

Santander

A mispriced opportunity

Reiterate Rating: BUY | PO: 5.00 EUR | Price: 3.74 EUR

Brazil: the best (of NIM expansion) has yet to come

SAN has a large share of funding tied to the SELIC rate in Brazil, while its loans are on fixed rates. The 18-month duration gap between assets and liabilities means SAN's funding cost started to drop, but it's only the start of the NIM expansion due. Given the loan mix skew towards households, lower rates will also support the LLPs outlook, 4Q was affected by single ticket, and increases appetite for new lending. We expect another c.225bps cuts by end of this year, for 9.5% in 2024e.

US asset quality guided 'stable'

Asset quality risk is subtle as things generally look good until they don't. However, Santander has done their homework, de-risking its book, shifting the mix from subprime to prime/near-prime clients which now account for c.58% of the book. 4Q was affected by an uptick in provisions, though mgmt. reiterated its guidance of c.200bps CoR in 2024e vs. consensus at c.220bps. Defaults will normalize but there's still scope for consensus upgrades here: we are c.6% below on LLPs in the US for 2024e.

ROTE guide implies 10-15% upside to 2024e consensus

TBVps was up +12% this year with CET1 reaching 12.3%, whilst yielding 11% between dividends and buybacks. Mgmt. guides for a 16% ROTE in 2024e, implying a net profit of €12-12.5bn, which would sit c.10-15% above consensus. BofA est is at €12.5bn for both 2024e and 2025e. Organic generation will support capital above >12% throughout the year and Basel headwinds are now targeted at a mere c.30bps from 2025e.

Buy Santander – PO up to €5.0, c.35% upside

Santander trades on a P/E 2024e of 4.5x – a level that's comparable to BMPS, amongst the lowest multiple in Europe which we view as mispriced. Its Brazilian unit (>25% of group earnings) has reached a key inflection point with SELIC cuts running at 50bps per BCB meeting. While its capital buffers would now be supported by the organic generation, the US auto lending market remains challenged short-term. We forecast loan losses to be more resilient than cons. especially as rates fall. We lift EPS by 2% post results and we increase our PO from €4.8 to €5.0. Reiterate Buy and top pick in Spain.

Estimates (Dec) (EUR)	2022A	2023A	2024E	2025E	2026E
Net Profit (EURm)	9,605	11,076	12,531	12,552	12,677
EPS (Adjusted Diluted)	0.54	0.65	0.78	0.83	0.90
Dividend / Share	0.12	0.17	0.21	0.22	0.24
Adjusted NAV PS	4.17	4.65	5.16	5.65	6.25
ADR EPS (Adjusted Diluted - US\$)	0.57	0.70	0.85	0.90	0.97
ADR Dividend / Shares (US\$)	0.12	0.18	0.23	0.24	0.26
Valuation (Dec)					
EPS Change (YoY)	14.4%	20.6%	20.1%	6.4%	8.0%
Price / NAV	0.90x	0.80x	0.72x	0.66x	0.60x
Price / Adj. EPS	6.9x	5.7x	4.8x	4.5x	4.2x
ROTE	13.0%	14.5%	15.5%	15.0%	14.6%
Net Yield	3.2%	4.6%	5.6%	6.0%	6.5%

>> 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 6. Price Objective Basis/Risk on page 6.

12653561

Timestamp: 31 January 2024 02:09PM EST

31 January 2024

Equity

Key Changes

(EUR)	Previous	Current
Price Obj.	4.80	5.00
2024E EPS	0.76	0.78
2026E EPS	NA	0.90
2024E DPS	0.20	0.21

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)	3.74 EUR / 3.96 USD
Price Objective	5.00 EUR / 5.42 USD
Date Established	31-Jan-2024 / 31-Jan-2024
Investment Opinion	B-1-7 / B-1-7
52-Week Range	2.94 EUR-3.97 EUR
Market Value (mn)	60,456 EUR
Shares Outstanding (mn)	16,184.1 / 16,184.1
Average Daily Value (mn)	127.23 USD
Free Float	97.1%
BofA Ticker / Exchange	BCDRF / SQC
BofA Ticker / Exchange	SAN / NYS
Bloomberg / Reuters	SAN SQ / SAN.MC
ROE (2024E)	12.9%
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".

NII = Net Interest Income
NIM = Net Interest Margin
CoR = Cost of Risk
CFO = Chief Financial Officer
CET1 = Common Equity Tier 1
FX = Foreign Exchange
DCB = Digital Consumer Bank
RWA = Risk-Weighted Assets
LLP = Loan Loss Provisions
SELIC = Brazilian Policy Rate
P/PPOP = Price to Pre-Provision Profit

iQprofileSM Santander

Key Income Statement Data (Dec)	2022A	2023A	2024E	2025E	2026E
(EUR Millions)	IFRS	IFRS	IFRS	IFRS	IFRS
Net Interest Income	38,619	43,261	44,733	45,307	46,299
Net Fee Income	11,790	12,057	12,244	12,651	13,142
Securities Gains / (Losses)	1,653	2,633	2,023	1,954	1,925
Other Income	57.0	(304)	907	1,056	1,068
Total Non-Interest Income	13,500	14,386	15,174	15,661	16,135
Total Operating Income	52,119	57,647	59,906	60,968	62,434
Operating Expenses	(23,903)	(25,425)	(25,325)	(25,750)	(26,395)
Pre-Provision Profit	28,216	32,222	34,582	35,218	36,038
Provisions Expense	(10,474)	(12,458)	(12,685)	(13,086)	(13,602)
Operating Profit	17,742	19,764	21,896	22,132	22,436
Non-Operating Items	(2,492)	(3,066)	(2,182)	(2,179)	(2,159)
Pre-Tax Income	15,250	16,698	19,714	19,953	20,277
Net Income to sh/holders	9,605	11,076	12,531	12,552	12,677
Adjusted Cash Earnings	9,122	10,582	12,037	12,058	12,183

Key Balance Sheet Data

Total Assets	1,734,659	1,797,062	1,789,446	1,807,523	1,830,054
Average Interest Earning Assets	1,481,332	1,576,793	1,606,347	1,611,622	1,631,963
Risk Weighted Assets	609,266	623,731	641,052	668,705	694,120
Total Gross Customer Loans	1,059,422	1,059,838	1,068,703	1,098,099	1,130,437
Total Customer Deposits	1,025,402	1,047,169	1,041,432	1,045,281	1,050,585
Tier 1 Capital	83,033	85,742	89,313	91,851	94,922
Tangible Equity	70,459	75,552	79,424	81,783	84,696
Common Shareholders' Equity	89,104	95,423	99,295	101,654	104,567

Key Metrics

Net Interest Margin	2.61%	2.74%	2.78%	2.81%	2.84%
Tier 1 Ratio	13.6%	13.7%	13.9%	13.7%	13.7%
Effective Tax Rate	29.4%	26.9%	29.7%	29.9%	29.9%
Loan / Assets Ratio	59.7%	57.7%	58.4%	59.4%	60.4%
Loan / Deposit Ratio	101%	99.0%	100%	103%	105%
Oper Leverage (Inc Growth - Cost Growth)	0.70%	4.24%	4.31%	0.09%	-0.10%
Gearing (Assets / Equity)	19.5x	18.8x	18.0x	17.8x	17.5x
Tangible Equity / Assets	4.06%	4.20%	4.44%	4.52%	4.63%
Tangible Equity / RWAs	11.6%	12.1%	12.4%	12.2%	12.2%

Business Performance

Revenue Growth	12.3%	10.6%	3.92%	1.77%	2.40%
Operating Expense Growth	11.6%	6.37%	-0.39%	1.68%	2.50%
Provisions Expense Growth	40.9%	18.9%	1.83%	3.15%	3.95%
Operating Revenue / Average Assets	1.07%	1.12%	1.22%	1.23%	1.23%
Operating Expenses / Average Assets	-1.44%	-1.44%	-1.41%	-1.43%	-1.45%
Pre-Provision ROA	1.69%	1.82%	1.93%	1.96%	1.98%
ROA	0.58%	0.63%	0.70%	0.70%	0.70%
Pre-Provision ROE	32.1%	34.9%	35.5%	35.1%	35.0%
ROE	10.9%	12.0%	12.9%	12.5%	12.3%
RoTE	13.0%	14.5%	15.5%	15.0%	14.6%
RoRWAs	1.54%	1.72%	1.90%	1.84%	1.79%
Dividend Payout Ratio	21.8%	26.3%	26.8%	26.9%	26.9%
Efficiency Ratio (Cost / Income Ratio)	45.9%	44.1%	42.3%	42.2%	42.3%

Quality of Earnings

Total Non-Interest Inc / Operating Inc	25.9%	25.0%	25.3%	25.7%	25.8%
Market-Related Revenue / Total Revenues	0%	0%	0%	0%	0%
Provisioning Burden as % of PPP	37.1%	38.7%	36.7%	37.2%	37.7%
NPLs plus Foreclosed Real Estate / Loans	3.35%	3.44%	3.46%	3.42%	3.38%
Loan Loss Reserves / NPLs	67.5%	65.9%	65.3%	66.4%	67.8%
Loan Loss Reserves / Total Loans	2.26%	2.27%	2.26%	2.27%	2.29%
Provisions Expense / Average Loans	1.04%	1.20%	1.22%	1.24%	1.25%

Company Sector

Banks-Multinational/Universal

Company Description

Santander is the largest Spanish bank by market cap with a wide international footprint accounting for >70% of group's assets. SAN is focused on c.10 core markets with 5 key regions accounting for c.90% of earnings: Brazil, Spain, Mexico, UK, US. The bank is also active in Portugal, Poland, Chile and other Latam, and has a Digital Consumer Bank unit accounting for c.15% of total earnings.

Investment Rationale

Santander is a 'show-me story' - its shares have underperformed the synthetic valuation of its subsidiaries. It trades at the lowest P/PPOP multiple in Europe and we believe its Brazilian unit (>25% of earnings) has inflected with SELIC cuts running at 50bps per BCB meeting. While its capital buffers would now be supported by the organic generation and although the US auto lending market remains challenged short-term, loan losses would be more resilient than cons. especially as rates fall. Buy.

Stock Data

Shares / ADR	1.00
Price to Book Value	0.6x

Quarterly Earnings Estimates

	2023	2024
Q1	0.15A	0.21E
Q2	0.16A	0.21E
Q3	0.17A	0.19E
Q4	0.17A	0.17E

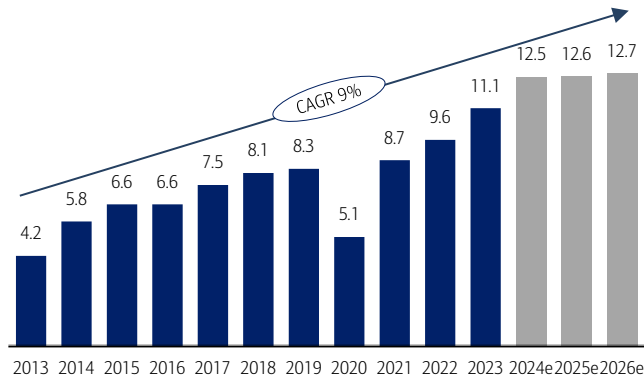
Key Changes

(US\$)	Previous	Current
Price Obj.	5.26	5.42
2024E EPS	0.83	0.85
2026E EPS	NA	0.97
2024E DPS	0.22	0.23

Story in 6 charts

Exhibit 1: Attributable net profit growing 9% CAGR 2013-26e

Evolution of attributable net profit (€bn)

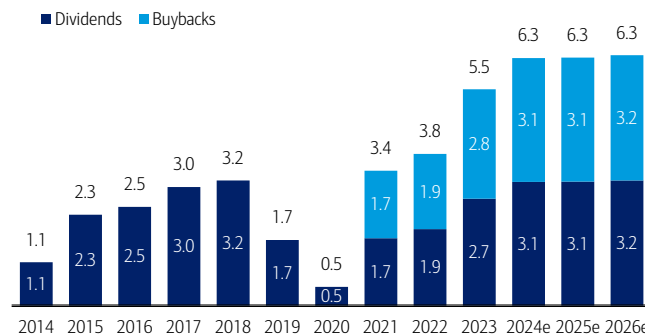


Source: BofA Global Research, company data

BofA GLOBAL RESEARCH

Exhibit 2: Capital distribution set to double vs. pre-Covid levels

Total capital distribution (dividends + buybacks, €bn)

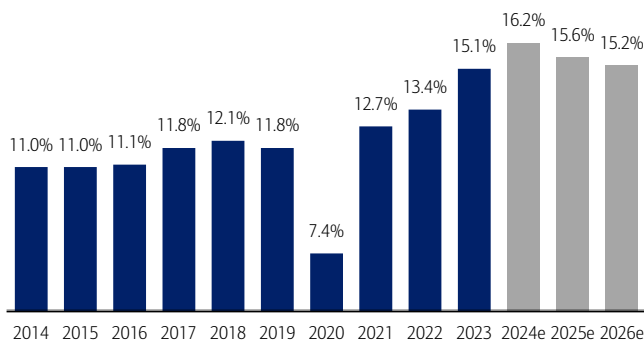


Source: BofA Global Research, company data. Notes: total capital distribution (dividends + buybacks) against each year's earnings

BofA GLOBAL RESEARCH

Exhibit 3: >15% normalized RoTE expected medium-term

Return on Tangible Equity to normalize above 15% vs. 12% pre-Covid

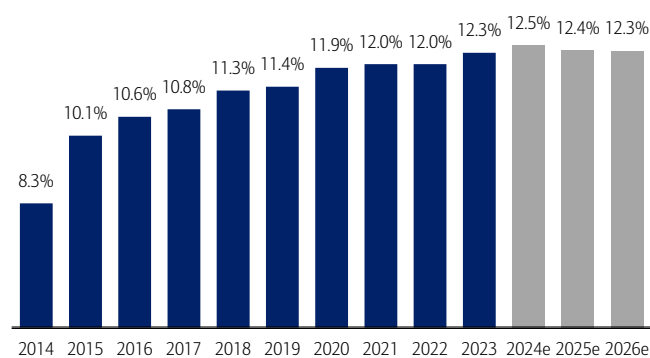


Source: BofA Global Research, company data. Notes: Return on Tangible Equity (RoTE) computed as attributable net profit divided by average tangible equity (equity minus intangibles)

BofA GLOBAL RESEARCH

Exhibit 4: Solid balance sheet with CET>12% vs. <10% historically

Common Equity Tier 1 target of >12%

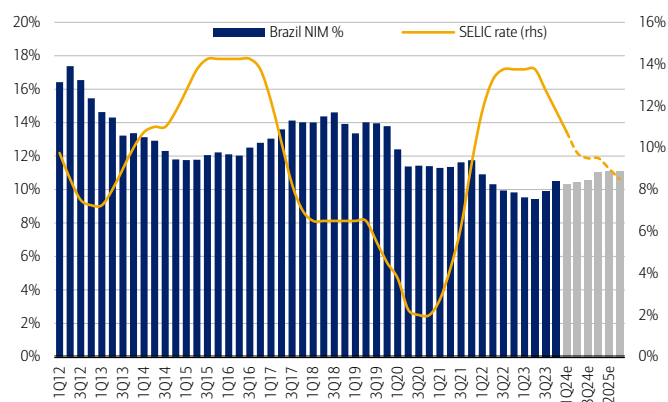


Source: BofA Global Research, company data. Notes: CET1 = Common Equity Tier 1

BofA GLOBAL RESEARCH

Exhibit 5: Brazil NIM to expand as SELIC cuts come through

Brazil net interest margin evolution vs. Selic rate path

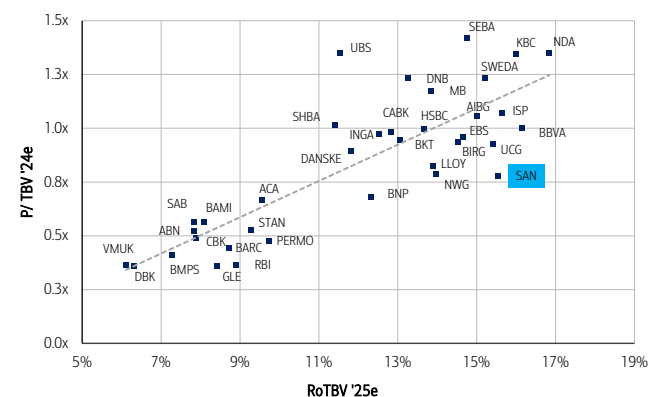


Source: BofA Global Research, Bloomberg. Notes: NIM = Net Interest Margin

BofA GLOBAL RESEARCH

Exhibit 6: SAN shares screening undervalued vs. peers

RoTE 2025e vs. P/TBV 2024e



Source: BofA Global Research

BofA GLOBAL RESEARCH

BofA ests new vs. old and consensus

Exhibit 7: BofA estimates new vs. old, 2024-26e

EPS '24e up by 2% on higher NII and lower costs, partially offset by lower fees and higher provisions

BofA estimates - New vs. Old 2024-26e

Santander € in millions	2024e			2025e			2026e		
	New	Old	Change	New	Old	Change	New	Old	Change
Net interest income	44,733	44,031	2%	45,307	45,110	0%	46,299	n.a.	n.a.
Fees & commission	12,244	12,720	-4%	12,651	13,293	-5%	13,142	n.a.	n.a.
Net financial results	2,023	2,068	-2%	1,954	2,005	-3%	1,925	n.a.	n.a.
Other revenues	907	940	-3%	1,056	1,076	-2%	1,068	n.a.	n.a.
Total revenues	59,906	59,759	0%	60,968	61,484	-1%	62,434	n.a.	n.a.
Personnel expenses	(13,672)	(13,587)	1%	(13,902)	(14,022)	-1%	(14,250)	n.a.	n.a.
Admin & D&A expenses	(11,653)	(12,298)	-5%	(11,849)	(12,691)	-7%	(12,145)	n.a.	n.a.
Total costs	(25,325)	(25,885)	-2%	(25,750)	(26,713)	-4%	(26,395)	n.a.	n.a.
Pre-provision profit	34,582	33,874	2%	35,218	34,771	1%	36,038	n.a.	n.a.
Loan loss provisions	(12,685)	(12,463)	2%	(13,086)	(12,863)	2%	(13,602)	n.a.	n.a.
Other non-operating income	(2,182)	(2,141)	2%	(2,179)	(2,145)	2%	(2,159)	n.a.	n.a.
Pre-tax profit	19,714	19,270	2%	19,953	19,763	1%	20,277	n.a.	n.a.
Tax	(5,847)	(5,737)	2%	(5,973)	(5,884)	2%	(6,068)	n.a.	n.a.
Minority interest and others	(1,337)	(1,289)	4%	(1,428)	(1,401)	2%	(1,533)	n.a.	n.a.
Underlying net profit	12,531	12,244	2%	12,552	12,478	1%	12,677	n.a.	n.a.
Attributable net profit	12,531	12,244	2%	12,552	12,478	1%	12,677	n.a.	n.a.
Net profit (BofA adjusted)	12,037	11,750	2%	12,058	11,984	1%	12,183	n.a.	n.a.
EPS adj. diluted	0.78	0.76	2%	0.83	0.83	1%	0.90	n.a.	n.a.
Avg. shares diluted	15,386	15,369	0%	14,482	14,484	0%	13,550	n.a.	n.a.

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

Exhibit 8: BofA estimates vs. consensus, 2024-26e

We remain c.10% ahead of consensus net profit over 2024-26e on better costs, partially offset by lower fees and trading

BofA vs. VA Consensus 2024-26e

Santander € in millions	2024e			2025e			2026e		
	BofA	Cons.	Diff.	BofA	Cons.	Diff.	BofA	Cons.	Diff.
Net interest income	44,733	44,752	0%	45,307	45,365	0%	46,299	45,869	1%
Fees & commission	12,244	12,883	-5%	12,651	13,421	-6%	13,142	13,893	-5%
Net financial results	2,023	2,259	-10%	1,954	2,282	-14%	1,925	2,368	-19%
Other revenues	907	120	n.m.	1,056	217	n.m.	1,068	304	n.m.
Total revenues	59,906	60,013	0%	60,968	61,284	-1%	62,434	62,432	0%
Personnel expenses	(13,672)	(14,017)	-2%	(13,902)	(14,436)	-4%	(14,250)	(14,667)	-3%
Admin & D&A expenses	(11,653)	(10,852)	7%	(11,849)	(12,774)	-7%	(12,145)	(13,193)	-8%
Total costs	(25,325)	(24,869)	2%	(25,750)	(27,210)	-5%	(26,395)	(27,860)	-5%
Pre-provision profit	34,582	35,144	-2%	35,218	34,075	3%	36,038	34,572	4%
Loan loss provisions	(12,685)	(12,797)	-1%	(13,086)	(12,961)	1%	(13,602)	(12,994)	5%
Other non-operating income	(2,182)	(4,304)	-49%	(2,179)	(2,566)	-15%	(2,159)	(2,353)	-8%
Pre-tax profit	19,714	18,044	9%	19,953	18,548	8%	20,277	19,226	5%
Tax	(5,847)	(5,594)	5%	(5,973)	(5,770)	4%	(6,068)	(6,001)	1%
Minority interest and others	(1,337)	(1,226)	9%	(1,428)	(1,327)	8%	(1,533)	(1,460)	5%
Underlying net profit (SAN def)	12,531	11,224	12%	12,552	11,451	10%	12,677	11,765	8%
Attributable net profit	12,531	11,243	11%	12,552	11,485	9%	12,677	11,869	7%
Adjusted net profit	12,037	10,700	12%	12,058	10,923	10%	12,183	11,281	8%
EPS adj. diluted	0.78	0.69	14%	0.83	0.73	14%	0.90	0.78	15%
Avg. shares diluted	15,386	15,535	-1%	14,482	14,927	-3%	13,550	14,423	-6%
CET1 ratio	12.50%	12.58%	-8bps	12.36%	12.56%	-20bps	12.35%	12.51%	-16bps

Source: BofA Global Research estimates, Consensus from Visible Alpha

BofA GLOBAL RESEARCH

Summary of financials

Exhibit 9: Santander – 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	38,619	43,261	44,733	45,307	46,299	Per Share Data					
% change	16%	12%	3%	1%	2%	EPS reported	0.57	0.68	0.81	0.87	0.94
Fees & Commissions	11,790	12,057	12,244	12,651	13,142	EPS Adjusted (for valuation)	0.54	0.65	0.78	0.83	0.90
% change	12%	2%	2%	3%	4%	% change	14%	21%	20%	6%	8%
Trading revenues	1,653	2,633	2,023	1,954	1,925	DPS	0.12	0.17	0.21	0.22	0.24
% change	6%	59%	-23%	-3%	-2%	% change	18%	45%	23%	7%	8%
Other revenues	57	(304)	907	1,056	1,068	Dividend yield	3.3%	4.6%	5.3%	5.3%	5.4%
% change	-94%	n.m.	n.m.	16%	1%	Payout ratio %	20%	24%	25%	25%	25%
Total Revenues	52,119	57,647	59,906	60,968	62,434	Buyback per share	0.12	0.17	0.21	0.22	0.24
% change	12%	11%	4%	2%	2%	Buyback yield	3.1%	3.7%	5.4%	5.3%	5.4%
Staff expenses	(12,547)	(13,726)	(13,672)	(13,902)	(14,250)	Buyback as % of earnings	20%	26%	25%	25%	25%
% change	14%	9%	0%	2%	3%	Total yield	6.4%	8.2%	10.7%	10.6%	10.7%
Other expense	(11,356)	(11,699)	(11,653)	(11,849)	(12,145)	BV per share	5.28	5.87	6.45	7.02	7.72
% change	9%	3%	0%	2%	3%	TBV per share	4.17	4.65	5.16	5.65	6.25
Total expenses	(23,903)	(25,425)	(25,325)	(25,750)	(26,395)	Avg shares outstanding	16,892	16,252	15,386	14,482	13,550
% change	12%	6%	0%	2%	3%	Valuation metrics					
Pre-provision profit	28,216	32,222	34,582	35,218	36,038	P/E	6.8x	5.6x	4.7x	4.4x	4.1x
% change	13%	14%	7%	2%	2%	P/BV	0.69x	0.62x	0.57x	0.52x	0.47x
Loan loss provisions	(10,474)	(12,458)	(12,685)	(13,086)	(13,602)	P/TBV	0.88x	0.79x	0.71x	0.65x	0.59x
Other provisions	(2,492)	(3,066)	(2,182)	(2,179)	(2,159)	Profitability					
Other non-recurrent pre-tax	--	--	0	--	0	ROE	10.4%	11.5%	12.4%	12.0%	11.8%
Profit before taxes	15,250	16,698	19,714	19,953	20,277	ROTE	13.0%	14.5%	15.5%	15.0%	14.6%
% change	0%	9%	18%	1%	2%	ROA	0.5%	0.6%	0.7%	0.7%	0.7%
Taxes	(4,486)	(4,489)	(5,847)	(5,973)	(6,068)	RoRWA	1.5%	1.7%	1.9%	1.8%	1.8%
% Tax rate	29%	27%	30%	30%	30%	NIM (NII / AIEA)	2.61%	2.74%	2.78%	2.81%	2.84%
Minorities, g'will + other	(1,159)	(1,133)	(1,337)	(1,428)	(1,533)	Total revenues / RWAs	9%	9%	9%	9%	9%
Underlying net profit	9,605	11,076	12,531	12,552	12,677	NII / Tot revenues	74%	75%	75%	74%	74%
One-off gains & provisions	--	--	--	--	--	Fees / Tot revenues	23%	21%	20%	21%	21%
Reported net profit	9,605	11,076	12,531	12,552	12,677	Efficiency					
BofA adjusted net profit	9,122	10,582	12,037	12,058	12,183	Cost / income	46%	44%	42%	42%	42%
						Cost / assets	1.4%	1.4%	1.4%	1.4%	1.5%
						Cost / RWAs	4.0%	4.1%	4.0%	3.9%	3.8%
						Balance sheet gearing					
						Loan / deposit	101%	99%	100%	103%	105%
						Bond securities / assets	11%	14%	13%	13%	13%
						Customer loans / assets	60%	58%	58%	59%	60%
						Customer deposits / funding	79%	77%	77%	77%	78%
						Bonds issued / funding	21%	23%	23%	23%	22%
						Asset quality					
						Gross NPEs	34,673	35,620	36,182	36,760	37,355
						% change	4%	3%	2%	2%	2%
						Gross NPE ratio	3.1%	3.2%	3.2%	3.2%	3.2%
						Texas ratio %	37%	36%	35%	35%	34%
						Coverage ratio - Stage 3	41%	41%	36%	37%	37%
						Cost of risk (bps)	104	120	122	124	125
						Capital					
						Core Tier 1 Capital (Basel III)	73,350	77,193	80,784	83,338	86,427
						RWAs (Basel III)	609,404	628,873	646,337	674,217	699,842
						% change	5%	3%	3%	4%	4%
						RWAs density	59%	60%	61%	62%	63%
						Leverage ratio %	5%	5%	6%	6%	6%
						Core Tier 1 fully loaded %	12.0%	12.3%	12.5%	12.4%	12.3%
						Buffer over SREP %	3.19%	3.36%	2.90%	2.76%	2.75%

Source: BofA Global Research

BofA GLOBAL RESEARCH

Price objective basis & risk

Santander (BCDRF / SAN)

We derive our PO of €5.00 (ADR USD 5.42) using a SoTP on 2024e estimates where we value each geography using a Gordon growth-implied P/CET1 multiple assuming 13% CET1 allocation to each region's RWAs. We assume 13% CoE for Spain, 13.5% for the UK and the US, 14% for Mexico and 15% for Brazil. We then add cumulative dividends over 2023-24 and capital excess/deficit to the steady-state CET1, and discount back to 1yr fwd from today.

Upside risks to our forecasts:

1. Geared to interest rates in Spain
2. Positive earnings revision deriving from NII and cost of risk, from more resilient US and better growth in Brazil
3. Better asset quality than market fears

Downside risks to our forecasts:

1. Selic rate in Brazil may not drop as fast as we forecast
2. Deposit beta may be higher than we forecast affecting funding mix
3. Higher default rates may affect cost of risk normalization and capital levels

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
NEUTRAL				
	ABN AMRO	ABMRF	ABN NA	Tarik El Mejjad
	Banco Bilbao Vizcaya Argentaria	BBVA	BBVA US	Antonio Reale

EMEA - Banks Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	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

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

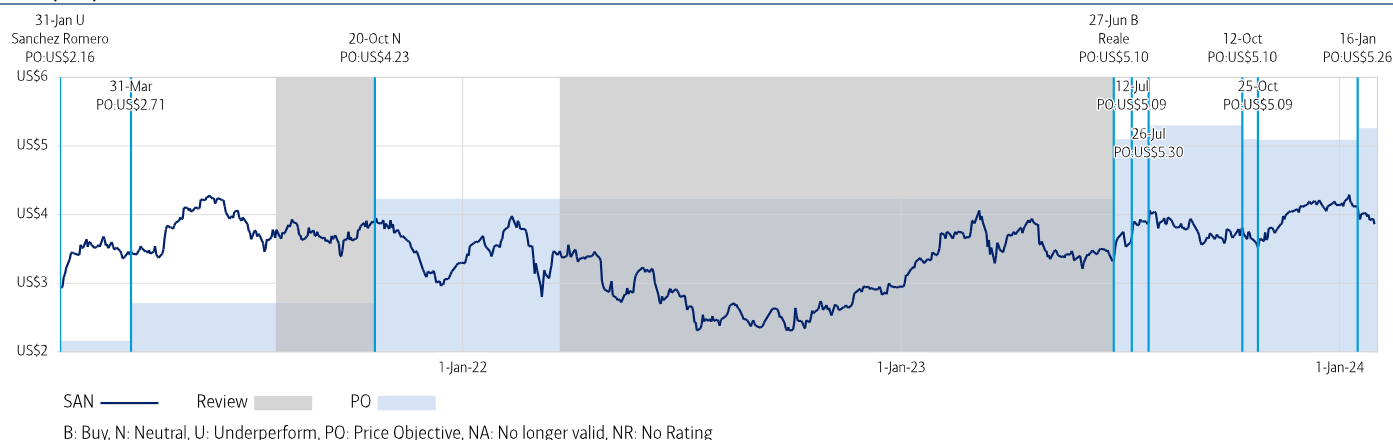
Important Disclosures

Santander (BCDRF) 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.

Santander (SAN) 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: Santander.

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

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

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

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: Santander.

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

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: Santander.

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: Santander.

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: Santander.

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.