

## ING Groep NV

## 4Q23 preview: mind the likely cautious revenue guidance

Reiterate Rating: NEUTRAL | PO: 16.40 EUR | Price: 13.23 EUR

## Results 1 February: all eyes on NII guidance and SBB

ING should deliver a good set of FY23 results. We estimate it should report €1.6bn net profit in 4Q23 (overall in line with cons), materially up YoY driven by 15% higher revenues, partly offset by 7% higher costs. The CoR should be 20% higher YoY but remain at 20bp below the TTC level with a FY23 CoR at 12bp. However, the focus will be on the updated NII and revenue guidance, which we believe could disappoint. ING is likely to reset consensus expectations on NII for 2024 and 2025, the main reason for our more cautious view on the shares, as explained in [Needs more than one string to its bow – downgrade to Neutral](#). We think increasing market expectations of an earlier SBB announcement is also a risk into 4Q results. We believe valuation at 0.85x P/TBV for a 12% ROTE in 2024E prices in the attractive capital return profile at 16% total yield pa.

## NII guidance could disappoint; low visibility on offsets

We believe the ECB rates outlook, which has clearly shifted from 'higher for longer' to 'lower faster', likely negatively impacting ING's replicating portfolio contribution to NII, is not factored in by consensus. (1) Higher lending growth from 2025E, (2) lower core deposit rates, although the trend still points to core savings rate hikes, and (3) improving asset spreads could offset some of the lower rates headwinds. However, visibility on these should remain poor as of the 4Q results release, making guidance uncertain. Unlike for the [French banks](#), F&C should provide little support, although likely growing >5% YoY, given the revenue mix is highly skewed to NII at 73% of the total.

## No SBB announcement with 4Q results

We believe the next SBB of €2.5bn will be announced at 1Q24 results in May even though the current one will most likely be fully implemented by FY23 results, creating a gap between the two. We also believe the idea that the bank would frontload some of the excess capital distribution to minimise the potential impact from the tax on SBB possibly from 2025 is overdone. We believe ING will stick to May/November announcement patterns (of €2-2.5bn SBB each) giving the market more clarity on the special distribution. We forecast the CET1 ratio at 14.7% in FY23. ING remains one of the highest and most sustainable capital-distribution stories in Europe, returning c.40% of market cap in 2024-26E.

Estimates (Dec) (EUR)	2021A	2022A	2023E	2024E	2025E
Net Profit (EURm)	3,516	2,429	7,096	5,670	5,699
EPS (Adjusted Diluted)	1.27	1.02	2.18	1.94	2.15
Dividend / Share	0.40	0.59	1.05	0.94	1.02
Adjusted NAV PS	14.0	13.5	14.6	15.6	17.0
ADR EPS (Adjusted Diluted - US\$)	1.50	1.07	2.39	2.12	2.36
ADR Dividend / Shares (US\$)	0.48	0.62	1.15	1.03	1.12
Valuation (Dec)					
P/E	10.5	13.0	6.1	6.8	6.2
EPS Change (YoY)	97.3%	-19.7%	114%	-11.1%	10.9%
Price / NAV	0.95x	0.98x	0.91x	0.85x	0.78x
Net Yield	3.05%	4.44%	7.93%	7.10%	7.71%

>> 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 9 to 12. Analyst Certification on page 6. Price Objective Basis/Risk on page 6.**

12643485

Timestamp: 09 January 2024 10:48AM EST

09 January 2024

## Equity

Tarik El Mejjad &gt;&gt;

Research Analyst

MLI (UK)

+44 20 7996 0014

tarik.el.mejjad@bofa.com

## Stock Data

Price (Common / ADR)	13.23 EUR / 14.55 USD
Price Objective	16.40 EUR / 18.00 USD
Date Established	4-Jan-2024 / 4-Jan-2024
Investment Opinion	B-2-7 / B-2-7
52-Week Range	9.59 EUR-13.83 EUR
Market Value (mn)	49,968 EUR
Shares Outstanding (mn)	3,775.8 / 3,775.8
Average Daily Value (mn)	168.70 USD
Free Float	100.0%
BofA Ticker / Exchange	INGVF / ENA
BofA Ticker / Exchange	ING / NYS
Bloomberg / Reuters	INGA NA / INGA.AS
ROE (2023E)	14.2%
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"](#).

## Abbreviations:

SBB: Share Buyback

ROTE: Return On Tangible Equity

CET1: Common Equity Tier 1

P/TBV: Price to Tangible Book Value

NII: Net Interest Income

CoR: Cost of Risk

TTC: Through-the-cycle

F&amp;C: Fees &amp; Commissions

# iQprofile<sup>SM</sup> ING Groep NV

Key Income Statement Data (Dec)	2021A	2022A	2023E	2024E	2025E
(EUR Millions)	IFRS	IFRS	IFRS	IFRS	IFRS
<b>Net Interest Income</b>	<b>13,615</b>	<b>13,756</b>	<b>16,038</b>	<b>15,796</b>	<b>16,132</b>
Net Fee Income	3,521	3,590	3,629	3,808	3,995
Securities Gains / (Losses)	138	187	138	149	149
Other Income	1,221	1,032	2,975	1,932	1,670
<b>Total Non-Interest Income</b>	<b>4,880</b>	<b>4,809</b>	<b>6,741</b>	<b>5,888</b>	<b>5,813</b>
<b>Total Operating Income</b>	<b>18,494</b>	<b>18,565</b>	<b>22,779</b>	<b>21,684</b>	<b>21,945</b>
Operating Expenses	(12,457)	(12,448)	(11,799)	(11,941)	(12,138)
<b>Pre-Provision Profit</b>	<b>6,038</b>	<b>6,117</b>	<b>10,980</b>	<b>9,743</b>	<b>9,807</b>
Provisions Expense	(516)	(1,861)	(757)	(1,514)	(1,549)
<b>Operating Profit</b>	<b>5,521</b>	<b>4,256</b>	<b>10,223</b>	<b>8,229</b>	<b>8,258</b>
Non-Operating Items	0	0	0	0	0
<b>Pre-Tax Income</b>	<b>5,521</b>	<b>4,256</b>	<b>10,223</b>	<b>8,229</b>	<b>8,258</b>
Net Income to sh/holders	3,516	2,429	7,096	5,670	5,699
<b>Adjusted Cash Earnings</b>	<b>4,780</b>	<b>3,678</b>	<b>7,314</b>	<b>5,853</b>	<b>5,855</b>

Key Balance Sheet Data	2021A	2022A	2023E	2024E	2025E
Total Assets	951,317	967,861	974,647	996,913	1,022,252
Average Interest Earning Assets	612,928	631,554	634,552	640,078	654,455
<b>Weighted Risk Assets</b>	<b>312,616</b>	<b>332,853</b>	<b>327,293</b>	<b>334,815</b>	<b>348,157</b>
Total Gross Customer Loans	627,550	635,557	633,547	646,609	662,300
Total Customer Deposits	657,831	686,341	715,040	727,254	741,250
<b>Tier 1 Capital</b>	<b>48,798</b>	<b>43,430</b>	<b>50,739</b>	<b>56,588</b>	<b>62,439</b>
Tangible Equity	52,763	48,807	48,948	47,281	46,215
<b>Common Shareholders' Equity</b>	<b>53,919</b>	<b>49,909</b>	<b>50,050</b>	<b>48,383</b>	<b>47,317</b>

Key Metrics	2021A	2022A	2023E	2024E	2025E
Net Interest Margin	1.49%	1.46%	1.68%	1.65%	1.65%
<b>Tier 1 Ratio</b>	<b>15.6%</b>	<b>13.0%</b>	<b>15.5%</b>	<b>16.9%</b>	<b>17.9%</b>
Core Tier 1 Ratio	13.8%	11.4%	13.8%	15.2%	16.3%
Basel 3 "fully phased in" Tier 1 Ratio	13.8%	11.4%	13.8%	15.2%	16.3%
Effective Tax Rate	34.0%	40.5%	28.6%	28.6%	28.5%
<b>Loan / Assets Ratio</b>	<b>66.0%</b>	<b>65.7%</b>	<b>65.0%</b>	<b>64.9%</b>	<b>64.8%</b>
Loan / Deposit Ratio	95.4%	92.6%	88.6%	88.9%	89.3%
Oper Leverage (Inc Growth - Cost Growth)	3.21%	0.45%	27.9%	-6.01%	-0.44%
Gearing (Assets / Equity)	17.6x	19.4x	19.5x	20.6x	21.6x
Tangible Equity / Assets	5.55%	5.04%	5.02%	4.74%	4.52%
Tangible Equity / WRAs	16.9%	14.7%	15.0%	14.1%	13.3%

Business Performance	2021A	2022A	2023E	2024E	2025E
Revenue Growth	4.84%	0.38%	22.7%	-4.81%	1.20%
Operating Expense Growth	1.62%	-0.06%	-5.21%	1.20%	1.65%
Provisions Expense Growth	-80.7%	260%	-59.3%	99.9%	2.31%
Operating Revenue / Average Assets	0.58%	0.44%	1.05%	0.83%	0.82%
Operating Expenses / Average Assets	-1.32%	-1.30%	-1.21%	-1.21%	-1.20%
<b>Pre-Provision ROA</b>	<b>0.64%</b>	<b>0.64%</b>	<b>1.13%</b>	<b>0.99%</b>	<b>0.97%</b>
ROA	0.37%	0.25%	0.73%	0.58%	0.56%
<b>Pre-Provision ROE</b>	<b>11.1%</b>	<b>11.8%</b>	<b>22.0%</b>	<b>19.8%</b>	<b>20.5%</b>
ROE	6.48%	4.68%	14.2%	11.5%	11.9%
RoTE	9.02%	7.24%	15.0%	12.2%	12.5%
RoWRAs	1.55%	1.14%	2.22%	1.77%	1.71%
Dividend Payout Ratio	32.4%	59.0%	50.1%	51.2%	50.1%
<b>Efficiency Ratio (Cost / Income Ratio)</b>	<b>60.5%</b>	<b>60.3%</b>	<b>50.8%</b>	<b>54.2%</b>	<b>54.6%</b>

Quality of Earnings	2021A	2022A	2023E	2024E	2025E
<b>Total Non-Interest Inc / Operating Inc</b>	<b>26.4%</b>	<b>25.9%</b>	<b>29.6%</b>	<b>27.2%</b>	<b>26.5%</b>
Market-Related Revenue / Total Revenues	19.0%	19.3%	15.9%	17.5%	18.2%
Provisioning Burden as % of PPP	8.55%	30.4%	6.90%	15.5%	15.8%
NPLs plus Foreclosed Real Estate / Loans	0%	0%	0%	0%	0%
<b>Loan Loss Reserves / NPLs</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>	<b>NA</b>
Loan Loss Reserves / Total Loans	0%	0%	0%	0%	0%
<b>Provisions Expense / Average Loans</b>	<b>0.08%</b>	<b>0.29%</b>	<b>0.12%</b>	<b>0.24%</b>	<b>0.24%</b>

## Company Sector

Banks-Multinational/Universal

## Company Description

ING Group is a global financial institution (Dutch origin), offering banking services. Following the sale of its remaining stakes in insurance operations, ING will become a pure bank with a European retail focus combined with a global Commercial Banking activity.

## Investment Rationale

We believe ING's story offers mostly an attractive capital return amongst the highest in Europe given its excess capital and low growth potential. However, the revenues' growth should be muted given its revenues mix highly reliant on NII in a decreasing rate environment.

## Stock Data

Shares / ADR	1.00
Price to Book Value	0.9x

## 4Q23 results preview (1 February)

**Table 1: ING Group 4Q23E - P&L (€mn)**

Q4 should show good YoY underlying revenue growth from NII and Other income. Cost inflation should continue. Below through-the-cycle CoR

	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023E	Q4 QoQ	Q4 YoY
Net interest income	3,545	4,012	4,061	4,028	3,937	-2.2%	11.1%
Fees & commissions income	888	896	912	909	908	0%	2%
Investment income	15	1	2	102	9	-92%	-42%
Realised gains and FV changes on invest.	0	15	0	0	10	2399%	3063%
Total investment income	15	15	1	103	18	-82%	21%
Total other income	420	644	785	802	744	-7%	77%
<b>Total income</b>	<b>4,868</b>	<b>5,567</b>	<b>5,759</b>	<b>5,842</b>	<b>5,608</b>	<b>-4%</b>	<b>15%</b>
Operating expenses	2,888	3,070	2,626	2,793	3,093	11%	7%
<b>Pre-provision profit</b>	<b>1,980</b>	<b>2,496</b>	<b>3,133</b>	<b>3,049</b>	<b>2,515</b>	<b>-18%</b>	<b>27%</b>
Loan loss provisions	269	152	98	183	324	76%	20%
<b>Pre-tax profit</b>	<b>1,711</b>	<b>2,344</b>	<b>3,035</b>	<b>2,866</b>	<b>2,191</b>	<b>-24%</b>	<b>28%</b>
Taxation	575	715	818	817	573	-30%	0%
Minority interests	48	37	62	67	39	-42%	-19%
<b>Underlying net profit</b>	<b>1,089</b>	<b>1,591</b>	<b>2,155</b>	<b>1,982</b>	<b>1,580</b>	<b>-20%</b>	<b>45%</b>
Net gains/losses on divestments	0	0	0	0	0		
Special items after tax	0	0	0	0	0		
<b>Adjusted Net profit</b>	<b>1,089</b>	<b>1,591</b>	<b>2,155</b>	<b>1,982</b>	<b>1,580</b>	<b>-20%</b>	<b>45%</b>

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

**Exhibit 1: ING Group 4Q23E – Pre-tax profit and Revenues by division (€mn)**

YoY earnings recovery derives from retail and wholesale banking

	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023E	Q4 QoQ	Q4 YoY
<b>Retail Banking - Pre-tax profit</b>	<b>1,140</b>	<b>1,379</b>	<b>1,911</b>	<b>1,898</b>	<b>1,409</b>	<b>-26%</b>	<b>24%</b>
o/w Retail Netherlands	442	682	753	766	535	-30%	21%
o/w Retail Belgium	181	3	277	208	164	-21%	-9%
o/w Retail Germany	258	397	493	491	436	-11%	69%
o/w Retail Challengers & Growth Markets	259	296	389	433	274	-37%	6%
<b>Wholesale Banking - Total income</b>	<b>1,507</b>	<b>1,791</b>	<b>1,846</b>	<b>1,825</b>	<b>1,815</b>	<b>-1%</b>	<b>20%</b>
o/w Lending	746	807	809	804	812	1%	9%
o/w Daily Banking & Trade Finance	443	529	561	527	524	-1%	18%
o/w Financial Markets	287	349	359	375	369	-2%	28%
o/w Treasury & Other	31	107	117	119	111	-7%	253%
<b>Wholesale Banking - Pre-tax profit</b>	<b>570</b>	<b>1,021</b>	<b>1,091</b>	<b>1,037</b>	<b>811</b>	<b>-22%</b>	<b>42%</b>
<b>Corporate Line - Pre-tax profit</b>	<b>1</b>	<b>-55</b>	<b>32</b>	<b>-70</b>	<b>-28</b>	<b>-59%</b>	<b>-2925%</b>
<b>Total - Pre-tax profit</b>	<b>1,711</b>	<b>2,344</b>	<b>3,035</b>	<b>2,866</b>	<b>2,191</b>	<b>-24%</b>	<b>28%</b>

Source: BofA Global Research estimates

BofA GLOBAL RESEARCH

## Valuation and FY forecast changes

### ING – reiterate Buy, €16.4 PO, 25% upside potential

Our 2024E SOTP gives a 12M discounted (at 12.8% CoE) PO of €16.4 (unchanged). The implied potential upside to our price objective is 25%.

Our SOTP values ING on a divisional basis, applying P/E multiples to our divisional earnings forecasts or P/BV multiples to our allocated equity forecast calculated as 12.5% of our forecast RWAs. We add the Group capital excess/deficit to the 12.5% 2024E Basel 4 CET1 ratio, which we value at 1x P/BV.

We keep our 2023-26E net profit forecast unchanged.

#### Exhibit 2: ING Group – SOTP valuation (2024E, €mn)

We maintain our PO unchanged at €16.4

	RWA	Allocated equity	Net profit	ROE	COE	Growth	Implied P/BV (x)	Implied P/E (x)	Value
<b>Retail banking</b>	<b>161,694</b>	<b>21,829</b>	<b>3,709</b>	<b>17%</b>	<b>11.7%</b>	<b>1.0%</b>	<b>1.6</b>	<b>9.5</b>	<b>35,282</b>
o/w Netherlands	51,401	6,939	1,558	22%	10.0%	0.5%	2.3	10.3	16,038
o/w Belgium	35,127	4,742	351	7%	10.0%	1.0%	0.7	9.6	3,371
o/w Germany	28,709	3,876	1,063	27%	10.0%	1.0%	2.9	10.7	11,384
o/w Other Challengers & Growth Markets	46,457	6,272	736	12%	16.0%	1.0%	0.7	6.1	4,489
<b>Wholesale Banking</b>	<b>155,443</b>	<b>20,985</b>	<b>2,264</b>	<b>11%</b>	<b>14.0%</b>	<b>1.0%</b>	<b>0.8</b>	<b>7.0</b>	<b>15,801</b>
<b>Corporate line</b>	<b>17,678</b>	<b>2,386</b>	<b>-124</b>					<b>9.5</b>	<b>-1,174</b>
<b>Total</b>	<b>334,815</b>	<b>45,200</b>	<b>5,849</b>	<b>13%</b>	<b>12.8%</b>		<b>1.1</b>	<b>8.5</b>	<b>49,910</b>

Number of shares (mn)

3,023

12m Price Objective(€)

16.4

Source: BofA Global Research estimates, company data

BofA GLOBAL RESEARCH

**Exhibit 3: ING Group financials summary**

ING model

Income Statement							Ratio Analysis						
	FY21	FY22	FY23E	FY24E	FY25E	FY26E		FY21	FY22	FY23E	FY24E	FY25E	FY26E
<b>Revenues</b>	<b>18,490</b>	<b>18,561</b>	<b>22,775</b>	<b>21,680</b>	<b>21,941</b>	<b>22,395</b>	<b>Per share data</b>						
% change	5%	0%	23%	-5%	1%	2%	EPS	1.24	0.99	2.10	1.83	2.04	2.26
<b>Expenses &amp; depreciation</b>	<b>-11,192</b>	<b>-11,199</b>	<b>-11,582</b>	<b>-11,758</b>	<b>-11,982</b>	<b>-12,192</b>	% change	95%	-20%	111%	-13%	11%	11%
% change	0%	0%	3%	2%	2%	2%	DPS	0.40	0.59	1.05	0.94	1.02	1.15
<b>Gross Operating Income</b>	<b>7,299</b>	<b>7,363</b>	<b>11,194</b>	<b>9,922</b>	<b>9,959</b>	<b>10,203</b>	% change	1%	46%	79%	-10%	9%	13%
% change	13%	1%	52%	-11%	0%	2%	Dividend yield	2.9%	4.5%	8.0%	7.1%	7.8%	8.7%
Provisions	-516	-1,861	-757	-1,514	-1,549	-1,667	Payout ratio	32%	59%	50%	51%	50%	51%
% change	-81%	260%	-59%	100%	2%	8%	Share Buyback per share	0.40	0.53	0.95	1.32	1.29	0.92
<b>Operating Income</b>	<b>6,782</b>	<b>5,502</b>	<b>10,436</b>	<b>8,408</b>	<b>8,410</b>	<b>8,536</b>	Share Buyback yield	3.2%	4.1%	7.2%	10.0%	9.8%	7.0%
% change	78%	-19%	90%	-19%	0%	1%	Share Buyback (% Net Income)	32%	53%	45%	72%	63%	41%
Associates	0	0	0	0	0	0	Total yield	6.1%	8.6%	15.2%	17.1%	17.6%	15.7%
Other non op. items	0	0	0	0	0	0	Book Value per share	14.28	13.79	14.93	16.07	17.45	18.93
<b>Pre-tax Income</b>	<b>6,782</b>	<b>5,502</b>	<b>10,436</b>	<b>8,408</b>	<b>8,410</b>	<b>8,536</b>	Tangible Book Value per share	13.98	13.48	14.59	15.69	17.04	18.48
% change	78%	-19%	90%	-19%	0%	1%	Nb of shares for EPS calculation (m)	3,838	3,697	3,489	3,191	2,875	2,631
Taxes	-1,877	-1,725	-2,922	-2,354	-2,355	-2,390	Nb of shares end of the period (m)	3,776	3,619	3,359	3,023	2,726	2,536
% change	51%	-8%	69%	-19%	0%	1%	<b>Valuation multiples</b>						
Minorities	-128	-102	-205	-205	-205	-205	P/E			6.3	7.2	6.5	5.8
<b>Net Income - Underlying</b>	<b>4,776</b>	<b>3,674</b>	<b>7,310</b>	<b>5,849</b>	<b>5,851</b>	<b>5,941</b>	P/BV			0.88	0.82	0.75	0.69
% change	92%	-23%	99%	-20%	0%	2%	P/TBV			0.90	0.84	0.77	0.71
Special items	0	0	0	0	0	0	<b>Profitability</b>						
<b>Net Income - Adjusted</b>	<b>4,776</b>	<b>3,674</b>	<b>7,310</b>	<b>5,849</b>	<b>5,851</b>	<b>5,941</b>	ROE	8.9%	7.4%	14.6%	12.0%	12.3%	12.4%
% change	92%	-23%	99%	-20%	0%	2%	ROTE	9.0%	7.5%	14.9%	12.3%	12.6%	12.7%
							ROA	0.51%	0.38%	0.75%	0.59%	0.58%	0.57%
							RoRWA	1.54%	1.14%	2.22%	1.77%	1.71%	1.69%
							Revenues/RWAs	6.0%	5.8%	6.9%	6.5%	6.4%	6.4%
							<b>Efficiency</b>						
							Cost/income	61%	60%	51%	54%	55%	54%
							Cost/assets	1.18%	1.16%	1.19%	1.18%	1.17%	1.16%
							<b>Asset quality</b>						
							Doubtful loans	11,476	11,268	11,381	11,494	11,609	11,726
							Gross Doubtful loans ratio	1.8%	1.8%	1.8%	1.8%	1.9%	1.9%
							Coverage ratio	46%	53%	53%	53%	53%	53%
							Cost of risk (% loans)	0.08%	0.29%	0.12%	0.23%	0.23%	0.25%
							<b>Liquidity &amp; Capital</b>						
							Loan/deposit	95%	93%	89%	89%	89%	89%
							Loan/assets	66%	66%	65%	65%	65%	65%
							CET 1 Capital (Basel 3)	49,760	47,961	48,017	46,450	45,473	45,879
							Tier 1 Capital (Basel 3)	48,889	43,521	50,831	56,680	62,530	68,472
							RWAs (Basel 3)	313,064	331,520	327,293	334,815	348,157	356,099
							% change	2%	6%	-1%	2%	4%	2%
							CET1 ratio (FL Basel 3)	15.9%	14.5%	14.7%	13.9%	13.1%	12.9%

Source: BofA Global Research estimates, company data

BofA GLOBAL RESEARCH

## Price objective basis & risk

### ING Groep NV (INGVF / ING)

Our price objective of EUR16.4 (US\$18 per ADR) is based on our standard sum-of-the-parts valuation model. Our sum-of-the-parts valuation methodology values the bank on a divisional basis, applying PNAV multiples to our divisional forecasts on the basis of an ROE/COE model  $[(ROE - G) / (COE - G)]$ . Rather than use management's allocation of capital, we apply our own internal method to allocate capital.  $ROE = \text{Expected earnings} / \text{allocated capital}$  assuming 13.5% CET1 ratio.  $COE = 12.5\%$ .  $G = 1\%$ .

Our valuation model arrives at the following target multiples: The multiples has changed reflecting our net profit forecast changes.

Retail at 1.6x allocated capital (ROE 17%, COE 11.7%, G 1%) or an implied 9.5x earnings  
Wholesale Banking at 0.8x allocated capital (ROE 11%, COE 14%, G 1%) or an implied 7.0x earnings. We value the capital surplus at 1x BV.

Downside risks to our PO are 1) material macro slowdown in ING's core markets (Netherlands, Belgium and Germany) driven by global geopolitical uncertainty, 2) significant deterioration in the lending book asset quality in Western Europe and in CEE and 3) faster drop in ECB rates.

Upside risks to our PO are 1) a more favourable dividend from 2024, 2) sustainable asset quality normalisation, 3) less rate cuts than priced by the market and 4) exceed 12% ROE target

## Analyst Certification

I, Tarik El Mejjad, 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
<b>BUY</b>				
	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
	Lloyds Banking Group	LLDTF	LLOY LN	Rohith Chandra-Rajan
	Lloyds Banking Group	LYG	LYG US	Rohith Chandra-Rajan
	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

## EMEA - Banks Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Santander	BCDRF	SAN SQ	Antonio Reale
	Societe Generale	SCGLF	GLE FP	Tarik El Mejjad
	Societe Generale	SCGLY	SCGLY US	Tarik El Mejjad
	Unicredit	UNCF	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
	Banco BPM	BNCZF	BAMI IM	Antonio Reale
	Bankinter	BKIMF	BKT SQ	Antonio Reale
	BBVA	BBVXF	BBVA SQ	Antonio Reale
	Commerzbank	CRZBF	CBK GY	Rohith Chandra-Rajan
	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
	Monte dei Paschi	BMDPF	BMPS IM	Antonio Reale
	StanChart	SCBFF	STAN LN	Alastair Ryan
	StanChart	XCHBF	2888 HK	Alastair Ryan
	Svenska Handelsbanke	SVNLY	SVNLY US	Tarik El Mejjad
	UBS	XUJHF	UBSG SW	Alastair Ryan
	UBS	UBS	UBS US	Alastair Ryan

## UNDERPERFORM

	Banco Sabadell	BNDSF	SAB SQ	Antonio Reale
	Barclays	BCLYF	BARC LN	Rohith Chandra-Rajan
	Barclays	BCS	BCS US	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
	Raiffeisen Bank International	RAIFF	RBI AV	Alastair Ryan
	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

## **iQmethod<sup>SM</sup> Measures Definitions**

### **Business Performance**

Return On Capital Employed

Return On Equity  
Operating Margin  
Earnings Growth  
Free Cash Flow

### **Numerator**

$\text{NOPAT} = (\text{EBIT} + \text{Interest Income}) \times (1 - \text{Tax Rate}) + \text{Goodwill Amortization}$   
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  
 $\text{EV} = \text{Current Share Price} \times \text{Current Shares} + \text{Minority Equity} + \text{Net Debt} + \text{Other LT Liabilities}$   
Enterprise Value

### **Denominator**

Diluted Earnings Per Share (Basis As Specified)  
Shareholders' Equity / Current Basic Shares  
Current Share Price  
 $\text{Market Cap} = \text{Current Share Price} \times \text{Current Basic Shares}$   
Sales

Basic EBIT + Depreciation + Amortization

*iQmethod<sup>SM</sup>* 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<sup>®</sup>* 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.

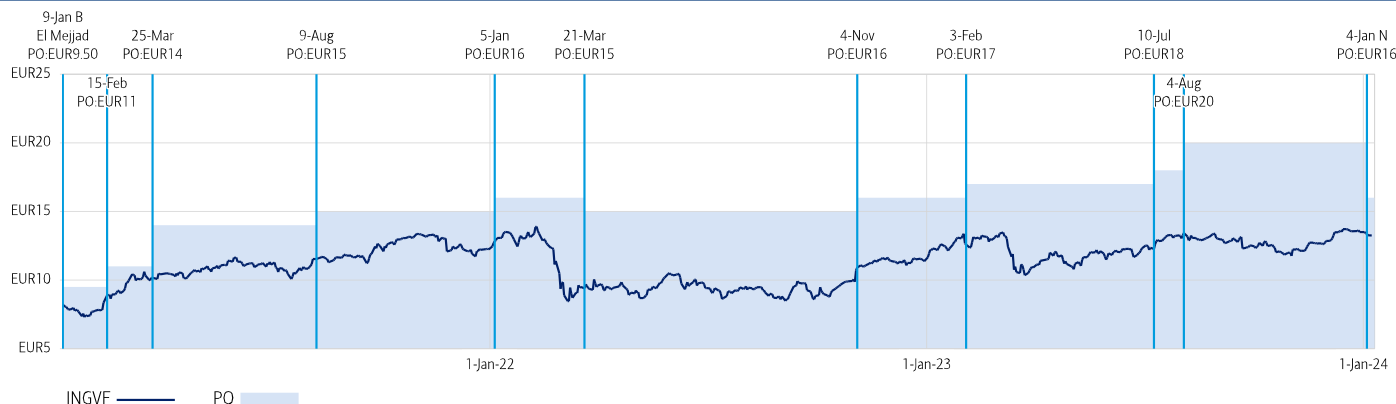
*iQprofile<sup>SM</sup>*, *iQmethod<sup>SM</sup>* are service marks of Bank of America Corporation. *iQdatabase<sup>®</sup>* is a registered service mark of Bank of America Corporation.



# Disclosures

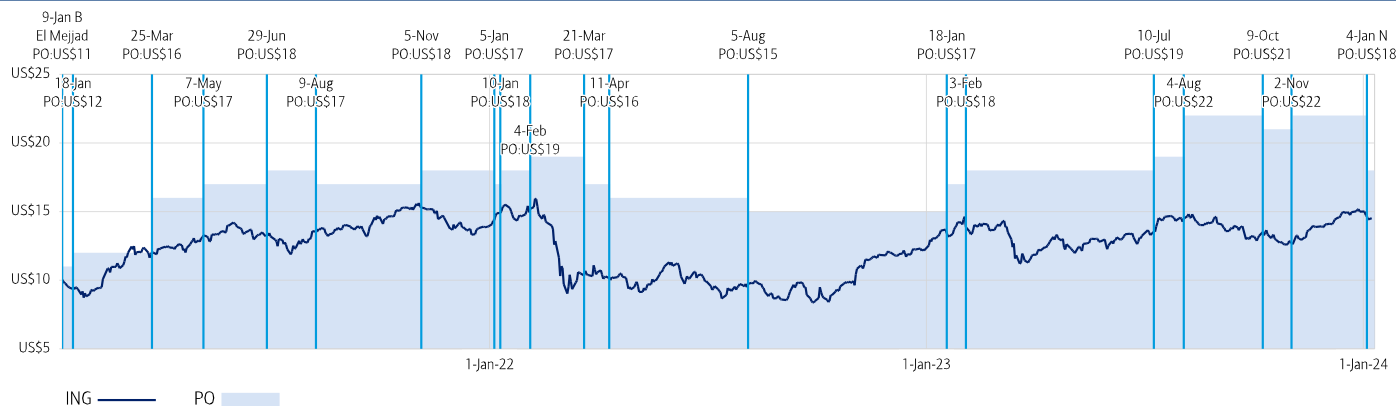
## Important Disclosures

### ING (INGVF) 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.

### ING (ING) 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 <sup>R1</sup>	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 <sup>R1</sup>	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%

<sup>R1</sup> 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 <sup>R2</sup>
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

<sup>R2</sup> 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: ING.

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

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

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

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: ING.

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

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: ING.

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: ING.

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: ING.

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](http://www.bofam.com/BofASEdisclaimer); BofA Europe (Milan): Bank of America Europe Designated Activity Company, Milan Branch, regulated by the Bank of Italy, the European Central Bank (ECB) and the Central Bank of Ireland (CBI); BofA Europe (Frankfurt): Bank of America Europe Designated Activity Company, Frankfurt Branch regulated by BaFin, the ECB and the CBI; BofA Europe (Madrid): Bank of America Europe Designated Activity Company, Sucursal en España, regulated by the Bank of Spain, the ECB and the CBI; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited, regulated by the Australian Securities and Investments Commission; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited, regulated by the Hong Kong Securities and Futures Commission (HKSCF); Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd, regulated by the Monetary Authority of Singapore (MAS); Merrill Lynch (Canada): Merrill Lynch Canada Inc, regulated by the Canadian Investment Regulatory Organization; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa, regulated by the Comisión Nacional Bancaria y de Valores; Merrill Lynch (Argentina): Merrill Lynch Argentina SA, regulated by Comisión Nacional de Valores; BofAS Japan: BofA Securities Japan Co., Ltd., regulated by the Financial Services Agency; Merrill Lynch (Seoul): Merrill Lynch International, LLC Seoul Branch, regulated by the Financial Supervisory Service; Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd., regulated by the Securities and Futures Bureau; BofAS India: BofA Securities India Limited, regulated by the Securities and Exchange Board of India (SEBI); Merrill Lynch (Israel): Merrill Lynch Israel Limited, regulated by Israel Securities Authority; Merrill Lynch (DIFC): Merrill Lynch International (DIFC Branch), regulated by the Dubai Financial Services Authority (DFSA); Merrill Lynch (Brazil): Merrill Lynch S.A. Corretora de Títulos e Valores Mobiliários, regulated by Comissão de Valores Mobiliários; Merrill Lynch KSA Company: Merrill Lynch Kingdom of Saudi Arabia Company, regulated by the Capital Market Authority.

This information: has been approved for publication and is distributed in the United Kingdom (UK) to professional clients and eligible counterparties (as each is defined in the rules of the FCA and the PRA) by MLI (UK), which is authorized by the PRA and regulated by the FCA and the PRA - details about the extent of our regulation by the FCA and PRA are available from us on request; has been approved for publication and is distributed in the European Economic Area (EEA) by BofASE (France), which is authorized by the ACPR and regulated by the ACPR and the AMF; has been considered and distributed in Japan by BofAS Japan, a registered securities dealer under the Financial Instruments and Exchange Act in Japan, or its permitted affiliates; is issued and

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

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

#### General Investment Related Disclosures:

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

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

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

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

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

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

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

BofA Securities, through business units other than BofA Global Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented herein. Such ideas or recommendations may reflect different time frames, assumptions, views and analytical methods of the persons who prepared them, and BofA Securities is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this information. In the event that the recipient received this information pursuant to a contract between the recipient and BofAS for the provision of research services for a separate fee, and in connection therewith BofAS may be deemed to be acting as an investment adviser, such status relates, if at all, solely to the person with whom BofAS has contracted directly and does not extend beyond the delivery of this report (unless otherwise agreed specifically in writing by BofAS). If such recipient uses the services of BofAS in connection with the sale or purchase of a security referred to herein, BofAS may act as principal for its own account or as agent for another person. BofAS is and continues to act solely as a broker-dealer in connection with the execution of any transactions, including transactions in any securities referred to herein.

#### BofA ESGMeter Methodology:

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

ESGMeter is independent of the BofA Global Research fundamental equity analyst's investment rating, volatility risk rating, income rating or price objective for that company.

#### Copyright and General Information:

Copyright 2024 Bank of America Corporation. All rights reserved. iQDatabase® is a registered service mark of Bank of America Corporation. This information is prepared for the use of BofA Securities clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of BofA Securities. BofA Global Research information is distributed simultaneously to internal and client websites and other portals by BofA Securities and is not publicly-available material. Any unauthorized use or disclosure is prohibited. Receipt and review of this information constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained herein (including any investment recommendations, estimates or price targets) without first obtaining express permission from an authorized officer of BofA Securities. Materials prepared by BofA Global Research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of BofA Securities, including investment banking personnel. BofA Securities has established information barriers between BofA Global Research and certain business groups. As a result, BofA Securities does not disclose certain client relationships with, or compensation received from, such issuers. To the extent this material discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this material. BofA Global Research personnel's knowledge of legal proceedings in which any BofA Securities entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving issuers mentioned in this material is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of BofA Securities in

connection with the legal proceedings or matters relevant to such proceedings.

This information has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of 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.