

Western Alliance Bancorp

Strategic repositioning continues

Reiterate Rating: BUY | PO: 82.00 USD | Price: 67.34 USD

4Q23 in-line, NII growth offset by higher expenses

Western Alliance (WAL) shares outperformed peers approximately ~150bp after reporting 4Q23 adj. EPS of \$1.91 vs BofAe/cons. \$1.91/1.88 estimates. Beat vs consensus was driven by lower credit provisioning costs. Management's FY24 guidance calls for: NII+5-10% YoY (4 cuts 2H24); expenses +0-2% (vs 4Q23 annzd. \$1.74bn); deposits +\$8bn YoY (+15% vs \$55.3bn YE23); loans +\$2bn (+4% vs \$50.3bn). Forecast FY24e EPS of \$7.70 vs ~\$8 implied by mid-point of management's guide; revise FY25e to \$9.00. We note significant capital build in '25/'26, creating room for EPS upside driven by excess capital deployment.

Liquidity prioritized over growth

Loan growth expected to be back-half weighted as management. plans to increase its HQLA portfolio ~\$3bn 1H24. L/D ratio expected to decline into the mid-80s (consistent with prior messaging) vs ~90% 4Q23. Deposit growth to be driven by new verticals (settlement services, business escrow, consumer digital), as well as from a renewed emphasis C&I as the bank seeks to transform itself away from a business model reliant on large, chunky deposits. While unlikely near-term, we do see potential for WAL to engage in bank M&A over the medium term as it seeks to diversify its deposit base.

Rate-cuts, loan growth to boost NII 2H24

Focus on building liquidity will temper NIM 1H24, as an expected benefit to loan yields (12/31/23 spot rate of 7.03% vs 6.65% 4Q23 avg) will be offset by the deployment of liquidity into lower-yielding (~5%) securities. The upper end of FY24 NII guide (+5-10% YoY) dependent on management's ability to deploy excess liquidity into loan growth beyond the +\$2bn target. Forecast 4Q24 NIM 3.63% vs 3.65% 4Q23. We note that rate-cuts should temper expense growth tied to the interest expense on ECR deposits (\$19.9bn 4Q23).

ROTCE outlook, growth potential = favorable risk/reward

Stock trades at a discount to fundamentals at 1.3x YE24e TBV vs our forecast for 16%+ROTCE FY24/25 (includes ~100bp of excess capital vs 11% CET1 target). On P/E stock trading at 8.7x/7.5x '24/'25e EPS vs. 11.0x/9.8x peer median. While management. has done a commendable job navigating the mini banking crisis over the last year, we do expect the stock to trade at a discount to peers until investors gain comfort that the repositioned business model can deliver superior growth/returns on a sustainable basis. Reiterate Buy rating. Revise PO to \$82, now based on 12.5x 2024 P/E and 1.3x YE24 TBV (from 10.5x/1.1x previously) driven by improved EPS visibility.

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	9.70	8.13	7.70	9.00	9.50
GAAP EPS	9.70	8.70	7.70	9.00	9.50
EPS Change (YoY)	9.9%	-16.2%	-5.3%	16.9%	5.6%
Consensus EPS (Bloomberg)			7.97	9.30	NA
DPS	1.42	1.45	1.48	1.48	1.48
Valuation (Dec)					
P/E	6.9x	8.3x	8.7x	7.5x	7.1x
GAAP P/E	6.9x	7.7x	8.7x	7.5x	7.1x
Dividend Yield	2.1%	2.2%	2.2%	2.2%	2.2%

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Refer to important disclosures on page 8 to 10. Analyst Certification on page 5. Price
Objective Basis/Risk on page 5.

26 January 2024

Equity

Key Changes		
(US\$)	Previous	Current
Price Obj.	70.00	82.00
2024E Rev (m)	2,968.7	2,979.0
2025E Rev (m)	3,314.2	3,205.5
2026E Rev (m)	3,617.7	3,432.3
2024E EPS	7.68	7.70
2025E EPS	8.95	9.00
2026E EPS	10.00	9.50

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Stock Data

Price	67.34 USD
Price Objective	82.00 USD
Date Established	26-Jan-2024
Investment Opinion	C-1-7
52-Week Range	7.46 USD -81.17 USD
Mrkt Val / Shares Out (mn)	7,374 USD / 109.5
Free Float	94.7%
Average Daily Value	93.43 USD
BofA Ticker / Exchange	WAL / NYS
Bloomberg / Reuters	WAL US / WAL.N
ROE (2024E)	13.5%
ESGMeter™	Medium

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

iQprofile[™] Western Alliance Bancorp

Income Statement Data (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Interest Income	2,250	2,374	2,522	2,724	2,926
% change	42.2%	5.5%	6.2%	8.0%	7.4%
Net Fee Income	318	478	457	481	507
Securities Gains / (Losses)	7	(26)	0	0	0
Total Operating Income	2,575	2,826	2,979	3,205	3,432
Operating Expenses	(1,156)	(1,610)	(1,745)	(1,788)	(1,919)
% change	39.2%	39.2%	8.4%	2.5%	7.3%
Provisions Expense	(68)	(63)	(100)	(100)	(125)
% change	NA	-8.1%	59.7%	0%	25.0%
Operating Pre-Tax Income	1,350	1,154	1,134	1,317	1,388
Operating Net Income to Comm S/Hold.	1,045	857	843	985	1,040
GAAP Net Income	1,058	870	856	998	1,053
Balance Sheet Data (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Total Assets	67,734	70,862	77,436	80,535	85,110
Average Interest Earning Assets	61,560	65,365	69,123	74,392	78,229
Total Gross Customer Loans	53,046	51,699	53,095	55,682	58,625
% change	18.6%	-2.5%	2.7%	4.9%	5.3%
Total Customer Deposits	53,644	55,333	63,127	67,425	72,122
% change	12.7%	3.1%	14.1%	6.8%	7.0%
Tangible Equity	4,678	5,180	5,973	6,798	7,677
Common Shareholders' Equity	5,061	5,555	6,348	7,171	8,049
Key Metrics (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Interest Margin	3.66%	3.63%	3.65%	3.66%	3.74%
Effective Tax Rate	19.2%	21.5%	21.3%	21.4%	21.4%
Loan / Deposit Ratio	98.9%	93.4%	84.1%	82.6%	81.3%
Tangible Common Equity / Assets	6.9%	7.3%	7.7%	8.4%	9.0%
ROA	1.7%	1.3%	1.1%	1.3%	1.3%
ROE	20.3%	15.7%	13.5%	14.4%	14.1%
RoTE	23.2%	17.9%	15.1%	15.4%	14.4%
Dividend Payout Ratio	14.6%	18.4%	19.2%	16.4%	15.6%
Efficiency Ratio (Cost / Income Ratio)	45.0%	56.4%	58.6%	55.8%	55.9%
Quality of Earnings (Dec)					
(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Total Non-Interest Inc / Operating Inc	12.6%	16.0%	15.3%	15.0%	14.8%
NPLs plus Foreclosed Real Estate / Loans	0.2%	0.5%	0.5%	0.5%	0.5%
Loan Loss Reserves / NPLs	364.35%	123.33%	126.07%	120.07%	122.25%
Loan Loss Reserves / Total Loans	0.58%	0.65%	0.68%	0.65%	0.66%

Company Sector

Banks-US Regionals

Company Description

Western Alliance Bancorporation is the bank holding company for Western Alliance Bank and provides various banking products and related services primarily in Arizona, California, and Nevada via approx. 35 branch locations, as well as loan production offices. Western Alliance Bancorporation was founded in 1994 and is headquartered in Phoenix, Arizona.

Investment Rationale

We believe that current valuation does not reflect the resiliency of the business model. Superior profitability coming into the current crisis, healthy capital levels and strong execution from the mgmt. team should allow the bank to navigate the highly uncertain operating backdrop. Improved visibility on steady-state EPS power should drive a re-rating higher in the stock.

Stock Data	
Average Daily Volume	1,387,424

Quarterly Earnings Estimates

	2023	2024
Q1	2.30A	1.62E
Q2	1.96A	1.75E
Q3	1.97A	2.01E
Q4	1.91A	2.32E

Exhibit 1: WAL variance table New vs old EPS estimates, assumptions

(\$ Millions, Except as Noted) KEY FORECAST VARIABLES:	3Q23	Actual 4Q23E	Estimate 4Q23E	Variance	New 2024E	Old 2024E	Variance	New 2025E	Old 2025E	Variance
EOP Loans	51,031	51,699	50,439	2.50%	53,095	53,089	0.01%	55,682	55,761	-0.14%
Average Loans	53,124	51,479	50,826	1.28%	52,013	51,370	1.25%	54,389	54,425	-0.07%
Average Earning Assets	65,649		66,025	-1.06%	69,124	69,509	-0.55%	74,392	75,621	-1.63%
Net Interest Margin (%)	3.42%	3.65%	3.65%	0bp	3.65%	3.61%	0bp	3.66%	3.75%	0bp
Net Interest Income (FTE)	559.0	600.8	607.9	-1.16%	2,522.1	2507.04	0.60%	2,724.1	2833.27	-3.85%
Loan Loss Provision	21.8	9.3	20.0	-53.50%	100.0	100.00	0.00%	100.0	100.00	0.00%
Noninterest Revenues	119.9	126.3	118.7	6.40%	456.9	461.65		481.4	480.91	0.10%
Securities Transactions	(13.6)	0.0	0.0	NA	0.0	0.00	NA	0.0	0.00	NA
Tot. Revenue	678.9	727.1	726.6	0.07%	2,979.0	2968.69	0.35%	3,205.5	3314.18	-3.28%
Staff Expenses	145.6	134.6	137.6	-2.21%	559.0	570.72	-2.05%	615.0	673.45	-8.69%
Total Expenses	388.1	434.9	428.5		1,745.0	1752.78		1,788.5	1921.25	-6.91%
Pre-Tax Income (FTE)	269.0	282.9	278.0	1.76%	1,133.9	1115.91	1.62%	1,317.0	1292.93	1.86%
FTE Tax Rate (%)	17.1	23.1	21.0	2pp	22.0	21.00		22.0	21.00	1pp
Net Income	215.7	210.5	212.6	-0.99%	856.1	853.44	0.31%	998.1	992.50	0.56%
Available For Common	212.5	207.3	209.5	-2mn	843.3	840.71	3mn	985.3	979.77	6mn
Op. EARNINGS PER SHARE (F.D.)	\$1.96	\$1.91	\$1.91	0%	\$7.70	\$7.68	0%	\$9.00	\$8.95	1%
	\$1.96	\$1.33	\$1.47	- 9 %	\$7.70	\$7.68	0%	\$9.00	\$8.95	1%
GAAP EPS (F.D.)	\$1.90	\$1.55	\$1.47	-9%	\$7.70	\$7.00	U%0	\$9.00	\$0.55	170
Book Value Per Share	\$49.22	\$50.73	\$51.13	(\$0.40)	\$57.97	\$58.3	(\$0.37)	\$65.49	\$65.8	(\$0.32)
Tangible Book Value Per Share	\$43.09	\$44.61	\$44.98	(\$0.37)	\$51.86	\$52.2	(\$0.35)	\$59.38	\$59.7	(\$0.30)
Dividend Per Share	\$0.36	\$0.37	\$0.37	\$0.00	\$1.48	\$1.5		\$1.48	\$1.5	\$0.00
Average Fully-Diluted Shares	108.3	108.7	109.50	-1mn	109.5	109.50		109.5	109.50	0mn
Therage rany shared shares		100.7	103.50		103.5	103.50	0.11.11	103.3	103.50	G
CAPITAL RATIOS:	7.0	7.0	7.00	Ol- ·-	0.2	0.1	Ch	0.0	0.0	1.41
EOP Common Equity/Assets (%)	7.9	7.8	7.92	-8bp	8.2	8.1	6bp	8.9	8.8	14bp
Tang. Common Equity/Assets (%)	7.0	7.0	7.04	-8bp	7.4	7.3	5bp	8.1	8.0	13bp
Tangible Common Equity/RWA (%)	8.9	9.3	9.42	-10bp	9.9	9.8		10.9	10.7	18bp
Tier 1 Common/RWA (%)	10.1	10.8	10.82	-2bp	11.0	10.9		12.0	11.7	24bp
Tier 1/RWA (%)	10.8	11.5	11.54	-4bp	11.7	11.5	14bp	12.6	12.4	25bp
PROFITABILITY RATIOS:										
Return On Assets (%)	1.2	1.2	1.19	0bp	1.2	1.1	1bp	1.3	1.2	3bp
Return On Common Equity (%)	16.1	15.0	15.07	-3bp	13.5	13.4		13.9	13.8	15bp
Return On Tangible Common Equity (%)	18.5		17.38	-4bp	16.3	16.1	20bp	16.4	16.2	19bp
Operating Expenses/Revenues (%)	58.3	59.8	58.98	83bp	58.6	59.0	-46bp	55.8	58.0	-218bp
BALANCE SHEET ITEMS:										
EOP Total Deposits	51,041		54,982		63,127	64,214		67,425	68,420	-1.45%
AVG Total Deposits	49,387	55,895	54,634	2.31%	59,863	59,468	0.66%	65,276	66,317	-1.57%
EOP Total Assets	68,160	70,862	70,675	0.26%	77,436	78,498	-1.35%	80,535	82,260	-2.10%
EOP Equity	5,685	5,850	5,894	-0.74%	6,643	6,683	-0.61%	7,466	7,501	-0.47%
EOP Preferred Equity	295	295	295	0.00%	295	295	0.00%	295	295	0.00%
EOP Common Equity	5,390	5,555	5,599	-0.78%	6,348	6,388	-0.64%	7,171	7,206	-0.49%
EOP Tangible Common Equity	4,718	4,885	4,926	-0.82%	5,678	5,716	-0.66%	6,503	6,535	-0.49%
CREDIT QUALITY INDICATORS:										
Net Charge-Offs	7.4	8.5	10.0	-15.00%	75.0	75.0	0.00%	100.0	100.0	0.00%
% Average Loans	0.1	0.1	0.1	-1bp	0.1	0.1	0bp	0.2	0.2	0bp
Nonperforming Assets	267.0	281.0	257.0		295.1	269.9		309.6	283.1	9.35%
% EOP Loans + OREO	20			0bp			Obp	I	.==.	0bp
Nonperforming Loans	256.0	273.0	248.9	9.70%	286.9	261.5		301.3	274.6	9.70%
% EOP Loans (excl. OREO)	0.5		0.5		0.5	0.5		0.5	0.5	5.7 6 76 5bp
Loan Loss Reserve	321	337	337.4		362	362.4		362	362.4	-0.19%
% EOP Loans	0.6		0.7	-2bp	0.7	0.7	Obp	0.6	0.6	Obp
% Nonperforming Loans	125.4		135.6		126.1	138.6		120.1	132.0	

Source: BofA Global Research estimates, Company filings

BofA GLOBAL RESEARCH



Acronyms

NII: Net interest income

TBV: Tangible book value

HQLA: High quality liquid assets

L/D ratio: Loan to deposit ratio

NIM: Net interest margin

C&I: Commercial and Industrial

ECR: Earnings credit rate

ROTCE: Return on tangible common equity



Price objective basis & risk

Western Alliance Bancorp (WAL)

Our \$82 PO is based on 50%/50% weighting between our 2024e EPS and 2024e TBV. We assign 12.5x/1.3x multiples respectively, below the bank's 5 year pre pandemic median of 14.8x/2.8x given heightened uncertainty surrounding EPS/ROTCE outlooks, owing to the macro backdrop.

Downside risks to our PO are: worse than expected credit losses, greater than expected net interest margin compression, and slower than expected economic growth. Upside risks to our PO are: credit resilience, better than expected margin performance, and stronger than expected economic growth.

Analyst Certification

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

North America - Banks Coverage Cluster

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



North America - Banks Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Ally Financial	ALLY	ALLY US	Brandon Berman
	Annaly Capital Management	NLY	NLY US	Derek Hewett
	Apollo Commercial Real Estate Finance	ARI	ARI US	Derek Hewett
	Associated Banc-Corp	ASB	ASB US	Brandon Berman
	Bain Capital Specialty Finance, Inc.	BCSF	BCSF US	Derek Hewett
	Bank of Nova Scotia	YBNS	BNS CN	Ebrahim H. Poonawala
	Bank of Nova Scotia	BNS	BNS US	Ebrahim H. Poonawala
	Blackstone Secured Lending Fund	BXSL	BXSL US	Derek Hewett
	BrightSpire Capital Inc.	BRSP	BRSP US	Derek Hewett
	Canadian Imperial Bank of Commerce	CM	CM US	Ebrahim H. Poonawala
	Canadian Imperial Bank of Commerce	YCM	CM CN	Ebrahim H. Poonawala
	Citizens Financial Group	CFG	CFG US	Ebrahim H. Poonawala
	Comerica Incorporated	CMA	CMA US	Brandon Berman
	Commerce Bancshares Inc.	CBSH	CBSH US	Brandon Berman
	Goldman Sachs BDC, Inc.	GSBD	GSBD US	Derek Hewett
	Golub Capital BDC, Inc.	GBDC	GBDC US	Derek Hewett
	Huntington Bancshares Inc.	HBAN	HBAN US	Ebrahim H. Poonawala
	Ladder Capital Corp	LADR	LADR US	Derek Hewett
	PennyMac Mortgage Investment Trust	PMT	PMT US	Derek Hewett
	Popular Inc	BPOP	BPOP US	Brandon Berman
	Regions Financial	RF	RF US	Ebrahim H. Poonawala
	The PNC Financial Services Group, Inc.	PNC	PNC US	Ebrahim H. Poonawala
	Toronto-Dominion Bank	TP	TD US	Fbrahim H. Poonawala
	Toronto-Dominion Bank	YTD	TD CN	Fbrahim H. Poonawala
	TPG RE Finance Trust, Inc.	TRTX	TRTX US	Derek Hewett
INDERPERFORM				
MDERI ERI ORM	Bank of Hawaii Corp.	ВОН	BOH US	Brandon Berman
	First Hawaiian Inc.	FHB	FHB US	Brandon Berman
	Guild Holdings Company	GHLD	GHLD US	Derek Hewett
	Invesco Mortgage Capital, Inc.	IVR	IVR US	Derek Hewett
	loanDepot Inc	LDI	LDI US	Derek Hewett
	MidCap Financial Investment Co	MFIC	MFIC US	Derek Hewett
	Prosperity Bancshares Inc	PB	PB US	Fbrahim H. Poonawala
	State Street Corporation	STT	STT US	Fbrahim H. Poonawala
	Texas Capital Bancshares Inc.	TCBI	TCBI US	Brandon Berman
	Zions Bancorp	ZION	ZION US	Brandon Berman

*IQ*method[™] Measures Definitions

Numerator

Business Performance

Return On Capital Employed	NOPAT = (EBIT + Interest Income) × (1 - Tax Rate) + Goodwill Amortization	Total Assets — Current Liabilities + ST Debt + Accumulated Goodwill
		Amortization
Return On Equity	Net Income	Shareholders' Equity
Operating Margin	Operating Profit	Sales
Earnings Growth	Expected 5 Year CAGR From Latest Actual	N/A
Free Cash Flow	Cash Flow From Operations — Total Capex	N/A
Quality of Earnings	Numerator	Denominator
Cash Realization Ratio	Cash Flow From Operations	Net Income
Asset Replacement Ratio	Capex	Depreciation
Tax Rate	Tax Charge	Pre-Tax Income
Net Debt-To-Equity Ratio	Net Debt = Total Debt — Cash & Equivalents	Total Equity
Interest Cover	EBIT	Interest Expense
Valuation Toolkit	Numerator	Denominator
Price / Earnings Ratio	Current Share Price	Diluted Earnings Per Share (Basis As Specified)
Price / Book Value	Current Share Price	Shareholders' Equity / Current Basic Shares
Dividend Yield	Annualised Declared Cash Dividend	Current Share Price
Free Cash Flow Yield	Cash Flow From Operations – Total Capex	Market Cap = Current Share Price × Current Basic Shares
Enterprise Value / Sales	EV = Current Share Price × Current Shares + Minority Equity + Net Debt + Other LT Liabilities	Sales
EV / EBITDA		Pacic EDIT + Depreciation + Americation
EV / EDITUA	Enterprise Value	Basic EBIT + Depreciation + Amortization

Denominator



Valuation Toolkit Numerator Denominator

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

Matarbase* 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.

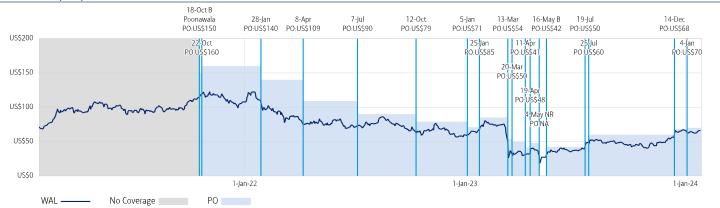
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Western Alliance (WAL) Price Chart



B: Buy, N: Neutral, U: Underperform, PO: Price Objective, NA: No longer valid, NR: No Rating

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%

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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%
Indernerform	N/A	> 20%

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