

FNB Corporation of Pennsylvania

Today's growth at yesterday's valuation; Initiate Buy

Initiating Coverage: BUY | PO: 15.00 USD | Price: 13.64 USD

Initiate FNB at Buy: Transformation still discounted

We are initiating coverage of FNB Corp/PA (FNB) with a Buy rating and a \$15 price objective (+13.5% total potential return). FNB offers investors exposure to a high-growth, geographically diverse mid-cap bank, at a discount. Shares of FNB are trading at 9.5x 2024e EPS. This represents an 16% discount to the KRX (vs. -34% historically). That said, we believe the transformation in the franchise (following the integration of Yadkin Bank), including higher capital levels and tech investments, should result in further multiple expansion. Finally, we believe management has proven themselves credible via their successful execution against financial targets (we estimate ~80% of outlook achieved since 2017).

Top beneficiary (in coverage) from 100bp rate cut

Investors are entering 2024 primarily focused on interest rate risk. According to banks' interest rate sensitivity disclosures, FNB screens as best to benefit from a 100bp rate cut. Moreover, FNB has grown loans and deposits at an 8%/10% CAGR (ex. acquisitions) since 2014, outpacing broader industry growth of 5%/6%. For FY2024, we forecast 6% loan growth, twice that of mid-cap banks under coverage. Coupled with its high-quality deposit base, we believe FNB's balance sheet is well positioned to mitigate rate headwinds in 2024 and provide more support for net interest income vs. peers.

Above-average credit leverage opportunity

We believe consensus' 2024 credit forecasts for FNB appear low, and thus could pose downside risk to EPS estimates. In contrast to forecasts for most mid-cap banks, consensus NCO estimates fall short of FNB management's previously disclosed through-the-cycle range. That said, we expect FNB's credit quality to continue to outperform that of the industry, driven by proactive action to remove risk from the b/s and conservative underwriting. Should the US economy avoid a recession, as BofA economists expect, FNB's peer-leading reserve ratio provides the bank with above-average credit leverage.

Not yet rewarded for improved capital position

FNB has delivered strong profitability over the past decade, despite building capital. This is evident in its above-average return on tangible common equity (ROTCE) that has re-set higher (2025e vs. 2015) despite significantly higher capital levels. Since 2017, FNB's CET1 ratio has improved by ~130bp and its TCE ratio has increased 80bp. However, the market has not rewarded FNB for this improved capital position. We est. shares of FNB are trading at 5.8x capital-adjusted EPS, in line with pandemic-era lows. Higher capital levels provide FNB increased flexibility to pursue future acquisitions.

Estimates (Dec) (US\$)	2021A	2022A	2023E	2024E	2025E
EPS	1.23	1.23	1.47	1.34	1.44
EPS Change (YoY)	48.2%	0%	19.5%	-8.8%	7.5%
Consensus EPS (Bloomberg)			1.54	1.45	1.56
DPS	0.48	0.48	0.48	0.48	0.48
Valuation (Dec)					
P/E	11.1x	11.1x	9.3x	10.2x	9.5x
Dividend Yield	3.5%	3.5%	3.5%	3.5%	3.5%

BofA Securities does and seeks to do business with issuers covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. Refer to important disclosures on page 16 to 18. Analyst Certification on page 14. Price Objective Basis/Risk on page 14.

12644634

Timestamp: 11 January 2024 06:00AM EST

11 January 2024

Equity

Brandon Berman
Research Analyst
BofAS
+1 646 855 3933
brandon.berman@bofa.com

Ebrahim H. Poonawala
Research Analyst
BofAS

Stock Data

Price	13.64 USD
Price Objective	15.00 USD
Date Established	11-Jan-2024
Investment Opinion	B-1-7
52-Week Range	10.09 USD - 14.68 USD
Mrkt Val / Shares Out (mn)	4,894 USD / 358.8
Free Float	98.6%
Average Daily Value	25.50 USD
BofA Ticker / Exchange	FNB / NYS
Bloomberg / Reuters	FNB US / FNB.N
ROE (2023E)	0%
ESGMeter™	Medium

ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of BofA Global Research's equity investment rating, volatility risk rating, income rating, and price objective for that company. For full details, refer to ["BofA ESGMeter Methodology"](#).

Acronyms:

CAGR: compounded annual growth rate

CET1: common equity tier 1

KRX: KBW Regional Banking Index

NCO: net charge-off

TCE: tangible common equity

iQprofileSM FNB Corporation of Pennsylvania

Income Statement Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Net Interest Income	917	1,131	1,325	1,302	1,374
% change	-1.8%	23.3%	17.1%	-1.7%	5.5%
Net Fee Income	329	321	321	330	333
Securities Gains / (Losses)	NA	NA	NA	NA	NA
Total Operating Income	1,247	1,452	1,646	1,632	1,707
Operating Expenses	(729)	(774)	(867)	(900)	(940)
% change	1.7%	6.2%	11.9%	3.9%	4.4%
Provisions Expense	(1)	(64)	(80)	(115)	(108)
% change	-99.5%	10,107.6%	23.9%	44.8%	-6.2%
Operating Pre-Tax Income	518	616	700	617	659
Operating Net Income to Comm S/Hold.	398	435	534	485	520
GAAP Net Income	398	435	533	485	521

Balance Sheet Data (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Total Assets	37,251	41,248	43,159	44,388	45,979
Average Interest Earning Assets	NA	NA	NA	NA	NA
Total Gross Customer Loans	10,085	11,638	10,960	10,805	11,199
% change	26.1%	15.4%	-5.8%	-1.4%	3.7%
Total Customer Deposits	63,452	69,540	69,228	71,305	74,136
% change	8.9%	9.6%	-0.4%	3.0%	4.0%
Tangible Equity	NA	NA	NA	NA	NA
Common Shareholders' Equity	(31,458)	(34,052)	(32,153)	(33,399)	(35,071)

Key Metrics (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Net Interest Margin	NA	NA	NA	NA	NA
Effective Tax Rate	20.9%	17.5%	18.8%	19.6%	19.5%
Loan / Deposit Ratio	15.9%	16.7%	15.8%	15.2%	15.1%
Tangible Common Equity / Assets	0%	0%	0%	0%	0%
ROA	NA	NA	NA	NA	NA
ROE	NA	NA	NA	NA	NA
RoTE	NA	NA	NA	NA	NA
Dividend Payout Ratio	39.0%	39.0%	32.6%	35.8%	33.4%
Efficiency Ratio (Cost / Income Ratio)	58.5%	53.3%	52.6%	55.1%	55.1%

Quality of Earnings (Dec)

(US\$ Millions)	2021A	2022A	2023E	2024E	2025E
Total Non-Interest Inc / Operating Inc	26.4%	22.1%	19.5%	20.2%	19.5%
NPLs plus Foreclosed Real Estate / Loans	0%	0%	0%	0%	0%
Loan Loss Reserves / NPLs	NA	NA	NA	NA	NA
Loan Loss Reserves / Total Loans	3.41%	3.45%	3.70%	3.87%	3.82%

Company Sector

Banks-US Regionals

Company Description

F.N.B. Corporation of Pennsylvania has total assets of about \$46bn. The bank has nearly 350 banking offices throughout PA, OH, MD, WV, NC, SC, Washington, DC, and VA. FNB also has segments devoted to insurance and wealth management.

Investment Rationale

FNB offers investors exposure to a high-growth, geographic diverse mid-cap bank, at a discount. The transformation in the franchise (following the integration of Yadkin Bank), including higher capital levels and tech investments, should result in further multiple expansion.

Stock Data

Average Daily Volume

1,869,783

Quarterly Earnings Estimates

	2022	2023
Q1	0.15A	0.40A
Q2	0.30A	0.39A
Q3	0.38A	0.40A
Q4	0.39A	0.29E

Initiate at Buy, PO implies ~14% returns

We are initiating coverage of FNB Corp/PA (FNB) with a Buy rating and a \$15 price objective (+13.5% total potential return).

FNB offers investors exposure to a high-growth, geographically diverse mid-cap bank, at a discount. Shares of FNB are trading at 9.5x 2024e EPS. This represents a 16% discount to the KRX (vs. -34% historically). That said, we believe the transformation in the franchise (following the integration of Yadkin Bank), including higher capital levels and tech investments, should result in further multiple expansion. Finally, we believe management has proven themselves credible via their successful execution against financial targets (we estimate ~80% of outlook achieved since 2017).

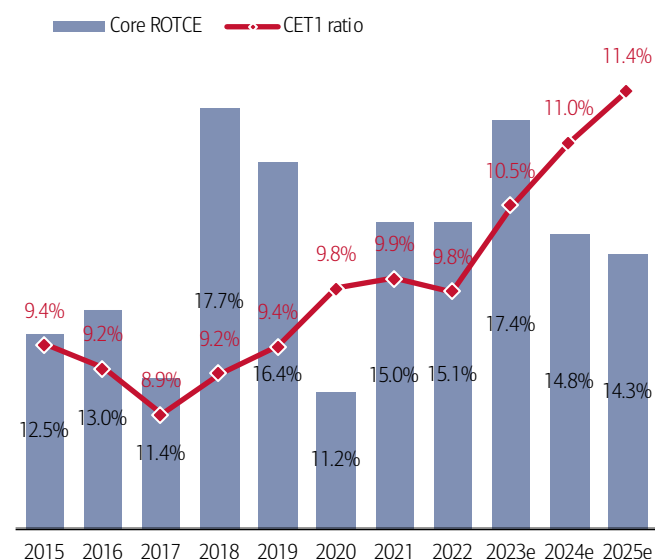
Investors are likely entering 2024 focused on interest rate and credit risks. According to banks' interest rate sensitivity disclosures, FNB screens as best to benefit from a 100bp rate cut. Meanwhile, the FNB's stable deposit base and better-than-peer ability to gather deposits should also provide defensibility to net interest margin (NIM) headwinds.

Although, consensus' 2024 credit forecasts for FNB appear low, in our view, and thus could pose downside risk to EPS estimates, we expect FNB's credit quality to continue to outperform that of the industry. That said, its peer-leading allowance could likely provide FNB above-average credit leverage, barring a recession.

FNB has delivered strong profitability over the past decade, despite building capital. This is evident in its above-average return on tangible common equity (ROTCE) that has reset higher (2025e vs. 2015) despite significantly higher capital levels. However, the market has not rewarded FNB for this improved capital position. We est. shares of FNB are trading at 5.8x capital-adjusted EPS, in line with pandemic-era lows.

Exhibit 1: ROTCE resilient despite building capital

Common equity tier 1 (CET1) ratio vs. ROTCE



Source: BofA Global Research Estimates, company filings, Visible Alpha

BofA GLOBAL RESEARCH

Exhibit 2: Capital adj. P/E at pandemic-era lows

Price to capital adjusted 1-year fwd. EPS



Source: BofA Global Research, company filings, S&P Capital IQ

Note: Capital-adjusted EPS adds excess capital (as defined by TCE ratio) to forward estimates

BofA GLOBAL RESEARCH

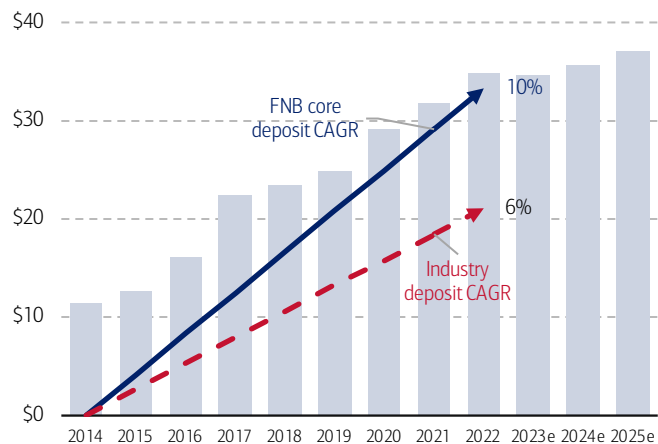


Diverse avenues to generate balance sheet growth

FNB has grown loans and deposits at an 8%/10% CAGR (ex. acquisitions) since 2014, outpacing broader industry growth of 5%/6%. We attribute this outperformance to FNB's diverse avenues for growth, including its expansive geographic footprint and digital programs (e.g., eStore, Physicians First, etc.). More recently, FNB has been able to take share amid retrenchment by peers needing to build capital ahead of regulatory changes (i.e., AOCI inclusion). We forecast 6% loan growth for FNB in 2024, nearly twice that of mid-cap banks under coverage. We believe this loan growth should help to minimize rate headwinds in 2024 and provide some support for net interest income vs. peers.

Exhibit 3: FNB deposit growth has outpaced the industry by 4ppt

Deposit growth; core excludes mergers (\$ in billions)

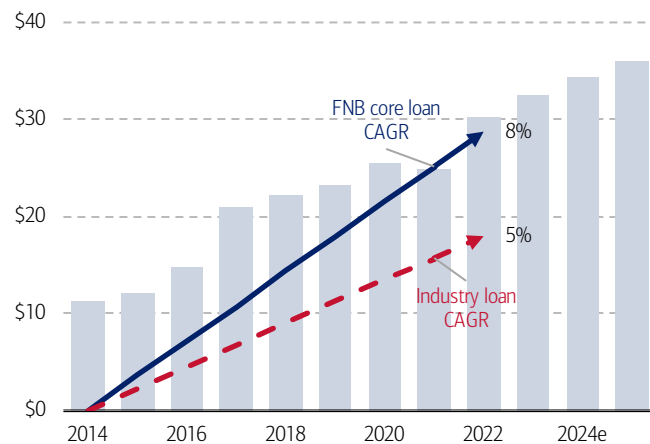


Source: company filings, S&P Capital IQ, FDIC

BofA GLOBAL RESEARCH

Exhibit 4: Loan growth outpaced the industry by 3ppt

Loan growth; core excludes mergers (\$ in billions)



Source: company filings, S&P Capital IQ, FDIC

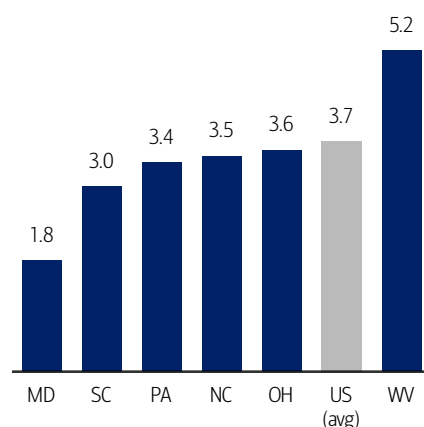
BofA GLOBAL RESEARCH

Geographic expansion/diversity helps navigate headwinds

Following several bank acquisitions, FNB operates in eight markets (including DC), nearly twice that of the average mid-cap bank (five markets). Expansion across the Mid-Atlantic and Carolinas has offered FNB access to ~8mn new households in high growth MSAs, including Charlotte, DC, Baltimore, and Charleston. Meanwhile, demographics within FNB's expansion markets, such as unemployment rate, loan growth, and projected household income growth, exhibit favorable trends vs. those of national average.

Exhibit 5: Unemployment rate lower in most of FNB's markets vs. national avg

Unemployment rate by state (%)

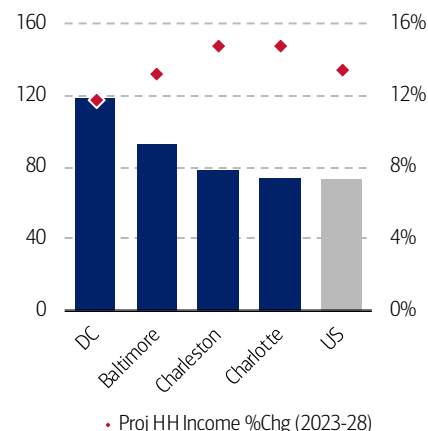


Source: Bloomberg

BofA GLOBAL RESEARCH

Exhibit 6: Median household income in FNB's footprint to outpace broader US

Median household income (\$ in thousands)

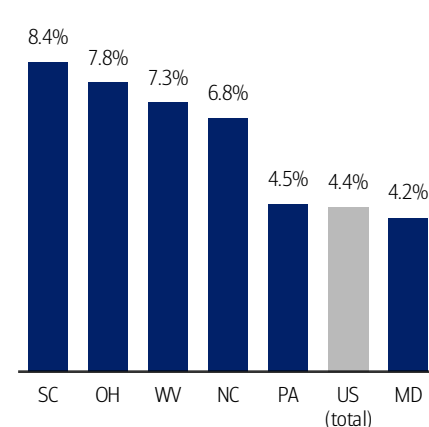


Source: S&P Capital IQ

BofA GLOBAL RESEARCH

Exhibit 7: Loan growth in FNB's footprint has outpaced that of US last 5 years

Loan growth (5Y CAGR)



Source: FDIC

BofA GLOBAL RESEARCH

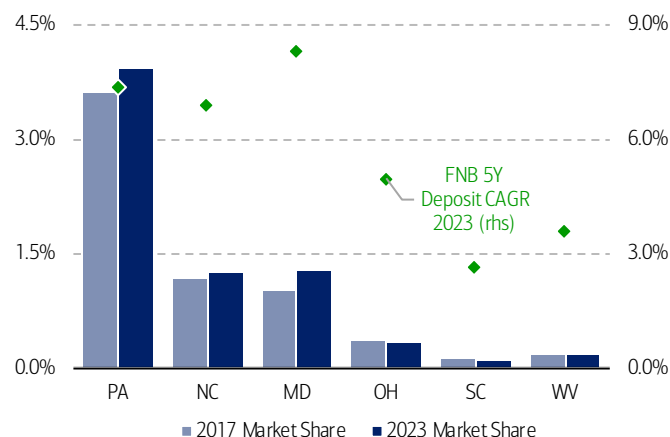
Although FNB is seeing growth across its entire footprint, the Carolinas (20-25% of footprint) have generated 40%+ net loan growth. Most of the growth in consumer portfolio driven by Physicians First program (within the Carolinas). We continue to view this as a growth avenue.

Deposit growth over the last six years buoyed by new markets

FNB has increased its deposit market share in its top 3 markets by 30bp to 2.5% since 2017, driven by 52% deposit growth over this time (market has grown deposits by 37%). In NC, expansion market via acquisition of Yadkin Financial, FNB has observed 2nd fastest deposit growth for an out-of-state bank.

Exhibit 8: FNB generating most deposit growth in top 3 markets

FNB deposit growth by state

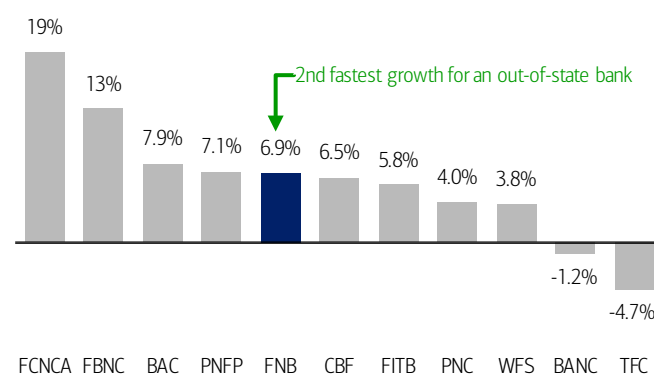


Source: S&P Capital IQ

BofA GLOBAL RESEARCH

Exhibit 9: FNB seen 2nd fastest growth in NC for an out-of-state bank

North Carolina 5Y deposit CAGR



Source: S&P Capital IQ

BofA GLOBAL RESEARCH

Digital offerings

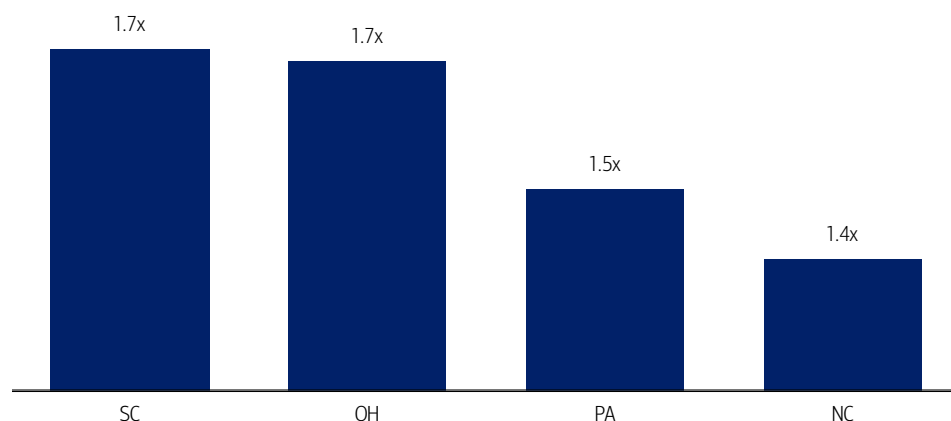
- Physicians First product offers a suite of digital solutions to help address the financial needs of the medical community. According to BLS, the health care and



social assistance sector is projected to not only grow most rapidly of any sector, but it is also projected to create about 45% of all the projected job gains from 2022 to 2032.

Exhibit 10: Pace of jobs in healthcare industry expected to outpace avg. job growth in FNB's footprint

Growth in health services vs. total job growth by state



Source: BLS

BofA GLOBAL RESEARCH

- FNB's eStore allows customers to shop for and buy multiple financial products and services simultaneously. (Customers can access an eStore anywhere – via the company's website, mobile app, or in a branch). The product offers a more efficient (can reduce by 23% the amount of time spent on a consumer loan application) and secure application process.

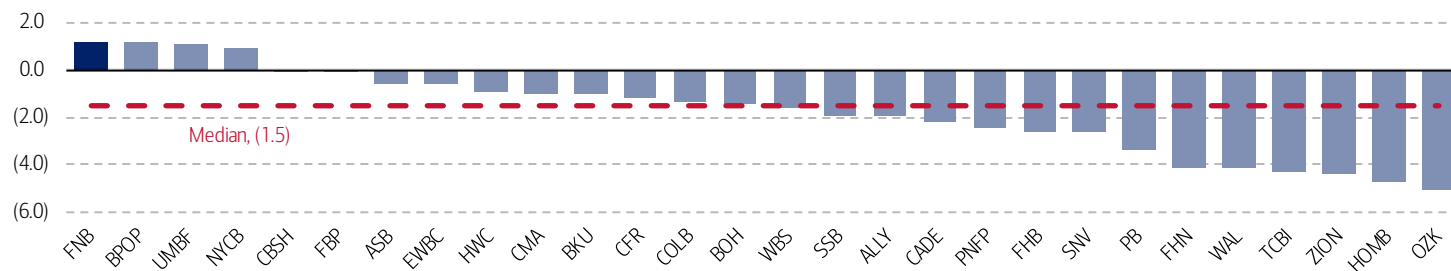
High quality deposits lead to liability-sensitive profile

We forecast FY2024 NII declines 2% YoY vs. -1% mid-cap coverage, driven by a continued increase in funding costs – albeit slowing – despite faster loan growth. Note, our forecasts assume rates remain higher for longer (i.e., no change to Fed funds rate). During our research, we found the bank's disclosure to be contradictory: rate sensitivity disclosure implies they benefit the most in a 100bp rate cut scenario but its 1Y gap ratio ranks above average. We concluded FNB's deposit franchise is of high quality, providing the bank with increased flexibility to manage funding costs.

Following the latest FOMC meeting, Fed funds futures are pricing in 130bp worth of rate cuts in 2024 (implies a terminal rate of 4.1%). According to companies' sensitivity disclosure, FNB would see the largest NII benefit from a rate cut among mid-cap bank peers. A gradual/parallel 100bp rate cut would increase FNB's NII by 1.2% over NTM. This compares to an average 1.5% reduction in NII among mid-cap bank peers. Management attributes the positive change in NII in this down rate scenario (vs. -2% disclosed at 4Q19) to 1) the higher starting point for deposit rates, 2) mix shift into higher beta deposit products, and 3) the increased level of shorter-term borrowings.

Exhibit 11: FNB expected to see the greatest benefit from 100bp rate cut

Interest rate sensitivity disclosure



Source: company filings, S&P Capital IQ

BofA GLOBAL RESEARCH

However, given the inconsistency of the underlying assumptions embedded in these disclosures, any comparison is somewhat unreliable, in our view. Instead, we compared how mid-cap banks' balance sheet's were positioned to navigate Fed rate cuts. Based on our analysis, it appears FNB is well balanced between NII/NIM headwinds and tailwinds. (Note: management has positioned the bank's balance sheet to be relatively neutral over medium-term).

Defensibility heatmap:

- FNB ranks above average on (i.e., reduces NIM volatility): cash levels; loan growth; short-term debt
- FNB ranks below average on: securities cash flows; loan/deposit ratio
 - Securities portfolio produces ~\$850mn in annual cash flows (3% of earning assets). Management is maintaining the portfolio's convexity and duration characteristics; reinvestment spreads are +350bp.
 - Management is comfortable funding loan growth with excess liquidity; however, with a 93% loan/deposit ratio (vs. 70% industry avg.) could receive negative. However, this limits the opportunity to let deposits attrite and reduce funding costs.

Exhibit 12: FNB's balance sheet construction suggests minimal NIM volatility in a down rate environment

Net interest margin decomposition heatmap

(as % of avg. earning assets)	ASB	BOH	BPOP	CBSH	CFR	CMA	EWBC	FBP	FHB	FHN	FNB	NYCB	PB	SNV	TCBI	WAL	WBS	ZION
Cash \$	2%	2%	9%	6%	16%	9%	7%	5%	4%	4%	3%	6%	1%	1%	14%	5%	3%	4%
Annual securities \$ cash flows	5%	3%	6%	8%	2%	2%	2%	4%	3%	1%	2%		6%	2%	1%	3%	2%	4%
Duration (years)	6.1	3.9	2.2	3.9	5.7	5.6	5.1	3.6	5.5	5.3	4.4	7.1	4.5	5.4	4.4	5.5	4.5	3.5
Yield on securities (3Q23)	3.03%	2.46%	2.33%	2.33%	3.24%	2.10%	3.11%	1.59%	2.14%	3.01%	2.61%	4.30%	2.05%	2.29%	2.33%	4.91%	3.39%	2.73%
Fixed rate \$ loans	39%	38%	26%	23%	17%	33%	17%	42%	35%	27%	31%	37%	25%	29%	4%	33%	30%	15%
Consensus loan growth forecast	3%	3%	7%	4%	2%	2%	5%	6%	3%	2%	5%	2%	2%	2%	9%	6%	4%	1%
Loan beta (CTD)	60%	22%	19%	46%	57%	59%	56%	26%	37%	52%	44%	46%	25%	48%	68%	55%	53%	40%
Loan/deposit ratio	94%	67%	54%	68%	45%	80%	92%	73%	67%	92%	93%	102%	78%	87%	86%	91%	83%	75%
Noninterest bearing deposits \$	17%	25%	22%	25%	32%	37%	25%	28%	36%	23%	27%	23%	29%	23%	32%	28%	17%	33%
Brokered \$ CDs + index-linked deposits	9%	10%	1%	4%	0%	6%	3%	2%	11%	5%	2%	8%	0%	11%	5%	10%	12%	10%
CD \$ maturity schedule	1%	3%	4%	1%	1%	0%	0%	5%	6%	0%	2%	16%		3%	4%	13%	6%	0%
Short term \$ borrowings	8%	1%	0%	9%	0%	6%	7%	0%	2%	3%	5%	0%	12%	0%	5%	12%	3%	5%
Long term debt to mature in 2024	0%	0%	0%	0%	0%	1%	0%	0%	0%	2%	0%	1%	0%	5%	0%	1%	0%	0%

Source: BofA Global Research, company filings, Visible Alpha

BofA GLOBAL RESEARCH

Quality of deposit base allows FNB to navigate rate cycles

We believe FNB's deposit base provides them with more flexibility to offset more rate cuts than presumed. Cycle-to-date, FNB has seen a deposit beta of 42%, lower than the



peer average (48%). This would suggest FNB has slightly less opportunity, relative to peers, to offset lower rates by reducing deposit costs. That said, FNB's deposit base appears more stable, driven by: 1) diversified funding channels; 2) modest reduction in NIB deposits over LTM; and 3) 85%+ of total deposits and customer repo agreements are transaction-based. This is reflected in FNB's ability to lower deposit costs more than peers (as exhibited by its higher deposit beta during the 2019 rate cutting cycle).

In order to stack rank each bank's deposit portfolio, we looked at five (5) characteristics: available deposit market share (lower = better); deposit costs and betas (lower = better); retail as % of total (higher = better); and % of insured deposits (higher = better). Based on the aggregate ranking, we found FNB has the 5th highest quality deposit franchise among mid-cap banks

Exhibit 13: FNB has a "top-5" quality deposit franchise

Deposit quality heatmap

Deposit Quality Heatmap						
	Available Share	Deposit Cost	CTD Beta	%Retail	%Insured	Combined Rank
BPOP	5%	1.85%	33%	40%	87%	3
FBP	5%	1.31%	21%	32%	52%	2
PB	43%	1.12%	19%	53%	61%	9
CFR	42%	1.36%	26%	0%	49%	8
EWBC	30%	2.45%	45%	61%	54%	20
TCBI	42%	2.64%	47%	8%	60%	16
FHB	3%	1.41%	26%	45%	49%	6
FHN	42%	2.46%	46%	43%	61%	17
BOH	3%	1.41%	26%	48%	49%	12
WAL	24%	2.33%	43%	46%	81%	11
WBS	34%	1.97%	37%	39%	63%	8
SNV	40%	2.33%	43%	37%	55%	15
NYCB	32%	2.33%	39%	0%	57%	11
ASB	45%	2.41%	46%	57%	79%	18
CBSH	56%	1.22%	23%	49%	59%	14
FNB	39%	1.63%	29%	40%	78%	5
SBCF	42%	1.81%	34%	43%	66%	13
SSB	38%	1.45%	27%	30%	66%	4
BKU	38%	2.76%	50%	40%	54%	20

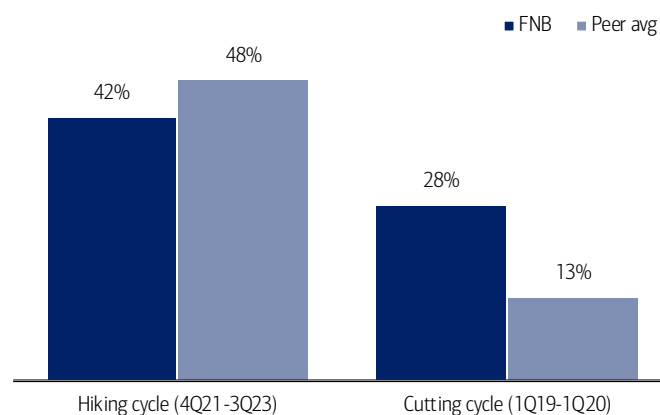
Source: BofA Global Research, company filings, S&P Capital IQ

Note: Available share = 1- top 5 market share holders in respective state

BofA GLOBAL RESEARCH

Exhibit 14: FNB saw above avg. deposit beta in last rate cutting cycle

Deposit betas during different cycles



Source: company filings, S&P Capital IQ

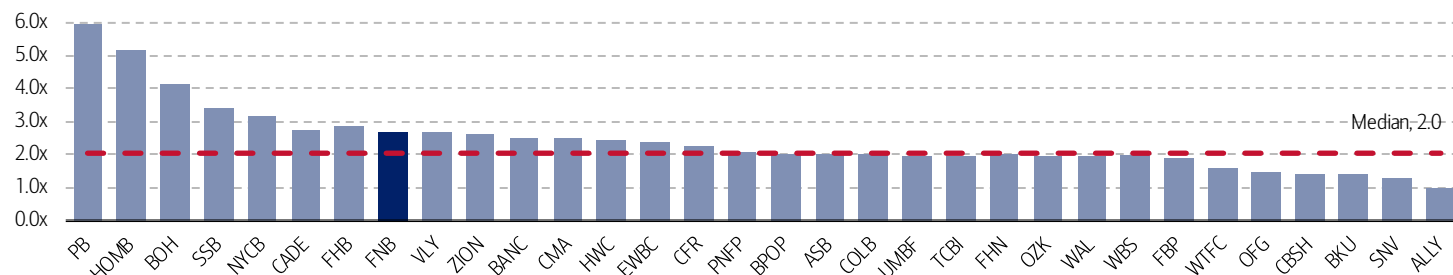
BofA GLOBAL RESEARCH

Credit estimates at risk if economy falters

We believe consensus' 2024 credit forecasts for FNB may be too low and thus could pose downside risk to EPS estimates. That said, we expect FNB's credit quality to continue to outperform that of the industry. As of 3Q23, FNB reported an allowance of 1.25% of loans or 2.7x consensus' 2024/25 NCO estimates (~46bp). Both ratios compare favorably to mid-cap bank peers (1.2%/2.0x, respectively). Barring a recession, the allowance would likely provide FNB above-average credit leverage. However, consensus loss estimates fall short of the low-end of FNB management's previously disclosed TTC NCO range of 25-50bp. In contrast, 2024 NCOs forecasts for most mid-cap banks are within the banks' respective TTC range.

Exhibit 15: FNB sufficiently reserved relative to loan loss expectations, increasing the bank's credit leverage

Allowance vs. consensus 2024/25 NCOs



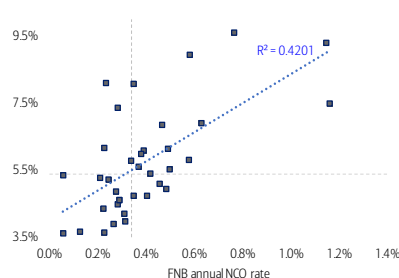
Source: company filings, S&P Capital IQ

BofA GLOBAL RESEARCH

We forecast 2024 NCOs of 30bp. This assumes a 75%/25% weighted average of Moody's unemployment forecast within its base case and stagflation scenarios, resulting in a 140bp YoY increase to 5.2% by 4Q24. Assuming a stable reserve ratio (1.24%), this implies a FY2024 provision expense of \$127mn or a 4% impact to consensus 2024 EPS est., all else equal.

Exhibit 16: We est. higher provisions from an increase in the unemployment would reduce FNB 2024 EPS by 4%, all else equal

Credit sensitivity analysis



	Moody's unemployment est.			NCO forecast (%)		EPS impact of higher provisions assuming stable ALLL ratio	
	Base	Stag	Wtd avg	Cons	BofA		
	75%	25%	-				
4Q23	3.80%	3.80%	3.80%	0.17	0.21	ALLL % of loans (3Q23)	1.24%
1Q24	3.90%	5.40%	4.28%	0.19	0.27	Reserves (3Q23)	\$ 401
2Q24	3.90%	6.50%	4.55%	0.22	0.29	BofA '24e NCOs	102
3Q24	4.00%	7.70%	4.93%	0.24	0.32	Cons '24e loans	34,254
4Q24	4.00%	8.80%	5.20%	0.25	0.34	Implied '24 provisions	\$ 127
						Cons '24e provisions	101
FY24	NCO rate (%)			0.22	0.30	EPS impact	-4%
	NCOs (\$mn)			\$78	\$102		

Source: BofA Global Research, company filings, S&P Capital IQ, Bloomberg, Visible Alpha, Moody's

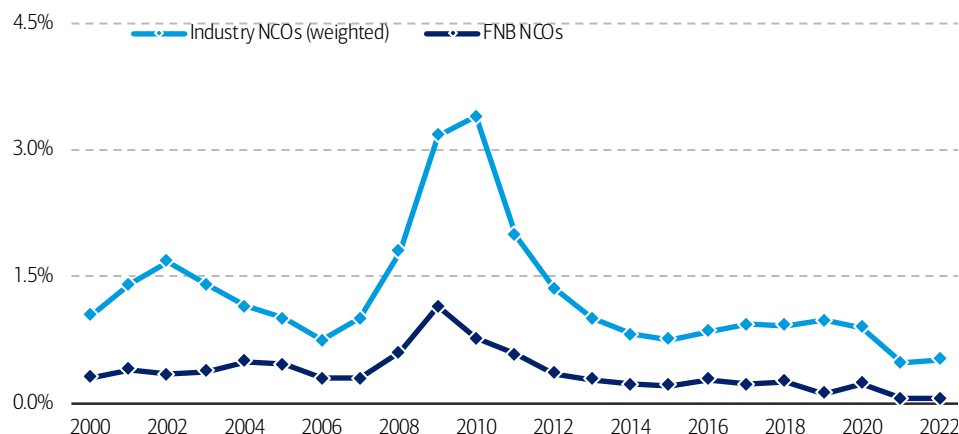
BofA GLOBAL RESEARCH

FNB's credit quality has typically outperformed industry

FNB has typically experienced lower loan losses vs. the industry. Since 1990, FNB reported average annual NCOs of 36bp (ex. recessions) vs. a composition-like weighted industry average of ~130bp. We attribute lower loan losses to 1) management action to proactively remove risk from the balance sheet and 2) conservative underwriting. Consumer loans have historically been the primary driver of loan losses; however, to minimize losses within this asset class, management has sold Regency (its consumer finance subsidiary), curtailed rate-sensitive portfolios, and reduced tail risk of auto portfolio.

Exhibit 17: FNB loan losses have outperformed by ~90bp

NCO ratio



Source: company filings, S&P Capital IQ, FDIC

BofA GLOBAL RESEARCH

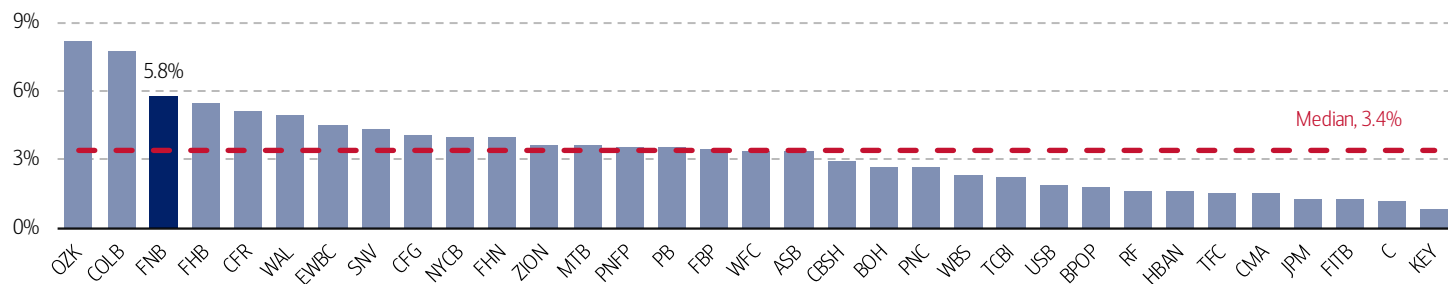
Similar to that of peers, FNB's credit migrations are beginning to increase. Criticized loans have increased 14% since 4Q21; however, at a slower pace than that of peers (+21%). That said, criticized loans represent 36% of tier 1 capital (peer avg. 20%). Management attributes the higher level of criticized loans to a relatively more conservative (i.e., aggressive) gradation process. More importantly, these loans have not necessarily translated into losses.

Office-CRE exposure could weigh on shares

Overall CRE portfolio (36% of loans), including multifamily (1.5%), is smaller than the average bank (42%/5%, respectively). Meanwhile, in 1Q23 FNB performed an in-depth review of CRE loans maturing in 2023/24. Although CRE loans classified as special mention have increased \$29mn YTD to \$565mn, representing 90bp of TCE, the review did not result in any risk rating changes. That said, FNB's above-average exposure to office-CRE could indiscriminately weigh on shares in 2024. Office loans comprise 6% of loans as of 3Q23, nearly double that of the average bank under coverage. Majority of which are less than \$5mn. There could be some reprieve with 18% of the portfolio expected to mature in 2024.

Exhibit 18: FNB has above-average office-CRE exposure

Office-CRE loans as % of total



Source: BofA Global Research, company filings

BofA GLOBAL RESEARCH

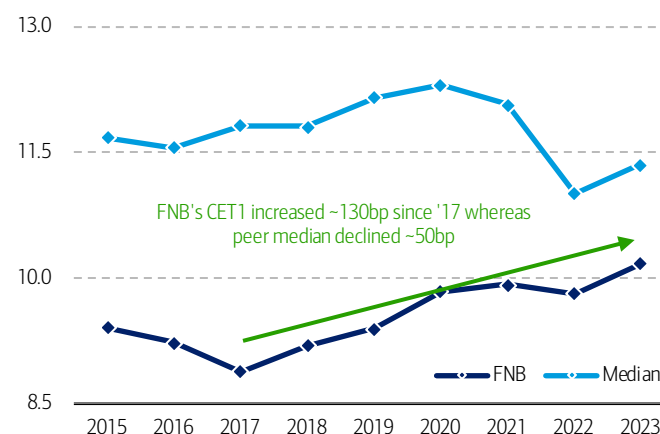


Capital improved but still below peers'

Following structural changes made to its balance sheet, FNB has seen its gap to peers on CET1 narrow since 2017. (Recall FNB's acquisition of Yadkin, closed Mar. 2017, reduced its TBV/share by 8.5%). Over this time, FNB's CET1 ratio has improved by ~130bp and its TCE ratio has increased 80bp. Peers on the other hand, have seen their capital ratios contract (-50bp/-210bp, respectively). Recent TCE growth outperformance has been aided by limited AOCI impairment. Although, FNB's CET1 ratio is above management's internal target (10.2% vs. ~10%), it remains below the peer median (11.3%). This likely will limit the amount of capital management returns to shareholders relative to peers in the near term. That said, these higher capital levels (+70bp vs. historical average) provides FNB increased flexibility to pursue future acquisitions.

Exhibit 19: FNB has narrowed its capital gap to peers since '17

CET1 ratio

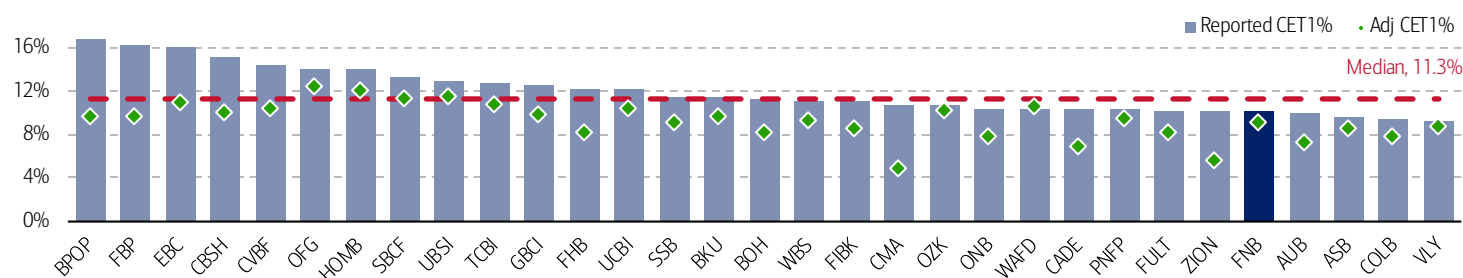


Source: company filings, S&P Capital IQ

BofA GLOBAL RESEARCH

Exhibit 20: FNB AOCI adj. CET1 ratio closer to that of peers

Reported and adjusted CET1 ratios (as of 3Q23)



Source: company filings, S&P Capital IQ

BofA GLOBAL RESEARCH

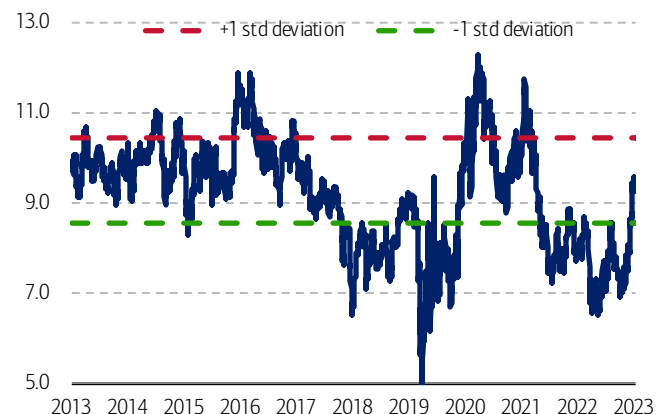
Valuation

Shares of FNB are trading at 9.5x 2024e EPS, in-line with its historical average. Meanwhile, the discount to the KRX has narrowed to -16% vs. -34% historically. While the discounted valuation likely reflects FNB's lower relative capital levels, we attribute the recent improvement to: 1) the successful integration of Yadkin acquisition (and subsequent increased FNB's scale and geographic diversity); 2) higher capital levels vs. history; and 3) higher/more resilient returns.



Exhibit 21: Shares trading in-line with historical average

1-year forward P/E multiple



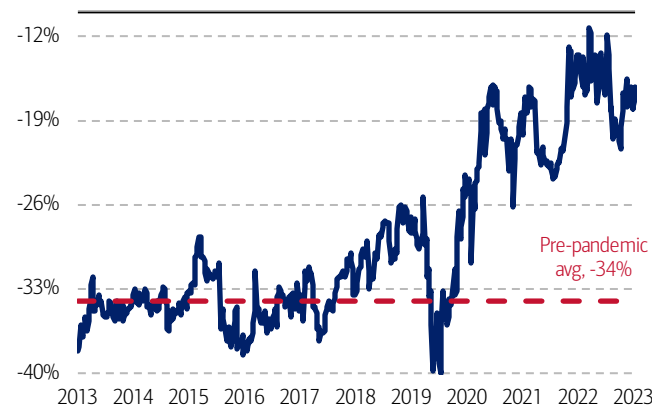
Source: Bloomberg

BofA GLOBAL RESEARCH

FNB is currently trading at 1.5x TBV, relatively in-line with its 5-year pre-pandemic average. After adjusting TBV for AOCI, we est. shares are trading at 1.4x TBV – at the low-end of its historical trading range (defined as +/-1 standard deviation). On an adjusted basis, FNB is trading in-line with mid-cap banks (consistent with history), this despite expectations for FNB to generate higher returns and TBV growth.

Exhibit 22: FNB has narrowed its valuation gap to peers

FNB vs. KRX 1-year forward P/E multiple



Source: Bloomberg

BofA GLOBAL RESEARCH

Exhibit 23: FNB trading in-line with pre-pandemic average

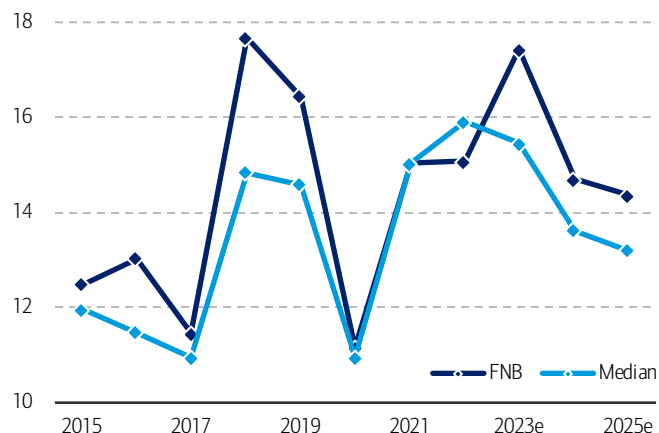
Price to tangible book value (x)



Source: Bloomberg

BofA GLOBAL RESEARCH

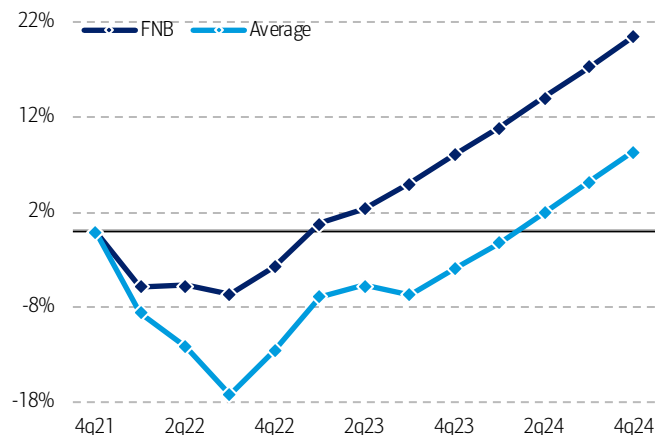
Exhibit 24: FNB expected to generate higher returns over next 2 years
ROTCE (%)



Source: company filings, Visible Alpha

BofA GLOBAL RESEARCH

Exhibit 25: Meanwhile, FNB's TBV/sh growth to outpace peers
TBV/share growth (index = 4Q21)



Source: company filings, Visible Alpha

BofA GLOBAL RESEARCH

Price objective

We value FNB's shares using a 50/50 blend of forward price-to-earnings (P/E) and price-to-tangible book value (P/TBV) multiples. We arrive at our \$15 price objective based on the following:

Given expectations for FNB to generate 14% (as well as under stress), we ascribe a 10.5x multiple on our 2024e EPS. This implies a fair value of \$14. The premium to its 5-year pre-pandemic history (9.5x) reflects improved capital levels, successful execution (including increased geographic diversity), and continued above-average balance sheet growth.

During times of uncertainty, principally driven by the trajectory of credit costs – and therefore earnings – investors will utilize a price-to-tangible book valuation (P/TBV) methodology. We ascribe a 1.6x P/TBV multiple based on our 2024e ROTCE. This implies a fair value of \$17. The represents a discount to history (1.8x).

Upside risk: stronger than expected balance sheet growth; quicker return to profitability; and greater NIM expansion relative to peers. Downside risk: higher than expected expense growth; accelerated credit migration; and slower balance sheet growth.

Price objective basis & risk

FNB Corporation of Pennsylvania (FNB)

Our \$15 PO is based on a 50%/50% weighting between our 2024e EPS and 2024e tangible book value (TBV). We assigned 10.5x/1.6x multiples, respectively, improved capital levels and above-average ROTCE profile.

Upside risk: stronger than expected balance sheet growth, quicker return to profitability, and greater NIM expansion relative to peers. Downside risk: higher than expected expense growth, accelerated credit migration, and slower balance sheet growth.

Analyst Certification

I, Brandon Berman, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

North America - Banks Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Ares Capital Corporation	ARCC	ARCC US	Derek Hewett
	Ares Commercial Real Estate Corporation	ACRE	ACRE US	Derek Hewett
	Bank of Montreal	BMO	BMO US	Ebrahim H. Poonawala
	Bank of Montreal	YBMO	BMO CN	Ebrahim H. Poonawala
	Barings BDC Inc	BBDC	BBDC US	Derek Hewett
	Blackstone Mortgage Trust Inc	BXMT	BXMT US	Derek Hewett
	Blue Owl Capital Corporation	OBDC	OBDC US	Derek Hewett
	Carlyle Secured Lending Inc	CGBD	CGBD US	Derek Hewett
	Citigroup Inc.	C	C US	Ebrahim H. Poonawala
	Compass Diversified Holdings	CODI	CODI US	Derek Hewett
	Crescent Capital BDC	CCAP	CCAP US	Derek Hewett
	Cullen/Frost Bankers Inc	CFR	CFR US	Ebrahim H. Poonawala
	East West Bancorp, Incorporated	EWBC	EWBC US	Ebrahim H. Poonawala
	Fifth Third Bank	FITB	FITB US	Ebrahim H. Poonawala
	First Bancorp Puerto Rico	FBP	FBP US	Brandon Berman
	First Horizon Corporation	FHN	FHN US	Ebrahim H. Poonawala
	FNB Corporation of Pennsylvania	FNB	FNB US	Brandon Berman
	Goldman Sachs	GS	GS US	Ebrahim H. Poonawala
	JPMorgan Chase & Co.	JPM	JPM US	Ebrahim H. Poonawala
	KeyCorp	KEY	KEY US	Ebrahim H. Poonawala
	M&T Bank	MTB	MTB US	Ebrahim H. Poonawala
	Morgan Stanley	MS	MS US	Ebrahim H. Poonawala
	New Mountain Finance Corporation	NMFC	NMFC US	Derek Hewett
	New York Community Bancorp	NYCB	NYCB US	Ebrahim H. Poonawala
	Northern Trust Corporation	NTRS	NTRS US	Ebrahim H. Poonawala
	Royal Bank of Canada	RY	RY US	Ebrahim H. Poonawala
	Royal Bank of Canada	YRY	RY CN	Ebrahim H. Poonawala
	Safehold, Inc	SAFE	SAFE US	Derek Hewett
	Sixth Street Specialty Lending, Inc	TSLX	TSLX US	Derek Hewett
	Starwood Property Trust	STWD	STWD US	Derek Hewett
	Synovus Financial Corp.	SNV	SNV US	Ebrahim H. Poonawala
	The Bank of New York Mellon Corporation	BK	BK US	Ebrahim H. Poonawala
	Truist Financial	TFC	TFC US	Ebrahim H. Poonawala
	U.S. Bancorp	USB	USB US	Ebrahim H. Poonawala
	Wells Fargo & Company	WFC	WFC US	Ebrahim H. Poonawala
	Western Alliance Bancorp	WAL	WAL US	Ebrahim H. Poonawala
NEUTRAL				
	AGNC Investment Corp	AGNC	AGNC US	Derek Hewett
	Ally Financial	ALLY	ALLY US	Brandon Berman
	Annaly Capital Management	NLY	NLY US	Derek Hewett
	Apollo Commercial Real Estate Finance	ARI	ARI US	Derek Hewett

North America - Banks Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Associated Banc-Corp.	ASB	ASB US	Brandon Berman
	Bain Capital Specialty Finance, Inc.	BCSF	BCSF US	Derek Hewett
	Bank of Nova Scotia	YBNS	BNS CN	Ebrahim H. Poonawala
	Bank of Nova Scotia	BNS	BNS US	Ebrahim H. Poonawala
	Blackstone Secured Lending Fund	BXSL	BXSL US	Derek Hewett
	BrightSpire Capital Inc.	BRSP	BRSP US	Derek Hewett
	Canadian Imperial Bank of Commerce	CM	CM US	Ebrahim H. Poonawala
	Canadian Imperial Bank of Commerce	YCM	CM CN	Ebrahim H. Poonawala
	Citizens Financial Group	CFG	CFG US	Ebrahim H. Poonawala
	Comerica Incorporated	CMA	CMA US	Brandon Berman
	Goldman Sachs BDC, Inc.	GSBD	GSBD US	Derek Hewett
	Golub Capital BDC, Inc.	GBDC	GBDC US	Derek Hewett
	Huntington Bancshares Inc.	HBAN	HBAN US	Ebrahim H. Poonawala
	Ladder Capital Corp	LADR	LADR US	Derek Hewett
	PennyMac Mortgage Investment Trust	PMT	PMT US	Derek Hewett
	Popular Inc	BPOP	BPOP US	Brandon Berman
	Regions Financial	RF	RF US	Ebrahim H. Poonawala
	The PNC Financial Services Group, Inc.	PNC	PNC US	Ebrahim H. Poonawala
	Toronto-Dominion Bank	TD	TD US	Ebrahim H. Poonawala
	Toronto-Dominion Bank	YTD	TD CN	Ebrahim H. Poonawala
	TPG RE Finance Trust, Inc.	TRTX	TRTX US	Derek Hewett

UNDERPERFORM

	Bank of Hawaii Corp.	BOH	BOH US	Brandon Berman
	First Hawaiian Inc.	FHB	FHB US	Brandon Berman
	Guild Holdings Company	GHLI	GHLI US	Derek Hewett
	Invesco Mortgage Capital, Inc.	IVR	IVR US	Derek Hewett
	loanDepot Inc	LDI	LDI US	Derek Hewett
	MidCap Financial Investment Co	MFIC	MFIC US	Derek Hewett
	Prosperity Bancshares Inc	PB	PB US	Ebrahim H. Poonawala
	State Street Corporation	STT	STT US	Ebrahim H. Poonawala
	Texas Capital Bancshares Inc.	TCBI	TCBI US	Brandon Berman
	Zions Bancorp	ZION	ZION US	Brandon Berman

IQmethodSM Measures Definitions**Business Performance**

Return On Capital Employed

Return On Equity
Operating Margin
Earnings Growth
Free Cash Flow

Numerator

NOPAT = (EBIT + Interest Income) × (1 – Tax Rate) + Goodwill Amortization

Net Income
Operating Profit
Expected 5 Year CAGR From Latest Actual
Cash Flow From Operations – Total Capex

Denominator

Total Assets – Current Liabilities + ST Debt + Accumulated Goodwill
Amortization
Shareholders' Equity
Sales
N/A
N/A

Quality of Earnings

Cash Realization Ratio
Asset Replacement Ratio
Tax Rate
Net Debt-To-Equity Ratio
Interest Cover

Numerator

Cash Flow From Operations
Capex
Tax Charge
Net Debt = Total Debt – Cash & Equivalents
EBIT

Denominator

Net Income
Depreciation
Pre-Tax Income
Total Equity
Interest Expense

Valuation Toolkit

Price / Earnings Ratio
Price / Book Value
Dividend Yield
Free Cash Flow Yield
Enterprise Value / Sales
EV / EBITDA

Numerator

Current Share Price
Current Share Price
Annualised Declared Cash Dividend
Cash Flow From Operations – Total Capex
EV = Current Share Price × Current Shares + Minority Equity + Net Debt + Other LT Liabilities
Enterprise Value

Denominator

Diluted Earnings Per Share (Basis As Specified)
Shareholders' Equity / Current Basic Shares
Current Share Price
Market Cap = Current Share Price × Current Basic Shares
Sales
Basic EBIT + Depreciation + Amortization

IQmethodSM is the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and valuations. The key features of IQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

IQdatabase[®] is our real-time global research database that is sourced directly from our equity analysts' earnings models and includes forecasted as well as historical data for income statements, balance sheets, and cash flow statements for companies covered by BofA Global Research.

IQprofileSM, **IQmethodSM** are service marks of Bank of America Corporation. **IQdatabase[®]** is a registered service mark of Bank of America Corporation.



Disclosures

Important Disclosures

Equity Investment Rating Distribution: Banks Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	100	49.75%	Buy	84	84.00%
Hold	54	26.87%	Hold	41	75.93%
Sell	47	23.38%	Sell	35	74.47%

Equity Investment Rating Distribution: Global Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	1895	53.62%	Buy	1083	57.15%
Hold	832	23.54%	Hold	454	54.57%
Sell	807	22.84%	Sell	383	47.46%

^{R1} Issuers that were investment banking clients of BofA Securities or one of its affiliates within the past 12 months. For purposes of this Investment Rating Distribution, the coverage universe includes only stocks. A stock rated Neutral is included as a Hold, and a stock rated Underperform is included as a Sell.

FUNDAMENTAL EQUITY OPINION KEY: Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. **VOLATILITY RISK RATINGS**, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. **INVESTMENT RATINGS** reflect the analyst's assessment of both a stock's absolute total return potential as well as its attractiveness for investment relative to other stocks within its Coverage Cluster (defined below). Our investment ratings are: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. An investment rating of 6 (No Rating) indicates that a stock is no longer trading on the basis of fundamentals. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R2}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R2} Ratings dispersions may vary from time to time where BofA Global Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

INCOME RATINGS, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. **Coverage Cluster** is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofA Global Research report referencing the stock.

BofAS or one of its affiliates acts as a market maker for the equity securities recommended in the report: FNB Corp.

The issuer is or was, within the last 12 months, an investment banking client of BofAS and/or one of its affiliates: FNB Corp.

BofAS or an affiliate has received compensation from the issuer for non-investment banking services or products within the past 12 months: FNB Corp.

BofAS or an affiliate has received compensation for investment banking services from this issuer within the past 12 months: FNB Corp.

BofAS together with its affiliates beneficially owns one percent or more of the common stock of this issuer. If this report was issued on or after the 9th day of the month, it reflects the ownership position on the last day of the previous month. Reports issued before the 9th day of a month reflect the ownership position at the end of the second month preceding the date of the report: FNB Corp.

BofAS or one of its affiliates is willing to sell to, or buy from, clients the common equity of the issuer on a principal basis: FNB Corp.

The issuer is or was, within the last 12 months, a securities business client (non-investment banking) of BofAS and/or one of its affiliates: FNB Corp.

BofA Global Research personnel (including the analyst(s) responsible for this report) receive compensation based upon, among other factors, the overall profitability of Bank of America Corporation, including profits derived from investment banking. The analyst(s) responsible for this report may also receive compensation based upon, among other factors, the overall profitability of the Bank's sales and trading businesses relating to the class of securities or financial instruments for which such analyst is responsible.

Other Important Disclosures

From time to time research analysts conduct site visits of covered issuers. BofA Global Research policies prohibit research analysts from accepting payment or reimbursement for travel expenses from the issuer for such visits.

Prices are indicative and for information purposes only. Except as otherwise stated in the report, for any recommendation in relation to an equity security, the price referenced is the publicly traded price of the security as of close of business on the day prior to the date of the report or, if the report is published during intraday trading, the price referenced is indicative of the traded price as of the date and time of the report and in relation to a debt security (including equity preferred and CDS), prices are indicative as of the date and time of the report and are from various sources including BofA Securities trading desks.

The date and time of completion of the production of any recommendation in this report shall be the date and time of dissemination of this report as recorded in the report timestamp.

Recipients who are not institutional investors or market professionals should seek the advice of their independent financial advisor before considering information in this report in connection with any investment decision, or for a necessary explanation of its contents.

Officers of BofAS or one of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

Refer to [BofA Global Research policies relating to conflicts of interest](#).

"BofA Securities" includes BofA Securities, Inc. ("BofAS") and its affiliates. Investors should contact their BofA Securities representative or Merrill Global Wealth Management financial advisor if they have questions concerning this report or concerning the appropriateness of any investment idea described herein for such investor. "BofA Securities" is a global brand for BofA Global Research.

Information relating to Non-US affiliates of BofA Securities and Distribution of Affiliate Research Reports:

BofAS and/or Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") may in the future distribute, information of the following non-US affiliates in the US (short name: legal name, regulator): Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd., regulated by The Financial Service Board; MLI (UK): Merrill Lynch International, regulated by the Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA); BofASE (France): BofA Securities Europe SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and

regulated by the ACPR and the Autorité des Marchés Financiers (AMF). BofA Securities Europe SA ("BofASE") with registered address at 51, rue La Boétie, 75008 Paris is registered under no 842 602 690 RCS Paris. In accordance with the provisions of French Code Monétaire et Financier (Monetary and Financial Code), BofASE is an établissement de crédit et d'investissement (credit and investment institution) that is authorised and supervised by the European Central Bank and the Autorité de Contrôle Prudentiel et de Résolution (ACPR) and regulated by the ACPR and the Autorité des Marchés Financiers. BofASE's share capital can be found at www.bofam.com/BofASEdisclaimer; BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSCF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and distributed in Hong Kong by Merrill Lynch (Hong Kong) which is regulated by HKSCF; is issued and distributed in Taiwan by Merrill Lynch (Taiwan); is issued and distributed in India by BofAS India; and is issued and distributed in Singapore to institutional investors and/or accredited investors (each as defined under the Financial Advisers Regulations) by Merrill Lynch (Singapore) (Company Registration No 198602883D). Merrill Lynch (Singapore) is regulated by MAS. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 (MLEA) distributes this information in Australia only to 'Wholesale' clients as defined by s.761G of the Corporations Act 2001. With the exception of Bank of America N.A., Australia Branch, neither MLEA nor any of its affiliates involved in preparing this information is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this information in Brazil and its local distribution is by Merrill Lynch (Brazil) in accordance with applicable regulations. Merrill Lynch (DIFC) is authorized and regulated by the DFSA. Information prepared and issued by Merrill Lynch (DIFC) is done so in accordance with the requirements of the DFSA conduct of business rules. BofA Europe (Frankfurt) distributes this information in Germany and is regulated by BaFin, the ECB and the CBI. BofA Securities entities, including BofA Europe and BofASE (France), may outsource/delegate the marketing and/or provision of certain research services or aspects of research services to other branches or members of the BofA Securities group. You may be contacted by a different BofA Securities entity acting for and on behalf of your service provider where permitted by applicable law. This does not change your service provider. Please refer to the [Electronic Communications Disclaimers](#) for further information.

This information has been prepared and issued by BofAS and/or one or more of its non-US affiliates. The author(s) of this information may not be licensed to carry on regulated activities in your jurisdiction and, if not licensed, do not hold themselves out as being able to do so. BofAS and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofAS and/or MLPF&S clients in the US by its non-US affiliates. Any US person receiving this information and wishing to effect any transaction in any security discussed herein should do so through BofAS and/or MLPF&S and not such foreign affiliates. Hong Kong recipients of this information should contact Merrill Lynch (Asia Pacific) Limited in respect of any matters relating to dealing in securities or provision of specific advice on securities or any other matters arising from, or in connection with, this information. Singapore recipients of this information should contact Merrill Lynch (Singapore) Pte Ltd in respect of any matters arising from, or in connection with, this information. For clients that are not accredited investors, expert investors or institutional investors Merrill Lynch (Singapore) Pte Ltd accepts full responsibility for the contents of this information distributed to such clients in Singapore.

General Investment Related Disclosures:

Taiwan Readers: Neither the information nor any opinion expressed herein constitutes an offer or a solicitation of an offer to transact in any securities or other financial instrument. No part of this report may be used or reproduced or quoted in any manner whatsoever in Taiwan by the press or any other person without the express written consent of BofA Securities.

This document provides general information only, and has been prepared for, and is intended for general distribution to, BofA Securities clients. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This document is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of, and is not directed to, any specific person(s). This document and its content do not constitute, and should not be considered to constitute, investment advice for purposes of ERISA, the US tax code, the Investment Advisers Act or otherwise. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this document and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this document.

Securities and other financial instruments referred to herein, or recommended, offered or sold by BofA Securities, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. Digital assets are extremely speculative, volatile and are largely unregulated. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the issuer or the market that is anticipated to have a short-term price impact on the equity securities of the issuer. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

BofA Securities is aware that the implementation of the ideas expressed in this report may depend upon an investor's ability to "short" securities or other financial instruments and that such action may be limited by regulations prohibiting or restricting "shortselling" in many jurisdictions. Investors are urged to seek advice regarding the applicability of such regulations prior to executing any short idea contained in this report.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned herein. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

BofAS or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofAS or one of its affiliates may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information.

In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

BofA ESGMeter Methodology:

ESGMeter is a proprietary metric based on quantitative analysis and fundamental analyst inputs that reflects our assessment of a company's Environmental, Social and Governance-related

attributes. The ESGMeter is intended to indicate a company's likelihood of experiencing stronger financial stability (higher return on equity and lower earnings and price volatility) over the next three years relative to peer group. There are three ESGMeter levels - Low, Medium, and High - which indicate whether a company has attributes most likely to translate into superior financial stability (in the case of a High level) or weaker financial stability (in the case of a Low level) over the next three years relative to its peer group. A Medium level suggests that a company exhibits ESG characteristics that are likely associated with financial stability results in line with its peer group over the next three years. Full details of our methodology, financial stability definition and disclaimers are available at [BofA ESGMeter methodology](#). ESGMeter is not indicative of a company's future stock price performance and is not an investment recommendation or rating. ESGMeter is independent of the BofA Global Research fundamental equity analyst's investment rating, volatility risk rating, income rating or price objective for that company.

Copyright and General Information:

Copyright 2024 Bank of America Corporation. All rights reserved. iQdatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities.

Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of BofA or any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). BofA Global Research policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to BofA Securities and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This information may contain links to third-party websites. BofA Securities is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this information and is not incorporated by reference. The inclusion of a link does not imply any endorsement by or any affiliation with BofA Securities. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. BofA Securities is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

All opinions, projections and estimates constitute the judgment of the author as of the date of publication and are subject to change without notice. Prices also are subject to change without notice. BofA Securities is under no obligation to update this information and BofA Securities ability to publish information on the subject issuer(s) in the future is subject to applicable quiet periods. You should therefore assume that BofA Securities will not update any fact, circumstance or opinion contained herein.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and BofA Securities policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current. Certain outstanding reports or investment opinions relating to securities, financial instruments and/or issuers may no longer be current. Always refer to the most recent research report relating to an issuer prior to making an investment decision.

In some cases, an issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BofA or any of its affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither BofA Securities nor any officer or employee of BofA Securities accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this information.