>	<u>\$ 13,479</u>
Amortization of Tax Credit Investments:			
Affordable housing tax credit investment losses	\$ 2,311	\$ 1,895	\$ 2,714
Affordable housing tax credit investment impairment losses	1,187	1,416	2,209
Other tax credit investment losses	1,254	811	2,234
Other tax credit investment impairment losses	7,655	6,788	6,178
Total amortization of tax credit investments recorded in non-interest expense	<u>\$ 12,407</u>	<u>\$ 10,910</u>	<u>\$ 13,335</u>

Impairment Analysis

An impairment loss is recognized when the fair value of the tax credit investment is less than its carrying value. The determination of whether a decline in value of a tax credit investment is other-than-temporary requires significant judgment and is performed separately for each investment. The tax credit investments are reviewed for impairment quarterly, or whenever events or changes in circumstances indicate that the carrying amount of the investment might not be recoverable. These circumstances can include, but are not limited to, the following factors:

- Evidence that Valley does not have the ability to recover the carrying amount of the investment;
- The inability of the investee to sustain earnings;
- A current fair value of the investment based upon cash flow projections that is less than the carrying amount; and
- Change in the economic or technological environment that could adversely affect the investee's operations.

On a periodic basis, Valley obtains financial reporting on its underlying tax credit investment assets for each fund. The financial reporting is reviewed for deterioration in the financial condition of the fund, the level of cash flows and any significant losses or impairment charges. Valley also regularly reviews the condition and continuing prospects of the underlying operations of the investment with the fund manager, including any observations from site visits and communications with the Fund Sponsor, if available. Annually, Valley obtains the audited financial statements prepared by an independent accounting firm for each investment, as well as the annual tax returns. Generally, none of the aforementioned review factors are individually conclusive and the relative importance of each factor will vary based on facts and circumstances. However, the longer the expected period of recovery, the stronger and more objective the positive evidence needs to be in order to overcome the presumption that the impairment is other than temporary. If management determines that a decline in value is other than temporary per its quarterly and annual reviews, including current probable cash flow projections, the applicable tax credit investment is written down to its estimated fair value through an impairment charge to earnings, which establishes the new cost basis of the investment.

COMMITMENTS AND CONTINGENCIES (Note 15)

Financial Instruments with Off-balance Sheet Risk

In the ordinary course of business in meeting the financial needs of its customers, Valley, through its subsidiary Valley National Bank, is a party to various financial instruments, which are not reflected in the consolidated financial statements. These financial instruments include standby and commercial letters of credit, unused portions of lines of credit and commitments to extend various types of credit. These instruments involve, to varying degrees, elements of credit risk in excess of the amounts recognized in the consolidated financial statements. The commitment or contract amount of these instruments is an indicator of the Bank's level of involvement in each type of instrument as well as the exposure to credit loss in the event of non-performance by the other party to the financial instrument. The Bank seeks to limit any exposure of credit loss by applying the same credit policies in making commitments as it does for on-balance sheet lending facilities.

The following table provides a summary of financial instruments with off-balance sheet risk at December 31, 2022 and 2021:

	2022	2021
	(in thousands)	
Commitments under commercial loans and lines of credit	\$ 10,262,414	\$ 7,460,742
Home equity and other revolving lines of credit	1,920,824	1,689,315
Standby letters of credit	509,804	311,285
Outstanding residential mortgage loan commitments	317,108	355,523
Commitments under unused lines of credit—credit card	116,208	96,734
Commitments to sell loans	22,008	210,468
Commercial letters of credit	5,863	7,603
Total	\$ 13,154,229	\$ 10,131,670

Obligations to advance funds under commitments to extend credit, including commitments under unused lines of credit, are agreements to lend to a customer as long as there is no violation of any condition established in the contract. Commitments generally have specified expiration dates, which may be extended upon request, or other termination clauses and generally require payment of a fee. These commitments do not necessarily represent future cash requirements, as it is anticipated that

many of these commitments will expire without being fully drawn upon. The Bank's lending activity for outstanding loan commitments is primarily to customers within the states of New Jersey, New York, and Florida.

Standby letters of credit represent the guarantee by the Bank of the obligations or performance of the bank customer in the event of the default of payment or nonperformance to a third party beneficiary.

Loan sale commitments represent contracts for the sale of residential mortgage loans to third parties in the ordinary course of the Bank's business. These commitments require the Bank to deliver loans within a specific period to the third party. The risk to the Bank is its non-delivery of loans required by the commitment, which could lead to financial penalties. The Bank has not defaulted on its loan sale commitments.

Derivative Instruments and Hedging Activities

Valley is exposed to certain risks arising from both its business operations and economic conditions. Valley principally manages its exposure to a wide variety of business and operational risks through management of its core business activities. Valley manages economic risks, including interest rate and liquidity risks, primarily by managing the amount, sources, and duration of its assets and liabilities and, from time to time, the use of derivative financial instruments. Specifically, Valley enters into derivative financial instruments to manage exposures that arise from business activities that result in the payment of future known and uncertain cash amounts, the value of which are determined by interest rates. Valley's derivative financial instruments are used to manage differences in the amount, timing, and duration of Valley's known or expected cash receipts and its known or expected cash payments related to assets and liabilities as outlined below.

Cash Flow Hedges of Interest Rate Risk. Valley's objectives in using interest rate derivatives are to add stability to interest expense and to manage its exposure to interest rate movements. To accomplish these objectives, Valley uses interest rate swaps as part of its interest rate risk management strategy. Interest rate swaps designated as cash flow hedges involve the payment of either fixed or variable-rate amounts in exchange for the receipt of variable or fixed-rate amounts from a counterparty, respectively.

At December 31, 2022, Valley had 6 interest rate swap agreements, with a total notional amount of \$600 million, to hedge the changes in cash flows associated with certain variable rate loans. Valley is required to pay variable rate amounts based on one-month CME Term SOFR and receives fixed rate payments based on the tenor of each swap. Expiration dates for the swaps range from November 2024 to November 2026.

Fair Value Hedges of Fixed Rate Assets and Liabilities. Valley is exposed to changes in the fair value of fixed-rate subordinated debt due to changes in interest rates. Valley uses interest rate swaps to manage its exposure to changes in fair value on fixed rate debt instruments attributable to changes in the designated benchmark interest rate. Interest rate swaps designated as fair value hedges involve the receipt of variable rate payments from a counterparty in exchange for Valley making fixed rate payments over the life of the agreements without the exchange of the underlying notional amount. For derivatives that are designated and qualify as fair value hedges, the gain or loss on the derivative as well as the loss or gain on the hedged item attributable to the hedged risk are recognized in earnings.

In June 2021, Valley entered into a \$300 million forward-starting interest rate swap agreement with a notional amount of \$300 million, maturing in June 2026, to hedge the change in the fair value of the 3 percent subordinated debt issued on May 28, 2021. Under the swap agreement, beginning in January 2022, Valley will receive fixed rate payments and pay variable rate amounts based on SOFR plus 2.187 percent.

Non-designated Hedges. Derivatives not designated as hedges may be used to manage Valley's exposure to interest rate movements or to provide a service to customers but do not meet the requirements for hedge accounting under U.S. GAAP. Derivatives not designated as hedges are not entered into for speculative purposes. Valley executes interest rate swaps with commercial lending customers to facilitate their respective risk management strategies. These interest rate swaps with customers are simultaneously offset by interest rate swaps that Valley executes with a third party, such that Valley minimizes its net risk exposure resulting from such transactions. As these interest rate swaps do not meet the strict hedge accounting requirements, changes in the fair value of both the customer swaps and the offsetting swaps are recognized directly in earnings.

Valley sometimes enters into risk participation agreements with external lenders where the banks are sharing their risk of default on the interest rate swaps on participated loans. Valley either pays or receives a fee depending on the participation type. Risk participation agreements are credit derivatives not designated as hedges. Credit derivatives are not speculative and are not used to manage interest rate risk in assets or liabilities. Changes in the fair value in credit derivatives are recognized directly in earnings. At December 31, 2022, Valley had 35 credit swaps with an aggregate notional amount of \$374.3 million related to risk participation agreements.

At December 31, 2022, Valley had two “steepener” swaps, each with a current notional amount of \$10.4 million where the receive rate on the swap mirrors the pay rate on the brokered deposits and the rates paid on these types of hybrid instruments are based on a formula derived from the spread between the long and short ends of the constant maturity swap (CMS) rate curve. Although these types of instruments do not meet the hedge accounting requirements, the change in fair value of both the bifurcated derivative and the stand alone swap tend to move in opposite directions with changes in the three-month LIBOR rate and therefore provide an effective economic hedge.

Valley regularly enters into mortgage banking derivatives which are non-designated hedges. These derivatives include interest rate lock commitments provided to customers to fund certain residential mortgage loans to be sold into the secondary market and forward commitments for the future delivery of such loans. Valley enters into forward commitments for the future delivery of residential mortgage loans when interest rate lock commitments are entered into in order to economically hedge the effect of future changes in interest rates on Valley’s commitments to fund the loans as well as on its portfolio of mortgage loans held for sale.

Valley enters foreign currency forward and option contracts, primarily to accommodate our customers, that are not designated as hedging instruments. Upon the origination of certain foreign currency denominated transactions (including foreign currency holdings and non-U.S. dollar denominated loans) with a client, we enter into a respective hedging contract with a third party financial institution to mitigate the economic impact of foreign currency exchange rate fluctuation.

Amounts included in the consolidated statements of financial condition related to the fair value of Valley’s derivative financial instruments were as follows at December 31, 2022 and 2021:

	2022			2021		
	Fair Value			Fair Value		
	Other Assets	Other Liabilities	Notional Amount	Other Assets	Other Liabilities	Notional Amount
	(in thousands)					
Derivatives designated as hedging instruments:						
Cash flow hedge interest rate swaps	\$ 3,971	\$ 4	\$ 600,000	\$ —	\$ 310	\$ 700,000
Fair value hedge interest rate swaps	—	29,794	300,000	—	3,335	300,000
Total derivatives designated as hedging instruments	\$ 3,971	\$ 29,798	\$ 900,000	\$ —	\$ 3,645	\$ 1,000,000
Derivatives not designated as hedging instruments:						
Interest rate swaps and other contracts *	\$ 449,280	\$ 564,678	\$ 14,753,330	\$ 180,701	\$ 47,044	\$ 10,179,294
Foreign currency derivatives	13,709	12,604	1,273,735	311	233	122,166
Mortgage banking derivatives	167	157	31,299	488	1,454	312,428
Total derivatives not designated as hedging instruments	\$ 463,156	\$ 577,439	\$ 16,058,364	\$ 181,500	\$ 48,731	\$ 10,613,888

* Other derivatives include risk participation agreements.

The Chicago Mercantile Exchange and London Clearing House variation margins are classified as a single-unit of account as settlements of cash flow hedges and other non-designated derivative instruments. As a result, the fair value of the applicable derivative assets and liabilities are reported net of variation margin at December 31, 2022 and 2021 in the table above.

Gains (losses) included in the consolidated statements of income and in other comprehensive income (loss), on a pre-tax basis, related to interest rate derivatives designated as hedges of cash flows were as follows:

	2022	2021	2020
	(in thousands)		
Amount of loss reclassified from accumulated other comprehensive loss to interest expense	\$ (274)	\$ (3,436)	\$ (2,912)
Amount of gain (loss) recognized in other comprehensive income (loss)	4,683	138	(3,169)

The accumulated net after-tax gains and losses related to effective cash flow hedges included in accumulated other comprehensive loss were \$2.2 million and \$1.3 million at December 31, 2022 and 2021, respectively.

Amounts reported in accumulated other comprehensive loss related to cash flow interest rate derivatives are reclassified to interest expense as interest payments are made on the hedged variable interest rate liabilities. Valley estimates that \$3.5 million will be reclassified as a decrease to interest expense in 2023.

Gains (losses) included in the consolidated statements of income related to interest rate derivatives designated as hedges of fair value were as follows:

	2022	2021	2020
	(in thousands)		
Derivative—interest rate swaps:			
Interest income	\$ —	\$ —	\$ 229
Interest expense	(466)	(3,335)	—
Hedged item—subordinated debt and loans:			
Interest income	\$ —	\$ —	\$ (229)
Interest expense	741	3,397	—

The changes in the fair value of the hedged item designated as a qualifying hedge are captured as an adjustment to the carrying amount of the hedged item (basis adjustment). The following table presents the hedged items related to interest rate derivatives designated as fair value hedges and the cumulative basis fair value adjustment included in the net carrying amount of the hedged items at December 31, 2022 and 2021:

Line Item in the Statement of Financial Position in Which the Hedged Item is Included	Net Carrying Amount of the Hedged Liability *	Cumulative Amount of Fair Value Hedging Adjustment Included in the Carrying Amount of the Hedged Liability
	(in thousands)	
December 31, 2022		
Long-term borrowings	\$ 267,076	\$ (30,132)
December 31, 2021		
Long-term borrowings	293,003	(3,397)

* Net carrying amount includes unamortized debt issuance costs of \$2.8 million and \$3.6 million at December 31, 2022 and 2021, respectively.

The net (gains) losses included in the consolidated statements of income related to derivative instruments not designated as hedging instruments were as follows:

	2022	2021	2020
	(in thousands)		
Non-designated hedge interest rate and credit derivatives			
Other non-interest expense	\$ (1,392)	\$ 54	\$ 1,067

Capital markets income reported in non-interest income included fee income related to non-designated hedge derivative interest rate swaps (not designated as hedging instruments) executed with commercial loan customers totaling \$43.1 million, \$26.9 million and \$59.0 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Collateral Requirements and Credit Risk Related Contingency Features. By using derivatives, Valley is exposed to credit risk if counterparties to the derivative contracts do not perform as expected. Management attempts to minimize counterparty credit risk through credit approvals, limits, monitoring procedures and obtaining collateral where appropriate. Credit risk exposure associated with derivative contracts is managed at Valley in conjunction with Valley's consolidated counterparty risk management process. Valley's counterparties and the risk limits monitored by management are periodically reviewed and approved by the Board of Directors.

Valley has agreements with its derivative counterparties providing that if Valley defaults on any of its indebtedness, including default where repayment of the indebtedness has not been accelerated by the lender, then Valley could also be declared in default on its derivative counterparty agreements. Additionally, Valley has an agreement with several of its derivative counterparties that contains provisions that require Valley's debt to maintain an investment grade credit rating from each of the major credit rating agencies from which it receives a credit rating. If Valley's credit rating is reduced below investment grade, or such rating is withdrawn or suspended, then the counterparties could terminate the derivative positions and

Valley would be required to settle its obligations under the agreements. As of December 31, 2022, Valley was in compliance with all of the provisions of its derivative counterparty agreements. The aggregate fair value of all derivative financial instruments with credit risk-related contingent features in a net liability position at December 31, 2022 was not material. Valley has derivative counterparty agreements that require minimum collateral posting thresholds for certain counterparties.

BALANCE SHEET OFFSETTING (Note 16)

Certain financial instruments, including certain over-the-counter (OTC) derivatives (mostly interest rate swaps) and repurchase agreements (accounted for as secured long-term borrowings), may be eligible for offset in the consolidated statements of financial condition and/or subject to master netting arrangements or similar agreements. OTC derivatives include interest rate swaps executed and settled bilaterally with counterparties without the use of an organized exchange or central clearing house (presented in the table below). The credit risk associated with bilateral OTC derivatives is managed through obtaining collateral and enforceable master netting agreements.

Valley is party to master netting arrangements with its financial institution counterparties; however, Valley does not offset assets and liabilities under these arrangements for financial statement presentation purposes. The master netting arrangements provide for a single net settlement of all swap agreements, as well as collateral, in the event of default on, or termination of, any one contract. Collateral, usually in the form of cash or marketable investment securities, is posted by the counterparty with net liability positions in accordance with contract thresholds. Master repurchase agreements which include “right of set-off” provisions generally have a legally enforceable right to offset recognized amounts. In such cases, the collateral would be used to settle the fair value of the swap or repurchase agreement should Valley be in default. Total amount of collateral held or pledged cannot exceed the net derivative fair values with the counterparty.

The table below presents information about Valley’s financial instruments that are eligible for offset in the consolidated statements of financial condition as of December 31, 2022 and 2021.

	Gross Amounts Recognized	Gross Amounts Offset	Net Amounts Presented	Gross Amounts Not Offset		Net Amount
				Financial Instruments	Cash Collateral *	
(in thousands)						
December 31, 2022						
Assets:						
Interest rate swaps	\$ 462,989	\$ —	\$ 462,989	\$ 12,766	\$ (342,480)	\$ 133,275
Liabilities:						
Interest rate swaps	\$ 577,282	\$ —	\$ 577,282	\$ (12,766)	\$ (432)	\$ 564,084
Total liabilities	\$ 577,282	\$ —	\$ 577,282	\$ (12,766)	\$ (432)	\$ 564,084
December 31, 2021						
Assets:						
Interest rate swaps	\$ 181,012	\$ —	\$ 181,012	\$ —	\$ —	\$ 181,012
Liabilities:						
Interest rate swaps	\$ 50,922	\$ —	\$ 50,922	\$ —	\$ (44,231)	\$ 6,691
Total liabilities	\$ 50,922	\$ —	\$ 50,922	\$ —	\$ (44,231)	\$ 6,691

* Cash collateral received from or pledged to our counterparties in relation to market value exposures of OTC derivative contracts in a asset/liability position.

REGULATORY AND CAPITAL REQUIREMENTS (Note 17)

Valley’s primary source of cash is dividends from the Bank. Valley National Bank, a national banking association, is subject to certain restrictions on the amount of dividends that it may declare without prior regulatory approval. In addition, the dividends declared cannot be in excess of the amount which would cause the subsidiary bank to fall below the minimum required for capital adequacy purposes.

Valley and Valley National Bank are subject to the regulatory capital requirements administered by the Federal Reserve Bank and the OCC. Failure to meet minimum capital requirements can initiate certain mandatory and possible additional discretionary actions by regulators that, if undertaken, could have a direct significant impact on Valley’s consolidated financial statements. Under capital adequacy guidelines Valley and Valley National Bank must meet specific capital guidelines that involve quantitative measures of Valley’s assets, liabilities and certain off-balance sheet items as calculated under regulatory

accounting practices. Capital amounts and classification are also subject to qualitative judgments by the regulators about components, risk weightings and other factors.

Quantitative measures established by regulation to ensure capital adequacy require Valley and Valley National Bank to maintain minimum amounts and ratios of common equity Tier 1 capital, total and Tier 1 capital to risk-weighted assets, and Tier 1 capital to average assets, as defined in the regulations.

Valley is required to maintain a common equity Tier 1 capital to risk-weighted assets ratio of 4.5 percent, Tier 1 capital to risk-weighted assets of 6.0 percent, ratio of total capital to risk-weighted assets of 8.0 percent, and minimum leverage ratio of 4.0 percent, plus a 2.5 percent capital conservation buffer added to the minimum requirements for capital adequacy purposes. As of December 31, 2022 and 2021, Valley and Valley National Bank exceeded all capital adequacy requirements (see table below).

For regulatory capital purposes, in accordance with the Federal Reserve Board's final interim rule as of April 3, 2020, we deferred 100 percent of the CECL Day 1 impact to shareholders' equity plus 25 percent of the reserve build (i.e., provision for credit losses less net charge-offs) for a two-year period ending January 1, 2022. On January 1, 2022, the deferral amount totaling \$47.3 million after-tax started to be phased-in by 25 percent and will increase by 25 percent per year until fully phased-in on January 1, 2025. As of December 31, 2022, approximately \$11.8 million of the \$47.3 million deferral amount was recognized as a reduction to regulatory capital and, as a result, decreased our risk based capital ratios by approximately 3 basis points.

The following table presents Valley's and Valley National Bank's actual capital positions and ratios under the Basel III risk-based capital guidelines at December 31, 2022 and 2021:

	Actual		Minimum Capital Requirements		To Be Well Capitalized Under Prompt Corrective Action Provision	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
(\$ in thousands)						
As of December 31, 2022						
Total Risk-based Capital						
Valley	\$ 5,569,639	11.63 %	\$ 5,026,621	10.50 %	N/A	N/A
Valley National Bank	5,659,511	11.84	5,018,129	10.50	\$ 4,779,170	10.00 %
Common Equity Tier 1 Capital						
Valley	4,315,659	9.01	3,351,080	7.00	N/A	N/A
Valley National Bank	5,284,372	11.06	3,345,419	7.00	3,106,461	6.50
Tier 1 Risk-based Capital						
Valley	4,530,500	9.46	4,069,169	8.50	N/A	N/A
Valley National Bank	5,284,372	11.06	4,062,295	8.50	3,823,336	8.00
Tier 1 Leverage Capital						
Valley	4,530,500	8.23	2,200,822	4.00	N/A	N/A
Valley National Bank	5,284,372	9.60	2,200,891	4.00	2,751,114	5.00
As of December 31, 2021						
Total Risk-based Capital						
Valley	\$ 4,454,485	13.10 %	\$ 3,569,144	10.50 %	N/A	N/A
Valley National Bank	4,571,448	13.45	3,567,618	10.50	\$ 3,397,732	10.00 %
Common Equity Tier 1 Capital						
Valley	3,417,930	10.06	2,379,429	7.00	N/A	N/A
Valley National Bank	4,308,734	12.68	2,378,412	7.00	2,208,526	6.50
Tier 1 Risk-based Capital						
Valley	3,632,771	10.69	2,889,307	8.50	N/A	N/A
Valley National Bank	4,308,734	12.68	2,888,072	8.50	2,718,185	8.00
Tier 1 Leverage Capital						
Valley	3,632,771	8.88	1,635,508	4.00	N/A	N/A
Valley National Bank	4,308,734	10.53	1,636,097	4.00	2,045,121	5.00

COMMON AND PREFERRED STOCK (Note 18)

Repurchase Plan. In 2007, Valley's Board of Directors approved the repurchase of up to 4.7 million of common shares. Purchases of Valley's common shares may be made from time to time in the open market or in privately negotiated transactions generally not exceeding prevailing market prices. Repurchased shares are held in treasury and are expected to be used for general corporate purposes. During 2022 and 2021, Valley repurchased approximately 1.0 million and 1.6 million of its common shares on the open market at an average price of \$13.32 and \$14.31 per share, respectively, under its 2007 stock repurchase plan. Valley made no share repurchases under the plan during the year ended December 31, 2020. In April 2022, Valley terminated its 2007 stock repurchase plan (and its remaining shares available for repurchase) and publicly announced a new stock purchase program for up to 25 million shares of Valley common stock. The authorization to repurchase shares will expire on April 25, 2024.

Other Stock Repurchases. Valley purchases shares directly from its employees in connection with employee elections to withhold taxes related to the vesting of stock awards. During the years ended December 31, 2022, 2021 and 2020, Valley purchased approximately 761 thousand, 510 thousand and 510 thousand shares, respectively, of its outstanding common stock at an average price of \$13.93, \$10.85 and \$10.61, respectively, for such purpose.

Preferred Stock

Series A Issuance. On June 19, 2015, Valley issued 4.6 million shares of its Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series A, no par value per share, with a liquidation preference of \$25 per share. Dividends on the preferred stock accrue and are payable quarterly in arrears, at a fixed rate per annum equal to 6.25 percent from the original issue date to, but excluding, June 30, 2025, and thereafter at a floating rate per annum equal to three-month LIBOR plus a spread of 3.85 percent. The net proceeds from the preferred stock offering totaled \$111.6 million. Commencing June 30, 2025, Valley may redeem the preferred shares at the liquidation preference plus accrued and unpaid dividends, subject to certain conditions.

Series B Issuance. On August 3, 2017, Valley issued 4.0 million shares of its Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series B, no par value per share, with a liquidation preference of \$25 per share. Dividends on the preferred stock will accrue and be payable quarterly in arrears, at a fixed rate per annum equal to 5.50 percent from the original issuance date to, but excluding, September 30, 2022, and thereafter at a floating rate per annum equal to three-month LIBOR plus a spread of 3.578 percent. The net proceeds from the preferred stock offering totaled \$98.1 million. Commencing September 30, 2022, Valley may redeem the preferred shares at the liquidation preference plus accrued and unpaid dividends, subject to certain conditions.

Preferred stock is included in Valley's (additional) Tier 1 capital and total risk-based capital at December 31, 2022 and 2021.

OTHER COMPREHENSIVE INCOME (Note 19)

The following table presents the tax effects allocated to each component of other comprehensive income (loss) for the years ended December 31, 2022, 2021 and 2020. Components of other comprehensive income (loss) include changes in net unrealized gains and losses on debt securities available for sale; unrealized gains and losses on derivatives used in cash flow hedging relationships; and the defined benefit pension and postretirement benefit plan adjustments for the unfunded portion of various employee, officer and director benefit plans.

	2022			2021			2020		
	Before Tax	Tax Effect	After Tax	Before Tax	Tax Effect	After Tax	Before Tax	Tax Effect	After Tax
(in thousands)									
Unrealized gains and losses on available for sale (AFS) debt securities									
Net (losses) gains arising during the period	\$ (189,201)	\$ 52,220	\$ (136,981)	\$ (32,586)	\$ 8,973	\$ (23,613)	\$ 38,477	\$ (10,632)	\$ 27,845
Less reclassification adjustment for net (gains) losses included in net income ⁽¹⁾	(31)	8	(23)	(663)	172	(491)	(524)	147	(377)
Net change	(189,232)	52,228	(137,004)	(33,249)	9,145	(24,104)	37,953	(10,485)	27,468
Unrealized gains and losses on derivatives (cash flow hedges)									
Net gains (losses) arising during the period	4,683	(1,321)	3,362	138	(11)	127	(3,169)	918	(2,251)
Less reclassification adjustment for net losses (gains) included in net income ⁽²⁾	274	(71)	203	3,436	(989)	2,447	2,912	(838)	2,074
Net change	4,957	(1,392)	3,565	3,574	(1,000)	2,574	(257)	80	(177)
Defined benefit pension and postretirement benefit plans									
Net (losses) gains arising during the period	(18,531)	5,356	(13,175)	14,381	(4,075)	10,306	(5,719)	2,301	(3,418)
Amortization of prior service (cost) credit ⁽³⁾	(135)	35	(100)	(135)	39	(96)	(136)	38	(98)
Amortization of net loss ⁽³⁾	905	(261)	644	1,538	(432)	1,106	1,003	(282)	721
Net change	(17,761)	5,130	(12,631)	15,784	(4,468)	11,316	(4,852)	2,057	(2,795)
Total other comprehensive (loss) income	\$ (202,036)	\$ 55,966	\$ (146,070)	\$ (13,891)	\$ 3,677	\$ (10,214)	\$ 32,844	\$ (8,348)	\$ 24,496

- (1) Included in (losses) gains on securities transactions, net.
- (2) Included in interest expense.
- (3) Included in the computation of net periodic pension cost. See Note 12 for details.

The following table presents the after-tax changes in the balances of each component of accumulated other comprehensive loss for the years ended December 31, 2022, 2021 and 2020:

	Components of Accumulated Other Comprehensive Loss			Total Accumulated Other Comprehensive Loss
	Unrealized Gains and Losses on AFS Securities	Unrealized Gains and Losses on Derivatives	Defined benefit pension and postretirement benefit plans	
	(in thousands)			
Balance-December 31, 2019	\$ 5,822	\$ (3,729)	\$ (34,307)	\$ (32,214)
Other comprehensive income (loss) before reclassifications	27,845	(2,251)	(3,418)	22,176
Amounts reclassified from other comprehensive (loss) income	(377)	2,074	623	2,320
Other comprehensive income (loss), net	27,468	(177)	(2,795)	24,496
Balance-December 31, 2020	33,290	(3,906)	(37,102)	(7,718)
Other comprehensive (loss) income before reclassifications	(23,613)	127	10,306	(13,180)
Amounts reclassified from other comprehensive (loss) income	(491)	2,447	1,010	2,966
Other comprehensive (loss) income, net	(24,104)	2,574	11,316	(10,214)
Balance-December 31, 2021	9,186	(1,332)	(25,786)	(17,932)
Other comprehensive (loss) income before reclassifications	(136,981)	3,362	(13,175)	(146,794)
Amounts reclassified from other comprehensive (loss) income	(23)	203	544	724
Other comprehensive (loss) income, net	(137,004)	3,565	(12,631)	(146,070)
Balance-December 31, 2022	\$ (127,818)	\$ 2,233	\$ (38,417)	\$ (164,002)

PARENT COMPANY INFORMATION (Note 20)

Condensed Statements of Financial Condition

	December 31,	
	2022	2021
	(in thousands)	
Assets		
Cash	\$ 145,647	\$ 77,760
Interest bearing deposits with banks	250	250
Equity securities	15,423	6,135
Investments in and receivables due from subsidiaries	7,160,571	5,764,957
Other assets	32,727	23,521
Total Assets	<u>\$ 7,354,618</u>	<u>\$ 5,872,623</u>
Liabilities and Shareholders' Equity		
Dividends payable to shareholders	\$ 58,754	\$ 49,265
Long-term borrowings	754,639	634,643
Junior subordinated debentures issued to capital trusts	56,760	56,413
Accrued expenses and other liabilities	83,663	48,236
Shareholders' equity	6,400,802	5,084,066
Total Liabilities and Shareholders' Equity	<u>\$ 7,354,618</u>	<u>\$ 5,872,623</u>

Condensed Statements of Income

	Years Ended December 31,		
	2022	2021	2020
	(in thousands)		
Income			
Dividends from subsidiary	\$ 420,000	\$ 150,000	\$ 186,000
Income from subsidiary	—	—	4,436
Net (losses) gains on equity securities	(1,136)	1,491	—
Other interest and income	82	20	21
Total Income	418,946	151,511	190,457
Total Expenses	48,104	28,537	23,484
Income before income tax and equity in undistributed earnings of subsidiary	370,842	122,974	166,973
Income tax benefit	(13,098)	(9,501)	(3,946)
Income before equity in undistributed earnings of subsidiary	383,940	132,475	170,919
Equity in undistributed earnings of subsidiary	184,911	341,365	219,687
Net Income	568,851	473,840	390,606
Dividends on preferred stock	13,146	12,688	12,688
Net Income Available to Common Shareholders	\$ 555,705	\$ 461,152	\$ 377,918

Condensed Statements of Cash Flows

	Years Ended December 31,		
	2022	2021	2020
	(in thousands)		
Cash flows from operating activities:			
Net Income	\$ 568,851	\$ 473,840	\$ 390,606
Adjustments to reconcile net income to net cash provided by operating activities:			
Equity in undistributed earnings of subsidiaries	(184,911)	(341,365)	(219,687)
Stock-based compensation	28,788	20,887	16,154
Net amortization of premiums and accretion of discounts on borrowings	1,741	1,152	230
Net change in:			
Other assets	(8,070)	2,134	121
Accrued expenses and other liabilities	5,851	(7,079)	17,905
Net cash provided by operating activities	412,250	149,569	205,329
Cash flows from investing activities:			
Purchases of equity securities	(10,424)	(1,644)	(2,500)
Cash and cash equivalents paid in acquisitions, net	(113,244)	(3,983)	—
Repayment of subordinated debt by subsidiary	—	—	100,000
Capital contributions to subsidiary	(125,055)	(227,000)	(210,000)
Other, net	—	—	(1,200)
Net cash used in investing activities	(248,723)	(232,627)	(113,700)
Cash flows from financing activities:			
Proceeds from issuance of long-term borrowings, net	147,508	295,922	113,146
Repayment of long-term borrowings	—	(60,000)	—
Dividends paid to preferred shareholders	(13,146)	(12,688)	(12,688)
Dividends paid to common shareholders	(205,999)	(179,667)	(177,965)
Purchase of common shares to treasury	(24,123)	(23,907)	(5,374)
Common stock issued, net	120	11,245	2,202
Net cash (used in) provided by financing activities	(95,640)	30,905	(80,679)
Net change in cash and cash equivalents	67,887	(52,153)	10,950
Cash and cash equivalents at beginning of year	78,010	130,163	119,213
Cash and cash equivalents at end of year	\$ 145,897	\$ 78,010	\$ 130,163

OPERATING SEGMENTS (Note 21)

Prior to the second quarter 2022, Valley operated as four reportable segments: Consumer Lending, Commercial Lending, Investment Management, and Corporate and Other Adjustments. Valley re-evaluated its segment reporting during the second quarter 2022 to consider the Bank Leumi USA acquisition on April 1, 2022 along with other factors, including changes in the internal structure of operations, discrete financial information reviewed by key decision-makers, balance sheet management strategies and personnel. In connection with the re-evaluation, Valley determined it operated reportable segments consisting of Consumer Banking, Commercial Banking and Treasury and Corporate Other. Treasury and Corporate Other was reorganized to consolidate Treasury and other corporate-wide functions, including the Treasury managed investment securities portfolios and overnight interest earning cash balances formerly reported under Investment Management. The discrete financial information related to the activities previously reported in the Investment Management segment is no longer provided to Valley's CEO, who is the chief operating decision maker. Each operating segment is reviewed routinely for its asset growth, contribution to income before income taxes and return on average interest earning assets and impairment (if events or circumstances indicate a possible inability to realize the carrying amount). Valley regularly assesses its strategic plans, operations, and reporting structures to identify its reportable segments. There were no additional changes to Valley's reportable segments at December 31, 2022.

Consumer Banking is mainly comprised of residential mortgages and automobile loans, and to a lesser extent, secured personal lines of credit, home equity loans and other consumer loans. The duration of the residential mortgage loan portfolio is subject to movements in the market level of interest rates and forecasted prepayment speeds. The average weighted life of the automobile loans within the portfolio is relatively unaffected by movements in the market level of interest rates. However, the average life may be impacted by new loans as a result of the availability of credit within the automobile marketplace and consumer demand for purchasing new or used automobiles. Consumer Banking also includes the Wealth Management and Insurance Services Division, comprised of trust, asset management, brokerage, insurance and tax credit advisory services.

Commercial Banking is comprised of floating rate and adjustable rate commercial and industrial loans and construction loans, as well as fixed rate owner occupied and commercial real estate loans. Due to the portfolio's interest rate characteristics, commercial banking is Valley's operating segment that is most sensitive to movements in market interest rates.

Treasury and Corporate Other largely consists of the Treasury managed held to maturity debt securities and available for sale debt securities portfolios mainly utilized in the liquidity management needs of our lending segments and income and expense items resulting from support functions not directly attributable to a specific segment. Interest income is generated through investments in various types of securities (mainly comprised of fixed rate securities) and interest-bearing deposits with other banks (primarily the Federal Reserve Bank of New York). Expenses related to the branch network, all other components of retail banking, along with the back office departments of the Bank are allocated from Treasury and Corporate Other to the Consumer and Commercial Banking segments. Interest expense and internal transfer expense (for general corporate expenses) are allocated to each operating segment utilizing a transfer pricing methodology, which involves the allocation of operating and funding costs based on each segment's respective mix of average earning assets and or liabilities outstanding for the period.

The financial reporting for each segment contains allocations and reporting in line with Valley's operations, which may not necessarily be comparable to any other financial institution. The accounting for each segment includes internal accounting policies designed to measure consistent and reasonable financial reporting and may result in income and expense measurements that differ from amounts under U.S. GAAP. Furthermore, changes in management structure or allocation methodologies and procedures may result in changes in reported segment financial data. The prior period balances presented in the tables below reflect reclassifications to conform the presentation in those periods to the current operating segment structure. Valley's consolidated results were not impacted by the changes discussed above and remain unchanged for all periods presented.

The following tables represent the financial data for Valley's operating segments for the years ended December 31, 2022, 2021 and 2020:

	Year Ended December 31, 2022			
	Consumer Banking	Commercial Banking	Treasury and Corporate Other	Total
	(\$ in thousands)			
Average interest earning assets (unaudited)	\$ 8,133,665	\$ 33,796,688	\$ 6,137,028	\$ 48,067,381
Interest income	\$ 272,295	\$ 1,556,182	\$ 148,206	\$ 1,976,683
Interest expense	48,843	202,948	69,252	321,043
Net interest income	223,452	1,353,234	78,954	1,655,640
Provision for credit losses	20,880	35,456	481	56,817
Net interest income after provision for credit losses	202,572	1,317,778	78,473	1,598,823
Non-interest income	56,506	79,695	70,592	206,793
Non-interest expense	73,105	118,919	832,925	1,024,949
Internal transfer expense (income)	121,220	491,507	(612,727)	—
Income before income taxes	\$ 64,753	\$ 787,047	\$ (71,133)	\$ 780,667
Return on average interest earning assets (pre-tax) (unaudited)	0.80 %	2.33 %	(1.16)%	1.62 %

Year Ended December 31, 2021				
	Consumer Banking	Commercial Banking	Treasury and Corporate Other	Total
	(\$ in thousands)			
Average interest earning assets (unaudited)	\$ 7,262,808	\$ 25,554,177	\$ 5,410,830	\$ 38,227,815
Interest income	\$ 238,715	\$ 1,018,674	\$ 76,837	\$ 1,334,226
Interest expense	19,117	67,265	37,943	124,325
Net interest income	219,598	951,409	38,894	1,209,901
(Credit) provision for credit losses	(6,807)	39,703	(263)	32,633
Net interest income after provision for credit losses	226,405	911,706	39,157	1,177,268
Non-interest income	72,063	35,600	47,350	155,013
Non-interest expense	78,853	108,577	504,112	691,542
Internal transfer expense (income)	81,423	286,335	(367,758)	—
Income (loss) before income taxes	\$ 138,192	\$ 552,394	\$ (49,847)	\$ 640,739
Return on average interest earning assets (pre-tax) (unaudited)	1.90 %	2.16 %	(0.92)%	1.68 %
Year Ended December 31, 2020				
	Consumer Banking	Commercial Banking	Treasury and Corporate Other	Total
	(\$ in thousands)			
Average interest earning assets (unaudited)	\$ 7,160,793	\$ 24,625,066	\$ 5,225,074	\$ 37,010,933
Interest income	\$ 257,196	\$ 1,027,796	\$ 98,727	\$ 1,383,719
Interest expense	47,712	164,075	53,028	264,815
Net interest income	209,484	863,721	45,699	1,118,904
Provision for credit losses	11,502	113,585	635	125,722
Net interest income after provision for credit losses	197,982	750,136	45,064	993,182
Non-interest income	81,499	64,783	36,750	183,032
Non-interest expense	77,582	98,710	469,856	646,148
Internal transfer expense (income)	77,835	267,588	(345,423)	—
Income (loss) before income taxes	\$ 124,064	\$ 448,621	\$ (42,619)	\$ 530,066
Return on average interest earning assets (pre-tax) (unaudited)	1.73 %	1.82 %	(0.82)%	1.43 %

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Valley National Bancorp:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of financial condition of Valley National Bancorp and subsidiaries (the Company) as of December 31, 2022 and 2021, the related consolidated statements of income, comprehensive income, changes in shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2022, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2022, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 28, 2023 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Allowance for loan losses evaluated on a collective basis

As discussed in Note 5 to the consolidated financial statements, the Company's total allowance for loan losses as of December 31, 2022 was \$458.7 million, of which \$372.1 million related to the loans collectively evaluated for credit losses (the collective ALL). The collective ALL includes the measure of expected credit losses on a collective basis for those loans that share similar risk characteristics. In estimating the collective ALL, the Company uses a transition matrix model which calculates an expected life of loan loss percentage for each loan pool by using probability of default and loss given default metrics. The metrics are based on the migration of loans from performing to loss by credit quality rating or delinquency categories using life-of-loan analysis periods for each loan portfolio pool, and the severity of loss, based on the aggregate net lifetime losses incurred. The expected credit losses are the product of multiplying the model's expected life of loan loss percentages by the exposure at default at period end. The model's expected losses are adjusted for qualitative factors which includes a two-year reasonable and supportable forecast period followed by a one-year period over which estimated losses revert to historical loss experience on a straight-line basis for the remaining life of the loan. The forecasts consist of a multi-scenario economic forecast model which is

assigned relative probability weightings. These adjustments are based on qualitative factors not reflected in the quantitative model but are likely to impact the measurement of estimated credit losses.

We identified the assessment of the collective ALL as a critical audit matter. A high degree of audit effort, including specialized skills and knowledge, and subjective and complex auditor judgment was involved in the assessment of the collective ALL. Specifically, the assessment encompassed the evaluation of the collective ALL methodology, including the model and methods used to estimate the (1) life of loan loss percentages and the related significant assumptions, including probability of default, loss given default and credit risk ratings for commercial loans, and (2) the qualitative factors, including the reasonable and supportable economic forecasts and related weightings, and reversion. The assessment also included an evaluation of the conceptual soundness and performance of the methodology utilized to derive the quantitative life of loan loss percentages and qualitative factors and the Company's procedures to validate the model utilized to produce the lifetime loss estimate. In addition, auditor judgment was required to evaluate the sufficiency of audit evidence obtained.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company's measurement of the collective ALL estimate, including controls over the:

- development of the collective ALL methodology
- continued use and appropriateness of changes made to the transition matrix model
- performance monitoring of the transition matrix model
- identification and determination of the significant assumptions used in the model
- continued use and ongoing monitoring of the appropriateness of the reasonable and supportable forecast period
- development of the qualitative factors, including the significant assumptions used in the measurement of the qualitative factors
- procedures performed by the Company to validate the model is fit for use and appropriate to estimate lifetime losses
- periodic testing of loan risk ratings for loan portfolios
- analysis of the collective ALL results, trends and ratios.

We evaluated the Company's process to develop the collective ALL estimate by testing certain sources of data, factors, and assumptions that the Company used, and considered the relevance and reliability of such data, factors and assumptions. In addition, we involved credit risk professionals with specialized skills and knowledge, who assisted in:

- evaluating the Company's collective ALL methodology for compliance with U.S. generally accepted accounting principles
- evaluating the judgments made by the Company relative to the assessment and performance monitoring of the transition matrix model used to calculate the life of loan loss percentage by comparing them to Company-specific metrics and trends and the applicable industry and regulatory practices
- testing the conceptual soundness and performance of the transition matrix model by inspecting the model documentation and model validation documentation to determine whether the model is suitable for the intended use
- evaluating the economic forecast scenarios and related weightings by comparing them to the Company's business environment and relevant industry practices
- determining whether the loan portfolio is segmented by similar risk characteristics by comparing to the Company's business environment and relevant industry practices
- testing individual credit risk ratings for a selection of commercial loans by evaluating the financial performance of the borrower, sources of repayment and any relevant guarantees or underlying collateral
- evaluating the methodology used to develop the qualitative factor framework and the effect of those factors on the collective ALL by comparing the qualitative factors to the specific portfolio risk characteristics, trends and relevant industry practices and identified limitations of the underlying quantitative models.

We also assessed the sufficiency of the audit evidence obtained related to the collective ALL by evaluating the cumulative results of the audit procedures, qualitative aspects of the Company's accounting practices and potential bias in the accounting estimate.

Fair value measurement of the acquired loans in the Bank Leumi USA business combination

As discussed in Note 2 to the consolidated financial statements, the Company acquired Bank Leumi Le-Israel Corporation, the U.S. subsidiary of Bank Leumi Le-Israel B.M., and parent company of Bank Leumi USA (collectively referred to as Bank Leumi USA) on April 1, 2022. The transaction was accounted for as a business combination using the acquisition method of accounting. Accordingly, assets acquired, liabilities assumed, and consideration paid for Bank Leumi USA were recorded at their fair values at the acquisition date, including the fair value of acquired loans of \$5.9 billion. The fair value of acquired loans was based on a discounted cash flow methodology and the portfolio was segregated into categories for valuation purposes primarily based on loan type and loan risk rating. The expected cash flows from the acquired loan categories were discounted using a forecast of principal and interest payments based on certain loan contractual characteristics, loan risk ratings and key valuation assumptions such as estimated market rates, prepayment speeds, default rates, and loss severity rates.

We identified the assessment of the fair value measurement of the acquired loans in the Bank Leumi USA business combination as a critical audit matter. A high degree of audit effort, including specialized skills and knowledge, and auditor judgment was involved in the assessment due to significant measurement uncertainty. Specifically, the assessment of the fair value measurement encompassed the evaluation of the fair value methodology and the development of key valuation assumptions. The assessment also included an evaluation of loan risk ratings.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls over the Company's fair value measurement process for acquired loans, including controls related to (1) the development of the fair value methodology for acquired loans, (2) the determination of key valuation assumptions, and (3) the determination of loan risk ratings. We involved credit risk professionals with specialized skills and knowledge who assisted in testing individual loan risk ratings for a selection of commercial loan relationships by evaluating the financial performance of the borrower, sources of repayment and any relevant guarantees or underlying collateral. We involved valuation professionals with specialized skills and knowledge who assisted in:

- evaluating the fair value methodology for compliance with U.S. generally accepted accounting principles, and
- developing an independent estimate of the fair value of acquired loans using key valuation assumptions, by loan category, used by other market participants and comparing the results to the Company's fair value estimate.

/s/ KPMG LLP

We have served as the Company's auditor since 2008.

Short Hills, New Jersey

February 28, 2023

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Valley maintains disclosure controls and procedures which, consistent with Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended, are defined to mean controls and other procedures that are designed to ensure that information required to be disclosed in the reports that Valley files or submits under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and to ensure that such information is accumulated and communicated to Valley's management, including its Chief Executive Officer (CEO) and Chief Financial Officer (CFO), as appropriate, to allow timely decisions regarding required disclosure.

Valley's management, with the participation of the CEO and CFO, has evaluated the effectiveness of Valley's disclosure controls and procedures. Based on such evaluation, Valley's CEO and CFO have concluded that such disclosure controls and procedures were effective as of December 31, 2022 (the end of the period covered by this Annual Report on Form 10-K).

Valley's management, including the CEO and CFO, does not expect that our disclosure controls and procedures or our internal controls over financial reporting will prevent all errors and all fraud. A system of internal control, no matter how well conceived and operated, provides reasonable, not absolute, assurance that the objectives of the system of internal control are met. The design of a system of internal control reflects resource constraints and the benefits of controls must be considered relative to their costs. Because there are inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within Valley have been or will be detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns occur because of a simple error or mistake. Controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of internal control is based in part upon certain assumptions about the likelihood of future events. There can be no assurance that any design will succeed in achieving its stated goals under all future conditions; over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with the policies or procedures. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Management's Report on Internal Control over Financial Reporting

Valley's management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. Valley's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles and includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. In addition, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As of December 31, 2022, management assessed the effectiveness of Valley's internal control over financial reporting based on the criteria for effective internal control over financial reporting established in Internal Control-Integrated Framework (2013), issued by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission. Management's assessment included an evaluation of the design of Valley's internal control over financial reporting and testing of the operating effectiveness of its internal control over financial reporting. Management reviewed the results of its assessment with the Audit Committee.

Based on this assessment, management determined that, as of December 31, 2022, Valley's internal control over financial reporting was effective to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

KPMG LLP, the independent registered public accounting firm that audited Valley's December 31, 2022 consolidated financial statements included in this Annual Report on Form 10-K, has issued an audit report expressing an opinion on the effectiveness of Valley's internal control over financial reporting as of December 31, 2022. The report is included in this item under the heading "Report of Independent Registered Public Accounting Firm."

Changes in Internal Control over Financial Reporting

There have been no changes in Valley's internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the year ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect, Valley's internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Valley National Bancorp:

Opinion on Internal Control Over Financial Reporting

We have audited Valley National Bancorp and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statements of financial condition of the Company as of December 31, 2022 and 2021, the related consolidated statements of income, comprehensive income, changes in shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2022, and the related notes (collectively, the consolidated financial statements), and our report dated February 28, 2023 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP

Short Hills, New Jersey
February 28, 2023

Item 9B. Other Information

Not applicable.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Certain information regarding executive officers is included under the section captioned “Information about our Executive Officers” in Item 1 of this report. The information set forth under the captions “Director Information” and “Corporate Governance” in the 2023 Proxy Statement is incorporated herein by reference.

Item 11. Executive Compensation

The information set forth under the captions “Compensation of Directors,” “Compensation Committee Interlocks and Insider Participation” and “Advisory Vote on Our Named Executive Officer Compensation” in the 2023 Proxy Statement is incorporated herein by reference.

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

The information set forth under the captions “Equity Compensation Plan Information” and “Stock Ownership of Management and Principal Shareholders” in the 2023 Proxy Statement is incorporated herein by reference.

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

The information set forth under the captions “Compensation Committee Interlocks and Insider Participation,” “Certain Transactions with Management” and “Corporate Governance” in the 2023 Proxy Statement is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

Our independent registered public accounting firm is KPMG LLP, Short Hills, NJ, Auditor Firm ID: 185.

The information set forth under the caption “Ratification of the Appointment of Independent Registered Public Accounting Firm” in the 2023 Proxy Statement is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) Financial Statements and Schedules:

The following financial statements and supplementary data are filed as part of this annual report:

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All financial statement schedules are omitted because they are either inapplicable or not required, or because the required information is included in the consolidated financial statements or notes thereto.

(b) Exhibits (numbered in accordance with Item 601 of Regulation S-K):

(2) Plan of Acquisition, Reorganization, Arrangement, Liquidation or Succession

- A. [Agreement and Plan of Merger, dated as of September 22, 2021, by and among Valley National Bancorp, Bank Leumi Le-Israel Corporation, a New York corporation and Volcano Merger Sub Corporation, a New York corporation and subsidiary of Valley, incorporated herein by reference to Exhibit 2.1 to the Registrant's Form 8-K Current Report filed on September 27, 2021.](#)

(3) Articles of Incorporation and By-laws:

- A. [Restated Certificate of Incorporation of the Registrant, incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 10-Q Quarterly Report filed on August 7, 2020.](#)
- B. [By-laws of the Registrant, as amended and restated, incorporated herein by reference to Exhibit 3.1 to the Registrant's Form 8-K Current Report filed on October 24, 2018.](#)

(4) Instruments Defining the Rights of Security Holders:

- A. [Indenture, dated as of September 27, 2013, by and between Valley and The Bank of New York Mellon Trust Company, N.A., as Trustee, incorporated herein by reference to Exhibit 4.1 to the Registrant's Form 8-K Current Report filed on September 27, 2013. \(Valley 5.125% sub debt due September 27, 2023\).](#)
- B. [First Supplemental Indenture, dated as of September 27, 2013, by and between Valley and The Bank of New York Mellon Trust Company, N.A., as Trustee, including the form of the Notes attached as Exhibit A thereto, incorporated herein by reference to Exhibit 4.2 to the Registrant's Form 8-K Current Report filed on September 27, 2013 \(Valley 5.125% sub debt due September 27, 2023\).](#)
- C. [Indenture, dated as of June 19, 2015, by and between Valley and The Bank of New York Mellon Trust Company, N.A., as Trustee, incorporated herein by reference to Exhibit 4.1 to the Registrant's Form 8-K Current Report filed on June 19, 2015. \(Valley 4.55% sub debt due July 30, 2025\).](#)
- D. [First Supplemental Indenture, dated as of June 19, 2015, by and between Valley and The Bank of New York Mellon Trust Company, N.A., as Trustee, including the form of the Notes attached as Exhibit A thereto, incorporated herein by reference to Exhibit 4.2 to the Registrant's Form 8-K Current Report filed on June 19, 2015 \(Valley 4.55% sub debt due July 30, 2025\).](#)
- E. [Agreement to provide SEC with Indentures not filed. \(Item 601\(b\)\(4\)\(iii\)\(A\)\), incorporated herein by reference to Exhibit 4G to the Registrant's Form 10-K Annual Report filed on February 28, 2017.](#)
- F. [Description of Valley Securities*](#)
- G. [Indenture, dated as of June 5, 2020, between Valley and The Bank of New York Mellon Trust Company, N.A., as Trustee, incorporated herein by reference to Exhibit 4.1 to the Registrant's Form 8-K Current Report filed on June 5, 2020.](#)
- H. [First Supplemental Indenture, dated as of June 5, 2020, between Valley and The Bank of New York Mellon Trust Company, N.A., as Trustee, including the form of Notes attached as Exhibit A thereto, incorporated herein by reference to Exhibit 4.2 to the Registrant's Form 8-K Current Report filed on June 5, 2020 \(Valley 5.25% sub debt due June 15, 2030\).](#)
- I. [Indenture, dated as of May 28, 2021, between Valley and U. S. Bank, N.A., as Trustee, incorporated herein by reference to Exhibit 4.1 to the Registrant's Form 8-K Current Report filed on May 28, 2021.](#)
- J. [First Supplemental Indenture, dated as of May 28, 2021, between Valley and U. S. Bank, N.A., as Trustee, including the form of Notes attached thereto, incorporated by reference to Exhibit 4.2 to the Registrant's Form 8-K Current Report filed on May 28, 2021 \(Valley 3.00% sub debt due June 15, 2031\).](#)
- K. [Second Supplemental Indenture, dated as of September 20, 2022, between Valley and U.S. Bank Trust Company, National Association, as Trustee, including the form of Notes attached thereto, incorporated by reference to Exhibit 4.2 to the Registrant's Form 8-K Current Report filed on September 20, 2022 \(Valley 6.25% sub debt due September 30, 2022\).](#)

(10) Material Contracts:

- A. [The Valley National Bancorp Benefit Equalization Plan, as Amended and Restated, incorporated herein by reference to Exhibit 10 to the Registrant's Form 10-Q Quarterly Report filed on November 6, 2015.+](#)
- B. [Form of Participant Agreement for the Benefit Equalization Plan, incorporated herein by reference to Exhibit 10.J to the Registrant's Form 10-K Annual Report for the year ended December 31, 2011 \(No. 001-11277\).+](#)
- C. [Valley National Bancorp Deferred Compensation Plan, dated as of January 1, 2017, incorporated herein by reference to Exhibit 10.S to the Registrant's Form 10-K Annual Report for the year ended December 31, 2016.+](#)
- D. [Severance Letter Agreement, dated as of September 21, 2016, between Valley National Bank, Valley and Ira Robbins, incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 8-K Current Report filed on September 27, 2016.+](#)
- E. [Form of Valley National Bancorp Restricted Stock Award Agreement, incorporated herein by reference to Exhibit 10.2 to the Registrant's Form 10-Q Quarterly Report filed on May 8, 2017 \(in use prior to 2019\).+](#)
- F. [Severance Letter Agreement, dated as of September 21, 2016, between Valley National Bank, Valley and Thomas A. Iadanza, incorporated herein by reference to Exhibit 10.3 to the Registrant's Form 8-K Current Report filed on September 27, 2016.+](#)
- G. [Consulting Agreement, dated as of May 1, 2022, by and between Valley National Bancorp and Alrem LLC, incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 10-Q Quarterly Report filed on August 9, 2022.+](#)
- H. [Bank Leumi Le-Israel Corporation 2018 Stock Option Plan, incorporated herein by reference to Exhibit 4.1 to the Registrant's Form S-8 Registration Statement filed on April 1, 2022.+](#)
- I. [Restricted Stock Unit Agreement, effective as of January 6, 2022, between Bank Leumi Le-Israel Corporation and Avner Mendelson, incorporated herein by reference to Exhibit 4.2 to the Registrant's Form S-8 Registration Statement filed April 1, 2022.+](#)
- J. [USAmeriBancorp, Inc. 2006 Stock Option and Restricted Stock Plan, as amended, incorporated herein by reference to Exhibit 99.1 to the Registrant's Form S-8 Registration Statement filed on December 29, 2017.+](#)
- K. [USAmeriBancorp, Inc. 2015 Long-Term Incentive Plan, incorporated herein by reference to Exhibit 99.2 to the Registrant's Form S-8 Registration Statement filed on December 29, 2017.+](#)
- L. [Form of Change in Control Agreement for Executive Vice President, dated January 16, 2019, incorporated herein by reference to Exhibit CC to the Registrant's Form 10-K filed on February 28, 2019.+](#)
- M. [Form of Change in Control Agreement for Senior Executive Vice President, dated January 16, 2019, incorporated herein by reference to Exhibit DD to the Registrant's Form 10-K filed on February 28, 2019.+](#)
- N. [Form of Agreement to Reduce Change in Control Severance, effective January 1, 2023 \(applicable to Ira Robbins and Thomas A. Iadanza\), incorporated herein by reference to Exhibit EE to the Registrant's Form 10-K filed on February 28, 2019.+](#)
- O. [Form of Change in Control Agreement for President and Chief Executive Officer, dated January 16, 2019 and effective January 1, 2023 \(applicable to Ira Robbins\), incorporated herein by reference to Exhibit FF to the Registrant's Form 10-K filed on February 28, 2019.+](#)
- P. [Amendment to 2016 Change in Central Severance Plan for First Senior Vice Presidents and Senior Vice Presidents \(applicable after January 1, 2020\), incorporated herein by reference to Exhibit GG to the Registrant's Form 10-K filed on February 28, 2019.+](#)
- Q. [2019 Change in Control Severance Plan applicable to First Senior Vice Presidents and Senior Vice Presidents, incorporated herein by reference to Exhibit HH to the Registrant's Form 10-K filed on February 28, 2019.+](#)

- R. [Form of Change in Control Agreement for Senior Executive Vice President, effective January 1, 2023 \(covering Thomas A. Iadanza\), incorporated herein by reference to Exhibit II to the Registrant's Form 10-K filed on February 28, 2019. +](#)
- S. [Valley National Bancorp 2016 Long-Term Stock Incentive Plan, as amended and restated on January 28, 2020 incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 10-Q filed on November 6, 2020. +](#)
- T. [Form of Valley National Bancorp Agreement for Performance Based Restricted Stock Unit Award, in connection with Valley National Bancorp 2016 Long-Term Stock Incentive Plan, \(for use in 2019 and thereafter\), incorporated herein by reference to Exhibit LL to the Registrant's Form 10-K filed on February 28, 2019. +](#)
- U. [Form of Valley National Bancorp Restricted Stock Unit Award Agreement, in connection with Valley National Bancorp 2016 Long-Term Stock Incentive Plan, \(for use in 2019 and thereafter\), incorporated herein by reference to Exhibit MM to the Registrant's Form 10-K filed on February 28, 2019. +](#)
- V. [Form of Valley National Bancorp Director Restricted Stock Unit Award Agreement, in connection with Valley National Bancorp 2016 Long-Term Stock Incentive Plan, \(for use in 2019 and thereafter\), incorporated herein by reference to Exhibit NN to the Registrant's Form 10-K filed on February 28, 2019. +](#)
- W. [Oritani Financial Corp. 2011 Equity Incentive Plan, incorporated by reference to Appendix A of the proxy statement for the Special Meeting of Oritani Stockholders \(Commission File No. 001-34786\) filed by Oritani under the Securities Exchange Act of 1934, as amended, on June 27, 2011. +](#)
- X. [Employment Agreement, dated as of July 25, 2017, by and among Joseph V. Chillura, Valley National Bancorp and Valley National Bank, incorporated herein by reference to Exhibit 10.1 of the Registrant's Form 10-Q filed on August 7, 2020. +](#)
- Y. [Valley National Bancorp 2021 Incentive Compensation Plan, incorporated herein by reference to Exhibit 10.1 of the Registrant's Form 10-Q filed on May 7, 2021. +](#)
- Z. [Form of Valley National Bancorp Director Restricted Stock Unit Award Agreement, in connection with Valley National Bancorp 2021 Incentive Compensation Plan, incorporated herein by reference to Exhibit 10.4 of the Registrant's Form 10-Q filed on May 7, 2021. +](#)
- AA. [Form of Valley National Bancorp Time-Based Restricted Stock Unit Award Agreement, in connection with Valley National Bancorp 2021 Incentive Compensation Plan, incorporated herein by reference to Exhibit 10.DD to the Registrant's Form 10-K Annual Report filed on February 28, 2022. +](#)
- BB. [Form of Valley National Bancorp Performance-Based Restricted Stock Unit Award Agreement, in connection with Valley National Bancorp 2021 Incentive Compensation Plan, incorporated herein by reference to Exhibit 10.EE to the Registrant's Form 10-K Annual Report filed on February 28, 2022. +](#)
- CC. [Separation Agreement and General Release, dated as of February 16, 2022, between Valley National Bank and Robert Bardusch, incorporated herein by reference to Exhibit 10.2 to the Registrant's Form 10-Q Quarterly Report filed on May 9, 2022. +](#)
- DD. [Offer letter, dated as of September 23, 2021, between Valley National Bancorp and Raja Dakkuri. +*](#)
- EE. [Investor Rights Agreement, dated as of April 1, 2022, between Valley National Bancorp and Bank Leumi Le-Israel B.M., incorporated herein by reference to Exhibit 10.1 to the Registrant's Form 8-K Current Report filed on April 1, 2022.](#)

(21) List of Subsidiaries as of December 31, 2022:

	Name	Jurisdiction of Incorporation	Percentage of Voting Securities Owned by the Parent Directly or Indirectly
(a)	Subsidiaries of Valley:		
	Valley National Bank	United States	100%
	Aliant Statutory Trust II	Delaware	100%
	GCB Capital Trust III	Delaware	100%
	State Bancorp Capital Trust I	Delaware	100%
	State Bancorp Capital Trust II	Delaware	100%
	Dudley Ventures, LLC	Delaware	100%
	DV Financial Services, LLC	Delaware	100%
(b)	Subsidiaries of Valley National Bank:		
	Hallmark Capital Management, Inc.	New Jersey	100%
	Highland Capital Corp.	New Jersey	100%
	Valley Insurance Services, Inc.	New York	90%
	Metro Title and Settlement Agency, Inc.	New York	100%
	Valley Commercial Capital, LLC	New Jersey	100%
	Valley Securities Holdings L.L.C.	New Jersey	100%
	VNB New York, LLC	New York	100%
	DV Community Investment, LLC	Delaware	100%
	Valley Financial Management, Inc.	New York	100%
(c)	Subsidiaries of Valley Insurance Services, Inc.:		
	RISC One, Inc.	New York	90%
	Valley Insurance Services of Florida, LLC	Florida	90%
(d)	Subsidiaries of Valley Securities Holdings L.L.C.:		
	SAR II, Inc.	New Jersey	100%
	Shrewsbury Capital Corporation	New Jersey	100%
	Valley Investments, Inc.	New Jersey	100%
	Oritani Investment Corp.	New Jersey	100%
(e)	Subsidiary of Oritani Investment Corp.:		
	Oritani Asset Corp.	New Jersey	100%
(f)	Subsidiary of SAR II, Inc.:		
	VNB Realty, Inc.	New Jersey	100%
(g)	Subsidiary of VNB Realty, Inc.:		
	VNB Capital Corp.	New York	100%

† Excluded from the list are subsidiaries that, if considered in the aggregate, would not constitute a significant subsidiary under SEC rules as of December 31, 2022.

(23) [Consent of KPMG LLP *](#)

(24) [Power of Attorney of Certain Directors and Officers of Valley.*](#)

(31.1) [Certification of Ira Robbins, Chairman of the Board and Chief Executive Officer of the Company, pursuant to Securities Exchange Rule 13a-14\(a\).*](#)

(31.2) [Certification of Michael D. Hagedorn, Senior Executive Vice President and Chief Financial Officer of the Company, pursuant to Securities Exchange Rule 13a-14\(a\).*](#)

(32) [Certification, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, signed by Ira Robbins, Chairman of the Board and Chief Executive Officer of the Company and Michael D. Hagedorn, Senior Executive Vice President and Chief Financial Officer of the Company.*](#)

(101) Interactive Data File (XBRL Instance Document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document) *

(104) Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101) *

- * Filed herewith.
- + Management contract and compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

VALLEY NATIONAL BANCORP

By: /s/ IRA ROBBINS
**Ira Robbins, Chairman of the Board
and Chief Executive Officer**

By: /s/ MICHAEL D. HAGEDORN
**Michael D. Hagedorn,
Senior Executive Vice President
and Chief Financial Officer**

Dated: February 28, 2023

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities indicated:

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ IRA ROBBINS</u> Ira Robbins	Chairman of the Board and Chief Executive Officer and Director (Principal Executive Officer)	February 28, 2023
<u>/s/ MICHAEL D. HAGEDORN</u> Michael D. Hagedorn	Senior Executive Vice President, Chief Financial Officer (Principal Financial Officer)	February 28, 2023
<u>/s/ MITCHELL L. CRANDELL</u> Mitchell L. Crandell	Executive Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 28, 2023
<u>ANDREW B. ABRAMSON*</u> Andrew B. Abramson	Director	February 28, 2023
<u>RONEN AGASSI*</u> Ronen J. Agassi	Director	February 28, 2023
<u>PETER J. BAUM*</u> Peter J. Baum	Director	February 28, 2023
<u>ERIC P. EDELSTEIN*</u> Eric P. Edelstein	Director	February 28, 2023
<u>MARC J. LENNER*</u> Marc J. Lenner	Director	February 28, 2023
<u>PETER V. MAIO*</u> Peter V. Maio	Director	February 28, 2023
<u>AVNER MENDELSON*</u> Avner Mendelson	Director	February 28, 2023

<u>Signature</u>	<u>Title</u>	<u>Date</u>
SURESH L. SANI* Suresh L. Sani	Director	February 28, 2023
LISA J. SCHULTZ* Lisa J. Schultz	Director	February 28, 2023
JENNIFER W. STEANS* Jennifer W. Steans	Director	February 28, 2023
JEFFREY S. WILKS* Jeffrey S. Wilks	Director	February 28, 2023
DR. SIDNEY S. WILLIAMS, JR.* Dr. Sidney S. Williams, Jr.	Director	February 28, 2023
By: /s/ MICHAEL D. HAGEDORN Michael D. Hagedorn, attorney-in fact		February 28, 2023

*

**DESCRIPTION OF THE REGISTRANT'S SECURITIES
REGISTERED PURSUANT TO SECTION 12(B) OF THE
SECURITIES EXCHANGE ACT OF 1934**

Valley National Bancorp ("Valley") has three classes of securities registered under Section 12(b) of the Securities Exchange Act of 1934, as amended: (1) common stock, no par value per share ("Common Stock"); (2) 6.25% Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series A, no par value per share ("Series A Preferred Stock"); and (3) 5.50% Fixed-to-Floating Rate Non-Cumulative Perpetual Preferred Stock, Series B, no par value per share ("Series B Preferred Stock").

The following descriptions of Common Stock, Series A Preferred Stock and Series B Preferred Stock are summaries and do not purport to be complete. They are subject to and qualified in their entirety by reference to Valley's Restated Certificate of Incorporation (the "Certificate of Incorporation") and Valley's Amended and Restated Bylaws (the "Bylaws"), each of which are incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4F is a part. Valley encourages you to read the Certificate of Incorporation, the Bylaws and the applicable provisions of Title 14A of the New Jersey Business Corporation Act for additional information.

Description of Common Stock

General

All outstanding shares of Common Stock are fully paid and non-assessable. The Common Stock has no sinking fund provisions or preemptive, conversion or exchange rights.

Voting Rights

At meetings of shareholders, holders of Common Stock are entitled to one vote per share. The quorum for shareholders' meetings is a majority of the outstanding shares represented in person or by proxy. Generally, actions and authorizations to be taken or given by shareholders require the approval of a majority of the votes cast by holders of Common Stock at a meeting at which a quorum is present.

Dividend Rights

Subject to the rights of holders of preferred stock as set forth in the Certificate of Incorporation, if any, holders of Common Stock are entitled to receive dividends, if any, as may be declared from time to time by the Board of Directors of Valley (the "Board") in its discretion out of funds legally available for the payment of dividends.

Liquidation Rights

Subject to the rights of holders of preferred stock as set forth in the Certificate of Incorporation, if any, holders of Common Stock are entitled to share equally and ratably in assets legally available for distribution after payment of debts and liabilities, in the event of the dissolution, liquidation or winding up of Valley.

Redemption

The Common Stock is not redeemable at the option of Valley or holders thereof.

Transfer Agent and Registrar

American Stock & Trust Company, LLC is the transfer agent and registrar for the Common Stock.

Listing

The Common Stock is traded on The Nasdaq Stock Market LLC under the trading symbol "VLY."

Description of Series A Preferred Stock

General

All outstanding shares of Series A Preferred Stock are fully paid and non-assessable. The Series A Preferred Stock has no preemptive, conversion or exchange rights and is not subject to any sinking fund or any other obligation of Valley for its repurchase or retirement.

Ranking

The Series A Preferred Stock ranks, with respect to the payment of dividends and distributions upon the liquidation, dissolution or winding-up of Valley, respectively: (i) senior to the Common Stock and each other Valley capital stock issued in the future, unless the terms of that capital stock expressly provide that it ranks at least on parity with the Series A Preferred Stock; (ii) on parity with the Series B Preferred Stock and each other Valley capital stock issued in the future with terms that expressly rank it on parity with the Series A Preferred Stock; and (iii) junior to any Valley capital stock issued in the future with terms that expressly rank it senior to the Series A Preferred Stock.

Dividend Rights

Holders of Series A Preferred Stock are entitled to receive non-cumulative, non-mandatory cash dividends, if any, as may be declared from time to time by the Board, or a duly authorized committee of the Board, in its discretion out of assets legally available for the payment of dividends. These dividends are payable quarterly, in arrears, on the 30th day of March, June, September and December of each year. Dividends on Series A Preferred Stock will accrue on the liquidation preference amount of \$25 per share at a rate per annum equal to 6.25% with respect to each dividend period from and including the original issue date to, but excluding, June 30, 2025, and thereafter at a rate per annum equal to the three-month U.S. dollar LIBOR, as defined in the Certificate of Incorporation, on the related dividend determination date plus a spread of 3.85% per annum.

Priority of Dividends

If any Series A Preferred Stock remains outstanding, unless the full dividends for the most recently completed dividend period have been declared and paid, or declared and a sum sufficient for the payment thereof has been set aside, on all shares of outstanding Series A Preferred Stock, then: (i) no dividend can be declared, paid or set aside for payment and no distribution can be declared, made or set aside for payment on any junior stock, including Common Stock, aside from those exceptions as listed in the Certificate of Incorporation; (ii) no share of junior stock, including Common Stock, can be directly or indirectly repurchased, redeemed or otherwise acquired for consideration by Valley, aside from those exceptions as listed in the Certificate of Incorporation, and no monies can be paid to or made available for a sinking fund for the redemption of any junior stock by Valley; and (iii) no share of parity stock, including Series B Preferred Stock, can be directly or indirectly repurchased, redeemed or otherwise acquired for consideration by Valley, aside from those exceptions as listed in the Certificate of Incorporation, and no monies can be paid to or made available for a sinking fund for the redemption of any parity stock by Valley.

If dividends are not paid in full on the shares of Series A Preferred Stock and any shares of parity stock, including Series B Preferred Stock, dividends may be declared and paid on Series A Preferred Stock and all such parity stock on a proportional basis as described in the Certificate of Incorporation.

Redemption

Series A Preferred Stock is not subject to any mandatory redemption. However, on and after June 30, 2025, Valley may, at its option, on any dividend payment date, as defined in the Certificate of Incorporation, subject to the prior approval of the Board of Governors of the Federal Reserve System (the "Federal Reserve") or other appropriate federal banking agency, if required, redeem, in whole or in part, at any time and from time to time, out of funds legally available, shares of Series A Preferred Stock at the time outstanding, upon notice given as provided by the Certificate of Incorporation, at a redemption price of \$25 per share, plus the per share amount of any declared and unpaid dividends, without regard to any undeclared dividends, on Series A Preferred Stock prior to the date fixed for redemption.

Within 90 days of a regulatory capital treatment event, as defined in the Certificate of Incorporation, Valley may, at its option, subject to the prior approval of the Federal Reserve or other appropriate federal banking agency, if required, upon notice given as provided by the Certificate of Incorporation, redeem, all, but not less than all, of the shares of Series A Preferred Stock at the time outstanding at a redemption price of \$25 per share, plus the per share

amount of any declared and unpaid dividends, without regard to any undeclared dividends, on Series A Preferred Stock prior to the date fixed for redemption.

Liquidation Rights

In the event of the dissolution, liquidation or winding up of Valley, holders of Series A Preferred Stock are entitled to receive an amount per share equal to the fixed liquidation preference of \$25 per share, plus any declared and unpaid dividends, without regard to any undeclared dividends, after satisfaction of liabilities or obligations to creditors and subject to the rights of holders of capital stock ranking senior to Series A Preferred Stock in such distributions, and before Valley makes any distribution to holders of capital stock ranking junior to Series A Preferred Stock, including Common Stock.

If Valley's assets are not sufficient to pay the liquidation preference in full to all holders of Series A Preferred Stock and all holders of capital stock ranking on parity with Series A Preferred Stock in such distributions, including Series B Preferred Stock, the holders of Series A Preferred Stock and such other shares will share ratably in any such distribution in proportion to the full respective distributions to which they are entitled.

Voting Rights

Holders of Series A Preferred Stock do not have any voting rights, except as provided by the Certificate of Incorporation (summarized herein) or as required by law.

If and whenever, at any time or times, dividends payable on the shares of Series A Preferred Stock, or any parity stock upon which similar voting rights have been conferred, have not been paid for an aggregate amount equal to the amount of dividends payable on Series A Preferred Stock for at least three semi-annual or six quarterly dividend periods, as defined in the Certificate of Incorporation, whether or not consecutive (the "Series A and Parity Stock Nonpayment"), the authorized number of directors on the Board will automatically be increased by two and holders of Series A Preferred Stock, with holders of any parity stock outstanding at the time, will be entitled to vote as a single class, based on respective liquidation preferences, for the election of a total of two additional directors, subject to further rules and restrictions as provided by the Certificate of Incorporation.

The foregoing voting rights will continue until full dividends have been paid on Series A Preferred Stock and parity stock for at least one year following the Series A and Parity Stock Nonpayment. In this event, holders of Series A Preferred Stock will be divested of the foregoing voting rights, subject to revesting in the event of each subsequent Series A and Parity Stock Nonpayment, and the term of office of each director so elected will terminate and the number of directors on the Board will automatically decrease by the number of directors so elected, assuming the rights of the holders of parity stock have similarly terminated.

If any Series A Preferred Stock remains outstanding, the affirmative vote or consent of holders of at least 66 2/3% of the shares of Series A Preferred Stock at the time outstanding, voting as a single class, is necessary for effecting or validating: (i) authorization of senior stock, (ii) amendments, alterations or repeals of Series A Preferred Stock and (iii) share exchanges, reclassifications, mergers and consolidations. No vote or consent of holders of Series A Preferred Stock is required for such matters if, at or prior to the time when the act with respect to which any such vote or consent would otherwise be required, all outstanding shares of Series A Preferred Stock are redeemed, or are called for redemption upon proper notice as provided by the Certificate of Incorporation and sufficient funds are deposited in trust for such redemption.

Transfer Agent and Registrar

American Stock & Trust Company, LLC is the transfer agent and registrar for the Series A Preferred Stock.

Listing

The Series A Preferred Stock is traded on The Nasdaq Stock Market LLC under the trading symbol "VLYPP."

Description of Series B Preferred Stock

General

All outstanding shares of Series B Preferred Stock are fully paid and non-assessable. The Series B Preferred Stock has no preemptive, conversion or exchange rights and is not subject to any sinking fund or any other obligation of Valley for its repurchase or retirement.

Ranking

The Series B Preferred Stock ranks, with respect to the payment of dividends and distributions upon the liquidation, dissolution or winding-up of Valley, respectively: (i) senior to the Common Stock and each other Valley capital stock issued in the future, unless the terms of that capital stock expressly provide that it ranks at least on parity with the Series B Preferred Stock; (ii) on parity with the Series A Preferred Stock and each other Valley capital stock issued in the future with terms that expressly rank it on parity with the Series B Preferred Stock; and (iii) junior to any Valley capital stock issued in the future with terms that expressly rank it senior to the Series B Preferred Stock.

Dividend Rights

Holders of Series B Preferred Stock are entitled to receive non-cumulative, non-mandatory cash dividends, if any, as may be declared from time to time by the Board, or a duly authorized committee of the Board, in its discretion out of assets legally available for the payment of dividends. These dividends are payable quarterly, in arrears, on the 30th day of March, June, September and December of each year. Dividends on Series B Preferred Stock will accrue on the liquidation preference amount of \$25 per share at a rate per annum equal to 5.50% with respect to each dividend period from and including the original issue date to, but excluding, September 30, 2022, and thereafter at a rate per annum equal to the three-month U.S. dollar LIBOR, as defined in the Certificate of Incorporation, on the related dividend determination date plus a spread of 3.578% per annum. LIBOR will be replaced by the applicable Secured Overnight Financing Rate ("SOFR") rate as of June 30, 2023.

Priority of Dividends

If any Series B Preferred Stock remains outstanding, unless the full dividends for the most recently completed dividend period have been declared and paid, or declared and a sum sufficient for the payment thereof has been set aside, on all shares of outstanding Series B Preferred Stock, then: (i) no dividend can be declared, paid or set aside for payment and no distribution can be declared, made or set aside for payment on any junior stock, including Common Stock, aside from those exceptions as listed in the Certificate of Incorporation; (ii) no share of junior stock, including Common Stock, can be directly or indirectly repurchased, redeemed or otherwise acquired for consideration by Valley, aside from those exceptions as listed in the Certificate of Incorporation, and no monies can be paid to or made available for a sinking fund for the redemption of any junior stock by Valley; and (iii) no share of parity stock, including Series A Preferred Stock, can be directly or indirectly repurchased, redeemed or otherwise acquired for consideration by Valley, aside from those exceptions as listed in the Certificate of Incorporation, and no monies can be paid to or made available for a sinking fund for the redemption of any parity stock by Valley. LIBOR will be replaced by the applicable SOFR rate as of June 30, 2023.

If dividends are not paid in full on the shares of Series B Preferred Stock and any shares of parity stock, including Series A Preferred Stock, dividends may be declared and paid on Series B Preferred Stock and all such parity stock on a proportional basis as described in the Certificate of Incorporation.

Redemption

Series B Preferred Stock is not subject to any mandatory redemption. However, on and after September 30, 2022, Valley may, at its option, on any dividend payment date, as defined in the Certificate of Incorporation, subject to the prior approval of the Federal Reserve or other appropriate federal banking agency, if required, redeem, in whole or in part, at any time and from time to time, out of funds legally available, shares of Series B Preferred Stock at the time outstanding, upon notice given as provided by the Certificate of Incorporation, at a redemption price of \$25 per share, plus the per share amount of any declared and unpaid dividends, without regard to any undeclared dividends, on Series B Preferred Stock prior to the date fixed for redemption.

Within 90 days of a regulatory capital treatment event, as defined in the Certificate of Incorporation, Valley may, at its option, subject to the prior approval of the Federal Reserve or other appropriate federal banking agency, if required, upon notice given as provided by the Certificate of Incorporation, redeem, all, but not less than all, of the shares of Series B Preferred Stock at the time outstanding at a redemption price of \$25 per share, plus the per share amount of any declared and unpaid dividends, without regard to any undeclared dividends, on Series B Preferred Stock prior to the date fixed for redemption.

Liquidation Rights

In the event of the dissolution, liquidation or winding up of Valley, holders of Series B Preferred Stock are entitled to receive an amount per share equal to the fixed liquidation preference of \$25 per share, plus any declared and unpaid dividends, without regard to any undeclared dividends, after satisfaction of liabilities or obligations to creditors and subject to the rights of holders of capital stock ranking senior to Series B Preferred Stock in such

distributions, and before Valley makes any distribution to holders of capital stock ranking junior to Series B Preferred Stock, including Common Stock.

If Valley's assets are not sufficient to pay the liquidation preference in full to all holders of Series B Preferred Stock and all holders of capital stock ranking on parity with Series B Preferred Stock in such distributions, including Series A Preferred Stock, the holders of Series B Preferred Stock and such other shares will share ratably in any such distribution in proportion to the full respective distributions to which they are entitled.

Voting Rights

Holders of Series B Preferred Stock do not have any voting rights, except as provided by the Certificate of Incorporation (summarized herein) or as required by law.

If and whenever, at any time or times, dividends payable on the shares of Series B Preferred Stock, or any parity stock upon which similar voting rights have been conferred, have not been paid for an aggregate amount equal to the amount of dividends payable on Series B Preferred Stock for at least six quarterly dividend periods, as defined in the Certificate of Incorporation, whether or not consecutive (the "Series B and Parity Stock Nonpayment"), the authorized number of directors on the Board will automatically be increased by two and holders of Series B Preferred Stock, with holders of any parity stock outstanding at the time, will be entitled to vote as a single class, based on respective liquidation preferences, for the election of a total of two additional directors, subject to further rules and restrictions as provided by the Certificate of Incorporation.

The foregoing voting rights will continue until full dividends have been paid on Series B Preferred Stock and parity stock for at least one year following the Series B and Parity Stock Nonpayment. In this event, holders of Series B Preferred Stock will be divested of the foregoing voting rights, subject to revesting in the event of each subsequent Series B and Parity Stock Nonpayment, and the term of office of each director so elected will terminate and the number of directors on the Board will automatically decrease by the number of directors so elected, assuming the rights of the holders of parity stock have similarly terminated.

If any Series B Preferred Stock remains outstanding, the vote or consent of holders of at least 66 2/3% of the shares of Series B Preferred Stock at the time outstanding, voting as a single class, is necessary for effecting or validating: (i) authorization of senior stock, (ii) amendments, alterations or repeals of Series B Preferred Stock and (iii) share exchanges, reclassifications, mergers and consolidations. No vote or consent of holders of Series B Preferred Stock is required for such matters if, at or prior to the time when the act with respect to which any such vote or consent would otherwise be required, all outstanding shares of Series B Preferred Stock are redeemed, or are called for redemption upon proper notice as provided by the Certificate of Incorporation and sufficient funds are deposited in trust for such redemption.

Transfer Agent and Registrar

American Stock & Trust Company, LLC is the transfer agent and registrar for the Series B Preferred Stock.

Listing

The Series B Preferred Stock is traded on The Nasdaq Stock Market LLC under the trading symbol "VLYPO."



September 23, 2021

Dear Raja,

I am pleased to confirm our offer and your acceptance of employment with Valley National Bank as a Senior Executive Vice President, Chief Risk Officer, reporting to Ira Robbins. Your work location is located at 1455 Valley Road, Wayne, New Jersey. Your starting compensation will be an annual rate of \$500,000, which will be paid bi-weekly on a Friday at a rate of \$19,230.76. As an exempt employee under the Federal Fair Labor Standards Act you are not eligible for overtime pay. This offer is contingent upon the closing of the merger (the "Merger") between Valley National Bancorp and Bank Leumi USA. Your employment with Valley National Bank shall be effective as of the date (the "Effective Date") of the closing of the Merger.

You will be eligible to participate in the Valley Bonus Plan and Long-Term Incentive Plan with an annual bonus target of 60% of your base salary and an annual long-term stock target of \$600,000. In accordance with Valley's Executive Incentive Plan, 75% of your stock award will be in form of 3-year Performance Based Stock Award and 25% will be in form of Restricted Stock Award. Performance Based Stock Awards cliff-vest after 3 years based on achievement of performance goals approved by Valley's Compensation and Human Resources Committee. Restricted Stock Awards vest over 3 years, a third each year. Bonuses and stock awards are granted during the first quarter of the following year based on company and individual performance.

Your 2022 long-term stock award of \$600,000 (the "Initial Grant") will be granted within 30 days after the Effective Date. The Performance Based portion of your Initial Grant will have the same performance period, performance goals, and vesting schedule as other 2022 Performance Based awards granted to Valley Senior Executives. The Restricted Stock portion of your Initial Grant will vest ratably over 3 years, a third each year from the Effective Date.

You will also be eligible for a \$1,200/month car allowance and participate in Valley's Executive 401(k) SERP Plan with employer match. On the first anniversary of the Effective Date, you will be eligible to participate in the Valley Executive Change-In-Control Plan at the Senior Executive Vice President level.

Valley National Bank will pay or cause Bank Leumi USA to pay a lump sum payment currently estimated at \$2,260,000 (subject to final closing calculation) to you immediately prior to the Effective Date representing the amount you would be entitled to as severance pay and as the value of the COBRA benefits under the Change in Control Plan in consideration of your release and waiver of the rights you possess under the Bank Leumi USA Executive Change in Control Severance Plan and related participation agreement between you and Bank Leumi USA.

We look forward to having you join our team; however, we recognize that you retain the option, as does Valley National Bank, of ending your employment with the Company at any time, with or without notice and with or without cause. As such, your employment with Valley National Bank is at-will and neither this letter nor any other oral or written representations may be considered a contract for any specific period of time.

We are excited that you are joining Valley National Bank and believe you will become a valuable, enthusiastic and contributing member to our continued growth and success.

Raja, on behalf of Ira and the Leadership Team, welcome to Valley!

Sincerely,

Yvonne M. Surowiec

Senior Executive Vice President, Chief People Officer

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements (Nos. 333-255364, 333-235333, 333-222345, 333-211060 and 333-264071) on Form S-8; and the registration statements (Nos. 333-254696 and 333-264069) on Form S-3ASR of our reports dated February 28, 2023, with respect to the consolidated financial statements of Valley National Bancorp and the effectiveness of internal control over financial reporting.

/s/ KPMG LLP

Short Hills, New Jersey
February 28, 2023

POWER OF ATTORNEY

We, the undersigned directors and officers of Valley National Bancorp, hereby severally constitute and lawfully appoint Ira Robbins and Michael D. Hagedorn, and each of them singly, our true and lawful attorneys-in-fact with full power to them and each of them to sign for us, in our names in the capacities indicated below, the Annual Report on Form 10-K for the fiscal year ended December 31, 2022 of Valley National Bancorp and any and all amendments thereto, and to file the same with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Signature	Title	Date
/s/ Ira Robbins Ira Robbins	Chairman of the Board, Chief Executive Officer, and Director (Principal Executive Officer)	February 28, 2023
/s/ Michael D. Hagedorn Michael D. Hagedorn	Senior Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 28, 2023
/s/ Mitchell L. Crandell Mitchell L. Crandell	Executive Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 28, 2023
/s/ Andrew B. Abramson Andrew B. Abramson	Director	February 28, 2023
/s/ Ronen Agassi Ronen Agassi	Director	February 28, 2023
/s/ Peter J. Baum Peter J. Baum	Director	February 28, 2023
/s/ Eric P. Edelstein Eric P. Edelstein	Director	February 28, 2023
/s/ Marc J. Lenner Marc J. Lenner	Director	February 28, 2023
/s/ Peter V. Maio Peter V. Maio	Director	February 28, 2023
/s/ Avner Mendelson Avner Mendelson	Director	February 28, 2023
/s/ Suresh L. Sani Suresh L. Sani	Director	February 28, 2023
/s/ Lisa J. Schultz Lisa J. Schultz	Director	February 28, 2023
/s/ Jennifer W. Steans Jennifer W. Steans	Director	February 28, 2023
/s/ Jeffrey S. Wilks Jeffrey S. Wilks	Director	February 28, 2023
/s/ Dr. Sidney S. Williams, Jr. Dr. Sidney S. Williams, Jr.	Director	February 28, 2023

CERTIFICATIONS

I, Ira Robbins, certify that:

- 1 I have reviewed this Annual Report on Form 10-K of Valley National Bancorp;
- 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: February 28, 2023

/s/ Ira Robbins

Ira Robbins
Chairman of the Board
and Chief Executive Officer

CERTIFICATIONS

I, Michael D. Hagedorn, certify that:

- 1 I have reviewed this Annual Report on Form 10-K of Valley National Bancorp;
- 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: February 28, 2023

/s/ Michael D. Hagedorn

Michael D. Hagedorn
Senior Executive Vice President and
Chief Financial Officer

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

In connection with the Annual Report on Form 10-K of Valley National Bancorp (the “Company”) for the period ended December 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), Ira Robbins, as Chief Executive Officer of the Company, and Michael D. Hagedorn, as Chief Financial Officer of the Company, each hereby certify, pursuant to 18 U.S.C. (section) 1350, as adopted pursuant to (section) 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Ira Robbins

Ira Robbins
Chairman of the Board
and Chief Executive Officer
February 28, 2023

/s/ Michael D. Hagedorn

Michael D. Hagedorn
Senior Executive Vice President
and Chief Financial Officer
February 28, 2023