

BBVA

ALCO and Mexico's volume growth support net interest income outlook

Reiterate Rating: NEUTRAL | PO: 9.30 EUR | Price: 8.61 EUR

NII outlook drives positive revisions

BBVA guided for 'mid-single-digit' NII growth in Spain this year, despite commercial spreads approaching peak, from 3.42% currently. Deposit beta was up to c.20% in 4Q and is assumed by management to increase to 25-30% by year-end, versus our 25% estimate. Loans are expected to be stable in Spain, gaining share versus peers in SMEs/consumer. However, it is the ALCO portfolio that will likely drive margins from here, now seen contributing to c.15% of Spanish NII. This, together with Mexico's volume-driven unit, should lift the group's NII estimates by c.2% in 2024-25e.

Mexico dependant on double-digit volume growth

Mexico represents a significant c.60% of BBVA's group profits. While NII performance in Q4 was affected by higher wholesale funding and seasonality in credit cards, management converted c.€6bn of deposits to increase the ALCO book as a hedge against rates peaking in Mexico. Sensitivity to a -100bps parallel shift to NII currently accounts for 2.3% of NII, down from 3.7%. Volumes were strong, growing 11% YoY, with growth expected to be sustained at >10% in 2024e. This means that our NII is growing at c.9% in local currency this year and c.7% in euro terms. BofA Global Research economists expect Banxico to begin cutting gradually in March and the MXN to weaken in 2024. In addition, federal elections are due in June.

PO up from €8.85 to €9.30 – Neutral

Mexico and Spain remain key sources of positive EPS revisions for BBVA; we lift our NII and fee estimates by c.2% and 8%, respectively, only partly offset by higher loan losses as group CoR rises to c.135bps from c.120bps previously. While short-term momentum is supportive and valuation inexpensive, we expect activity levels in Mexico to decelerate, albeit with a strong first half in 2024 driven by fiscal impulse. The deceleration is based in part on a slowdown in US economic activity and in part on a cut to government expenditure due by year-end. As a result of our estimate revisions, our PO moves up from €8.85 to €9.30. We reiterate our Neutral rating.

Estimates (Dec) (EUR)	2022A	2023A	2024E	2025E	2026E
Net Profit (EURm)	6,420	8,019	8,569	8,475	8,547
EPS (Adjusted Diluted)	1.01	1.29	1.44	1.48	1.56
Dividend / Share	0.43	0.55	0.76	0.78	0.82
Adjusted NAV PS	7.19	8.26	8.79	9.24	9.24
ADR EPS (Adjusted Diluted - US\$)	1.06	1.40	1.56	1.60	1.68
ADR Dividend / Shares (US\$)	0.45	0.59	0.82	0.85	0.89
Valuation (Dec)					
EPS Change (YoY)	42.9%	27.8%	11.7%	2.7%	4.9%
Price / NAV	1.20x	1.04x	0.98x	0.93x	0.93x
Price / Adj. EPS	8.5x	6.7x	6.0x	5.8x	5.5x
ROTE	14.1%	16.4%	16.6%	16.2%	16.5%
Net Yield	5.0%	6.4%	8.9%	9.1%	9.5%

30 January 2024

Equity

Key Changes

(EUR)	Previous	Current
Price Obj.	8.85	9.30
2024E EPS	1.42	1.44
2025E EPS	1.46	1.48
2026E EPS	NA	1.56
2024E DPS	0.75	0.76

Antonio Reale >>
Research Analyst
MLI (UK)
+44 20 7996 1763
antonio.reale@bofa.com

Filippo Munari >>
Research Analyst
MLI (UK)
+44 20 7995 2198
filippo.munari@bofa.com

Stock Data

Price (Common / ADR)	8.61 EUR / 9.35 USD
Price Objective	9.30 EUR / 10.04 USD
Date Established	30-Jan-2024 / 30-Jan-2024
Investment Opinion	B-2-7 / B-2-7
52-Week Range	5.74 EUR-8.73 EUR
Market Value (mn)	50,288 EUR
Shares Outstanding (mn)	5,837.9 / 5,837.9
Average Daily Value (mn)	81.63 USD
Free Float	99.1%
BofA Ticker / Exchange	BBVXF / SQC
BofA Ticker / Exchange	BBVA / NYS
Bloomberg / Reuters	BBVA SQ / BBVA.MC
ROE (2024E)	16.4%
ESGMeter™	High

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"](#).

ALCO = Asset-Liability Committee
c. = circa
CoR = Cost of Risk
FX = Foreign Exchange
MXN = Mexican Peso
NII = Net Interest Income
PO = Price Objective
RWA = Risk-Weighted Assets
SMEs = Small and Medium-size Enterprises

>> Employed by a non-US affiliate of BofAS and is not registered/qualified as a research analyst under the FINRA rules.

Refer to "Other Important Disclosures" for information on certain BofA Securities entities that take responsibility for the information herein in particular jurisdictions.

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 8 to 11. Analyst Certification on page 5. Price Objective Basis/Risk on page 5.

12652906

Timestamp: 30 January 2024 04:06PM EST

vs. = versus

W

iQprofileSM BBVA

Key Income Statement Data (Dec)	2022A	2023A	2024E	2025E	2026E
(EUR Millions)	IFRS	IFRS	IFRS	IFRS	IFRS
Net Interest Income	19,153	23,089	24,180	23,783	24,250
Net Fee Income	5,353	6,288	6,901	7,154	7,291
Securities Gains / (Losses)	1,938	2,183	1,927	1,782	1,614
Other Income	(1,555)	(2,018)	(1,452)	(619)	(167)
Total Non-Interest Income	5,737	6,452	7,376	8,317	8,738
Total Operating Income	24,890	29,542	31,556	32,101	32,988
Operating Expenses	(10,761)	(12,308)	(13,155)	(13,752)	(14,366)
Pre-Provision Profit	14,129	17,233	18,402	18,349	18,622
Provisions Expense	(3,378)	(4,428)	(5,473)	(5,610)	(5,780)
Operating Profit	10,751	12,805	12,929	12,738	12,842
Non-Operating Items	(260)	(386)	(299)	(252)	(192)
Pre-Tax Income	10,490	12,419	12,630	12,486	12,651
Net Income to sh/holders	6,622	8,019	8,569	8,475	8,547
Adjusted Cash Earnings	6,107	7,723	8,273	8,179	8,251

Key Balance Sheet Data

Total Assets	713,140	775,558	778,221	795,280	791,982
Average Interest Earning Assets	648,931	701,866	732,780	742,776	749,830
Risk Weighted Assets	337,102	363,916	378,543	409,215	413,049
Total Gross Customer Loans	369,787	389,405	395,543	413,807	416,669
Total Customer Deposits	393,856	413,487	405,187	413,221	402,485
Tier 1 Capital	47,933	52,138	53,992	56,369	58,222
Tangible Equity	44,834	49,339	50,363	50,915	48,963
Common Shareholders' Equity	46,990	51,701	52,725	53,278	51,325

Key Metrics

Net Interest Margin	2.95%	3.29%	3.30%	3.20%	3.23%
Tier 1 Ratio	14.2%	14.3%	14.3%	13.8%	14.1%
Effective Tax Rate	33.0%	32.2%	29.4%	29.2%	29.2%
Loan / Assets Ratio	50.2%	48.7%	49.0%	50.0%	50.3%
Loan / Deposit Ratio	90.9%	91.3%	94.2%	96.3%	99.0%
Oper Leverage (Inc Growth - Cost Growth)	5.23%	4.31%	-0.05%	-2.82%	-1.70%
Gearing (Assets / Equity)	15.2x	15.0x	14.8x	14.9x	15.4x
Tangible Equity / Assets	6.29%	6.36%	6.47%	6.40%	6.18%
Tangible Equity / RWAs	13.3%	13.6%	13.3%	12.4%	11.9%

Business Performance

Revenue Growth	18.2%	18.7%	6.82%	1.72%	2.76%
Operating Expense Growth	12.9%	14.4%	6.87%	4.54%	4.46%
Provisions Expense Growth	11.3%	31.1%	23.6%	2.51%	3.02%
Operating Revenue / Average Assets	1.56%	1.72%	1.66%	1.62%	1.62%
Operating Expenses / Average Assets	-1.56%	-1.65%	-1.69%	-1.75%	-1.81%
Pre-Provision ROA	2.05%	2.32%	2.37%	2.33%	2.35%
ROA	0.93%	1.08%	1.10%	1.08%	1.08%
Pre-Provision ROE	31.1%	34.9%	35.2%	34.6%	35.6%
ROE	14.1%	16.3%	16.4%	16.0%	16.3%
RoTE	14.1%	16.4%	16.6%	16.2%	16.5%
RoRWAs	1.89%	2.20%	2.23%	2.08%	2.01%
Dividend Payout Ratio	43.9%	42.5%	52.8%	52.8%	52.8%
Efficiency Ratio (Cost / Income Ratio)	43.2%	41.7%	41.7%	42.8%	43.5%

Quality of Earnings

Total Non-Interest Inc / Operating Inc	23.0%	21.8%	23.4%	25.9%	26.5%
Market-Related Revenue / Total Revenues	0%	0%	0%	0%	0%
Provisioning Burden as % of PPP	23.9%	25.7%	29.7%	30.6%	31.0%
NPLs plus Foreclosed Real Estate / Loans	4.04%	4.05%	3.88%	3.59%	3.46%
Loan Loss Reserves / NPLs	81.3%	76.9%	93.8%	112%	133%
Loan Loss Reserves / Total Loans	3.29%	3.11%	3.64%	4.02%	4.59%
Provisions Expense / Average Loans	1.00%	1.20%	1.44%	1.44%	1.45%

Company Sector

Banks-Retail

Company Description

BBVA is the third-largest bank in Spain (c.15% loan market share), which accounts for more than 20-25% of group earnings. BBVA has a strong international footprint with leading franchises in Mexico (24% market share), for c.60% of group's earnings, and Latin America, with Colombia, Peru, Argentina and Venezuela as the main markets. In the mid-2000s, the bank expanded into the US Sunbelt (but sold in 2021). Since 2010, the bank has been building up a stake in Turkish bank Garanti, currently >85%.

Investment Rationale

Mexico represents a significant c.60% of BBVA's group profits. This has been a key source of growth for BBVA, which is set to normalize as we approach peak rates with early signs of an economic 'normalization' in Mexico and with elections this year. While Türkiye has been performing better than expected, it could continue to affect valuation both positively and negatively being a source of volatility. We see limited upside potential near-term - Neutral rating.

Stock Data

Shares / ADR	1.00
Price to Book Value	0.9x

Quarterly Earnings Estimates

	2023	2024
Q1	0.29A	0.36E
Q2	0.33A	0.39E
Q3	0.34A	0.37E
Q4	0.34A	0.32E

Key Changes

(US\$)	Previous	Current
Price Obj.	9.70	10.04
2024E EPS	1.53	1.56
2025E EPS	1.57	1.60
2026E EPS	NA	1.68
2024E DPS	0.81	0.82

BofA estimates new vs. old and consensus

Exhibit 1: BofA estimates new vs. old, 2024-26e

We raise NII, fees, costs and provisions in 2024-25e – all in all, EPS moves up 2%

BofA estimates – New vs. Old 2024-26e

BBVA € in millions	2024e			2025e			2026e		
	New	Old	Change	New	Old	Change	New	Old	Change
Net interest income	24,180	23,960	1%	23,783	23,269	2%	24,250	n.a.	n.a.
Fees & commission	6,901	6,367	8%	7,154	6,500	10%	7,291	n.a.	n.a.
Net financial results	1,927	1,441	34%	1,782	1,400	27%	1,614	n.a.	n.a.
Other	(1,452)	(1,055)	38%	(619)	(407)	52%	(167)	n.a.	n.a.
Total revenues	31,556	30,713	3%	32,101	30,762	4%	32,988	n.a.	n.a.
Personnel expenses	(6,905)	(6,782)	2%	(7,069)	(6,919)	2%	(7,170)	n.a.	n.a.
Admin & D&A expenses	(6,249)	(6,071)	3%	(6,683)	(6,255)	7%	(7,196)	n.a.	n.a.
Total costs	(13,155)	(12,853)	2%	(13,752)	(13,173)	4%	(14,366)	n.a.	n.a.
Pre-provision profit	18,402	17,860	3%	18,349	17,589	4%	18,622	n.a.	n.a.
Loan loss provisions	(5,473)	(4,882)	12%	(5,610)	(4,843)	16%	(5,780)	n.a.	n.a.
Other non-operating income	(299)	(319)	-6%	(252)	(189)	33%	(192)	n.a.	n.a.
Pre-tax profit	12,630	12,659	0%	12,486	12,556	-1%	12,651	n.a.	n.a.
Tax	(3,708)	(3,747)	-1%	(3,645)	(3,703)	-2%	(3,695)	n.a.	n.a.
Minority interest and others	(354)	(464)	-24%	(366)	(477)	-23%	(409)	n.a.	n.a.
Net attributable profit	8,569	8,448	1%	8,475	8,376	1%	8,547	n.a.	n.a.
Net profit (BofA adjusted)	8,273	8,152	1%	8,179	8,080	1%	8,251	n.a.	n.a.
EPS adj. diluted	1.44	1.42	2%	1.48	1.46	2%	1.56	n.a.	n.a.
Avg. shares diluted	5,728	5,744	0%	5,512	5,541	-1%	5,301	n.a.	n.a.

Source: BofA Global Research

BofA GLOBAL RESEARCH

Exhibit 2: BofA estimates vs. consensus, 2024-26e

We are c.10% ahead on consensus net profit on stronger fee and trading income, partially offset by higher provisions

BofA vs. VA Consensus 2024-26e

BBVA € in millions	2024e			2025e			2026e		
	BofA	Cons.	Diff.	BofA	Cons.	Diff.	BofA	Cons.	Diff.
Net interest income	24,180	24,432	-1%	23,783	24,137	-1%	24,250	24,521	-1%
Fees & commission	6,901	6,420	7%	7,154	6,589	9%	7,291	6,912	5%
Net financial results	1,927	1,635	18%	1,782	1,559	14%	1,614	1,712	-6%
Other	(1,452)	(1,683)	-14%	(619)	(1,287)	-52%	(167)	(1,280)	-87%
Total revenues	31,556	30,804	2%	32,101	30,997	4%	32,988	31,865	4%
Personnel expenses	(6,905)	(6,978)	-1%	(7,069)	(7,246)	-2%	(7,170)	(7,306)	-2%
Admin & D&A expenses	(6,249)	(6,275)	0%	(6,683)	(6,514)	3%	(7,196)	(7,049)	2%
Total costs	(13,155)	(13,253)	-1%	(13,752)	(13,759)	0%	(14,366)	(14,355)	0%
Pre-provision profit	18,402	17,551	5%	18,349	17,238	6%	18,622	17,510	6%
Loan loss provisions	(5,473)	(5,159)	6%	(5,610)	(5,315)	6%	(5,780)	(5,611)	3%
Other non-operating income	(299)	(340)	-12%	(252)	(317)	-20%	(192)	(272)	-30%
Pre-tax profit	12,630	12,051	5%	12,486	11,607	8%	12,651	11,627	9%
Tax	(3,708)	(3,806)	-3%	(3,645)	(3,613)	1%	(3,695)	(3,559)	4%
Minority interest and others	(354)	(377)	-6%	(366)	(374)	-2%	(409)	(365)	12%
Net attributable profit	8,569	7,867	9%	8,475	7,620	11%	8,547	7,703	11%
Net profit (BofA adjusted)	8,273	7,663	8%	8,179	7,401	11%	8,251	7,572	9%
EPS adj. diluted	1.44	1.32	9%	1.48	1.31	13%	1.56	1.34	16%
Avg. shares diluted	5,728	5,769	-1%	5,512	5,635	-2%	5,301	5,593	-5%
CET1 ratio	12.67%	12.77%	-10bps	12.30%	12.74%	-44bps	12.62%	12.76%	-14bps

Source: BofA Global Research, Visible Alpha

BofA GLOBAL RESEARCH

Summary of financials

Exhibit 3: BBVA – Summary of financials

P&L, key Balance Sheet items, ratio analysis

Income Statement						Ratio Analysis					
€ in millions, year-end Dec	FY22	FY23	FY24e	FY25e	FY26e		FY22	FY23	FY24e	FY25e	FY26e
Net interest income	19,153	23,089	24,180	23,783	24,250	Per Share Data					
% change	30%	21%	5%	-2%	2%	EPS reported	1.03	1.34	1.50	1.54	1.61
Fees & Commissions	5,353	6,288	6,901	7,154	7,291	EPS Adjusted (for valuation)	1.01	1.29	1.44	1.48	1.56
% change	12%	17%	10%	4%	2%	% change	43%	28%	12%	3%	5%
Trading revenues	1,938	2,183	1,927	1,782	1,614	DPS	0.43	0.55	0.76	0.78	0.82
% change	1%	13%	-12%	-8%	-9%	% change	39%	28%	39%	3%	5%
Other revenues	(1,555)	(2,018)	(1,452)	(619)	(167)	Dividend yield	5.5%	6.8%	9.0%	8.9%	9.0%
% change	n.m.	30%	-28%	-57%	-73%	Payout ratio %	40%	40%	50%	50%	50%
Total Revenues	24,890	29,542	31,556	32,101	32,988	Buyback per share	0.07	0.31	0.31	0.32	0.33
% change	18%	19%	7%	2%	3%	Buyback yield	6.7%	3.0%	3.8%	3.6%	3.6%
Staff expenses	(5,612)	(6,530)	(6,905)	(7,069)	(7,170)	Buyback as % of earnings	7%	22%	20%	20%	20%
% change	11%	16%	6%	2%	1%	Total yield	12.1%	9.8%	12.8%	12.6%	12.6%
Other expense	(5,149)	(5,778)	(6,249)	(6,683)	(7,196)	BV per share	7.53	8.66	9.20	9.67	9.68
% change	15%	12%	8%	7%	8%	TBV per share	7.19	8.26	8.79	9.24	9.24
Total expenses	(10,761)	(12,308)	(13,155)	(13,752)	(14,366)	Average shares outstanding	6,237	5,974	5,728	5,512	5,301
% change	13%	14%	7%	5%	4%	Valuation metrics					
Pre-provision profit	14,129	17,233	18,402	18,349	18,622	P/E	8.0x	6.3x	5.6x	5.5x	5.2x
% change	22%	22%	7%	0%	1%	P/BV	1.08x	0.94x	0.88x	0.84x	0.84x
Loan loss provisions	(3,378)	(4,428)	(5,473)	(5,610)	(5,780)	P/TBV	1.13x	0.98x	0.92x	0.88x	0.88x
Other provisions	(291)	(373)	(289)	(242)	(182)	Profitability					
Other non-recurrent	31	(13)	(10)	(10)	(10)	ROE	13.9%	15.7%	15.8%	15.4%	15.8%
Profit before taxes	10,490	12,419	12,630	12,486	12,651	ROTE	14.6%	16.4%	16.6%	16.2%	16.5%
% change	27%	18%	2%	-1%	1%	ROA	0.9%	1.0%	1.1%	1.0%	1.0%
Taxes	(3,461)	(4,003)	(3,708)	(3,645)	(3,695)	RoRWA	2.0%	2.2%	2.2%	2.1%	2.0%
% Tax rate	33%	32%	29%	29%	29%	NIM (NII / AIEA)	2.95%	3.29%	3.30%	3.20%	3.23%
Minorities, goodwill + other	(407)	(397)	(354)	(366)	(409)	Total revenues / RWAs	8%	8%	9%	8%	8%
Underlying net profit	6,622	8,019	8,569	8,475	8,547	NII / Tot revenues	77%	78%	77%	74%	74%
Discontinued ops & other	(201)	--	--	--	--	Fees / Tot revenues	22%	21%	22%	22%	22%
Reported net profit	6,420	8,019	8,569	8,475	8,547	Efficiency					
BofA adjusted net profit	6,309	7,723	8,273	8,179	8,251	Cost / income	43%	42%	42%	43%	44%
						Cost / assets	1.6%	1.7%	1.7%	1.7%	1.8%
						Cost / RWAs	3.3%	3.5%	3.5%	3.5%	3.5%
						Balance sheet gearing					
						Loan / deposit	91%	91%	94%	96%	99%
						Bond securities / assets	6%	6%	6%	6%	6%
						Customer loans / assets	50%	49%	49%	50%	50%
						Customer deposits / funding	88%	86%	85%	85%	85%
						Bonds issued / funding	12%	14%	15%	15%	15%
						Asset quality					
						Gross NPEs	14,463	15,305	14,808	14,287	13,764
						% change	-6%	6%	-3%	-4%	-4%
						Gross NPE ratio	3.4%	3.4%	3.2%	3.0%	2.9%
						Texas ratio %	26%	25%	23%	21%	20%
						Coverage ratio - Stage 3	52%	49%	60%	75%	94%
						Cost of risk (bps)	100	120	144	144	145
						Capital					
						Core Tier 1 Capital (Basel III)	42,486	46,104	47,958	50,335	52,188
						RWAs (Basel III)	336,920	363,916	378,543	409,215	413,049
						% change	10%	8%	4%	8%	1%
						RWAs density	94%	96%	99%	103%	104%
						Leverage ratio %	7%	7%	7%	7%	6%
						Core Tier 1 fully loaded %	12.6%	12.7%	12.7%	12.3%	12.6%
						Buffer over SREP %	4.01%	3.95%	3.58%	3.21%	3.54%

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk

BBVA (BBVXF / BBVA)

We derive our PO of €9.30 (ADR USD 10.04) using a sum of the parts (SoTP) on our 2024e estimates whereby we value each geography using a Gordon growth-implied P/CET1 multiple assuming 13% common equity tier 1 (CET1) allocation to each region's risk-weighted assets (RWAs). We assume 13% CoE for Spain, 14% for Mexico, 30% for Türkiye and a blended 18% for South America. We then add the market value of the stake in Telefonica, the cumulative dividends over 2023-24 and capital excess/deficit to steady-state CET1 and discount to 1 year forward from today.

Upside risks to our forecasts:

1. Positive earnings revision deriving from NII and cost of risk, provide upside to capital distribution
2. More stable markets would favour a recovery in AUMs, driving fee growth
3. Stronger real GDP growth in Spain and Mexico

Downside risks to our forecasts:

1. Deterioration in sovereign risk in key geographies
2. Türkiye risk could still affect capital and shareholders' returns
3. Asset quality deteriorating more than we forecast

Analyst Certification

I, Antonio Reale, 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.

EMEA - Banks Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	Allied Irish Banks	AIBRF	AIBG ID	Alastair Ryan
	Bank of Ireland Group	XBOIF	BIRG ID	Alastair Ryan
	BFF Banking Group	XBBZF	BFF IM	Antonio Reale
	BNP Paribas	BNPQF	BNP FP	Tarik El Mejjad
	BNP Paribas	BNPQY	BNPQY US	Tarik El Mejjad
	CaixaBank	CIXPF	CABK SQ	Antonio Reale
	Credit Agricole	CRARF	ACA FP	Tarik El Mejjad
	Danske Bank	DNSKF	DANSKE DC	Tarik El Mejjad
	Erste Bank	EBKOF	EBS AV	Alastair Ryan
	Erste Bank	EBKDY	EBKDY US	Alastair Ryan
	HSBC	XHSBF	5 HK	Alastair Ryan
	HSBC	HBCYF	HSBA LN	Alastair Ryan
	HSBC -A	HSBC	HSBC US	Alastair Ryan
	Intesa Sanpaolo	IITSF	ISP IM	Antonio Reale
	Intesa Sanpaolo	ISNPY	ISNPY US	Antonio Reale
	KBC Group	KBCSF	KBC BB	Tarik El Mejjad
	KBC Group NV	KBCSY	KBCSY US	Tarik El Mejjad
	NatWest Group	RBSPF	NWG LN	Rohith Chandra-Rajan
	Natwest Group PLC	NWG	NWG US	Rohith Chandra-Rajan
	Nordea	NBNKF	NDA FH	Tarik El Mejjad
	Nordea	XSABF	NDA SS	Tarik El Mejjad
	Nordea Bank Abp	NRDBY	NRDBY US	Tarik El Mejjad
	Santander	SAN	SAN US	Antonio Reale
	Santander	BCDRF	SAN SQ	Antonio Reale
	Societe Generale	SCGLF	GLE FP	Tarik El Mejjad
	Societe Generale	SCGLY	SCGLY US	Tarik El Mejjad
	Unicredit	UNCFF	UCG IM	Antonio Reale
	Unicredit	UNCRY	UNCRY US	Antonio Reale



EMEA - Banks Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
NEUTRAL				
	ABN AMRO	ABMRF	ABN NA	Tarik El Mejjad
	Banco Bilbao Vizcaya Argentaria	BBVA	BBVA US	Antonio Reale
	Banco BPM	BNCZF	BAMI IM	Antonio Reale
	Bankinter	BKIMF	BKT SQ	Antonio Reale
	BBVA	BBVXF	BBVA SQ	Antonio Reale
	Handelsbanken	SVNLF	SHBA SS	Tarik El Mejjad
	ING Groep NV	ING	ING US	Tarik El Mejjad
	ING Groep NV	INGVF	INGA NA	Tarik El Mejjad
	Lloyds Banking Group	LLDTF	LLOY LN	Rohith Chandra-Rajan
	Lloyds Banking Group	LYG	LYG US	Rohith Chandra-Rajan
	Monte dei Paschi	BMDPF	BMPS IM	Antonio Reale
	Raiffeisen Bank International	RAIFF	RBI AV	Alastair Ryan
	StanChart	SCBFF	STAN LN	Alastair Ryan
	StanChart	XCHBF	2888 HK	Alastair Ryan
	Svenska Handelsbanke	SVNLY	SVNLY US	Tarik El Mejjad
	UBS	XUHFJ	UBSG SW	Alastair Ryan
	UBS	UBS	UBS US	Alastair Ryan
UNDERPERFORM				
	Banco Sabadell	BNSDF	SAB SQ	Antonio Reale
	Barclays	BCLYF	BARC LN	Rohith Chandra-Rajan
	Barclays	BCS	BCS US	Rohith Chandra-Rajan
	Commerzbank	CRZBF	CBK GY	Rohith Chandra-Rajan
	Deutsche Bank	DB	DB US	Rohith Chandra-Rajan
	Deutsche Bank	XDUSF	DBK GY	Rohith Chandra-Rajan
	DNB	DNBBF	DNB NO	Tarik El Mejjad
	DNB ASA	DNBBY	DNBBY US	Tarik El Mejjad
	Mediobanca	MDIBF	MB IM	Antonio Reale
	Permanent TSB	ILPMF	PTSB ID	Alastair Ryan
	Poste Italiane	PITAF	PST IM	Antonio Reale
	SEB	SVKEF	SEBA SS	Tarik El Mejjad
	Swedbank	SWDBF	SWEDA SS	Tarik El Mejjad
	Swedbank AB	SWDBY	SWDBY US	Tarik El Mejjad
	Virgin Money UK PLC	CBBYF	VMUK LN	Rohith Chandra-Rajan
	Virgin Money UK PLC	CYBBF	VUK AU	Rohith Chandra-Rajan

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

Valuation Toolkit

Numerator

Denominator

*IQmethod*SM 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 validations. 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.

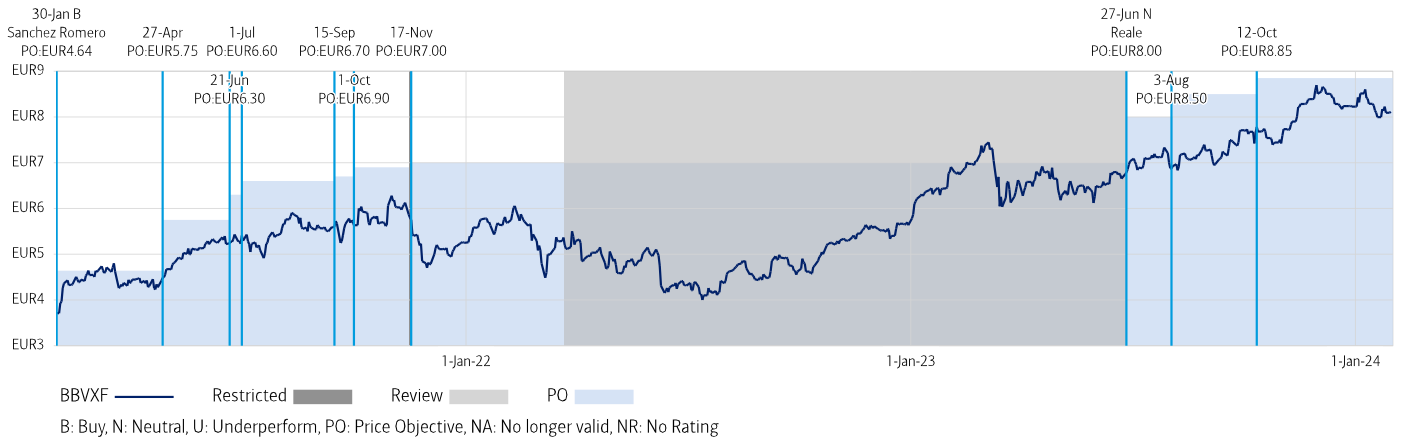
*IQprofile*SM, *IQmethod*SM are service marks of Bank of America Corporation. *IQdatabase*[®] is a registered service mark of Bank of America Corporation.



Disclosures

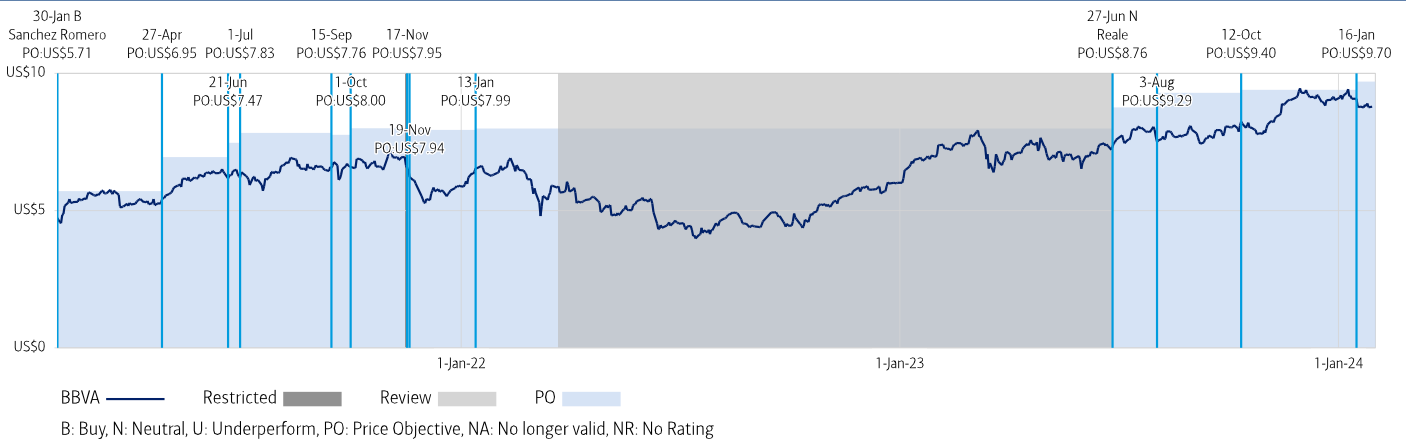
Important Disclosures

BBVA (BBVXF) Price Chart



The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

BBVA (BBVA) Price Chart



The Investment Opinion System is contained at the end of the report under the heading "Fundamental Equity Opinion Key". Dark grey shading indicates the security is restricted with the opinion suspended. Medium grey shading indicates the security is under review with the opinion withdrawn. Light grey shading indicates the security is not covered. Chart is current as of a date no more than one trading day prior to the date of the report.

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.

Price Charts for the securities referenced in this research report are available on the [Price Charts website](#), or call 1-800-MERRILL to have them mailed.

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

BofAS or an affiliate was a manager of a public offering of securities of this issuer within the last 12 months: BBVA.

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

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

The issuer is or was, within the last 12 months, a non-securities business client of BofAS and/or one or more of its affiliates: BBVA.

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

BofAS or an affiliate expects to receive or intends to seek compensation for investment banking services from this issuer or an affiliate of the issuer within the next three months: BBVA.

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: BBVA.

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

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 or more 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 (HKSF); 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 BofA 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 BofA 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. BofA and/or MLPF&S is the distributor of this information in the US and accepts full responsibility for information distributed to BofA 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 BofA 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.

BofA or one of its affiliates is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. BofA 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 BofA for the provision of research services for a separate fee, and in connection therewith BofA may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofA has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofA). If such recipient uses the services of BofA in connection with the sale or purchase of a security referred to herein, BofA may act as principal for its own account or as agent for another person. BofA 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 BofAS 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 BofAS 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.