

Nubank

4Q23 below BofAe as investments take a toll on expenses

Reiterate Rating: NEUTRAL | PO: 11.70 USD | Price: 10.36 USD

Net income growth slows on higher expenses

4Q23 net income of US\$361mn (23.5% ROE) rose 19% QoQ but was 16% below our estimates on higher operating expenses and effective tax rate. NI growth decelerated from 35% QoQ in 3Q and 53% in 2Q. Expenses rose on increased investments in branding and higher cloud expenses related to increased activity, while the efficiency ratio deteriorated for the first time in 8 quarters. However, there were several positives in the quarter, such as solid expansion of deposits, higher loan origination in Brazil, stable asset quality, and higher capital ratio.

Adjusting estimates and PO

Mgmt. expects gross margin to remain flattish in '24 as NU is in a "planting rather than harvesting phase", meaning that investments in Mexico and Colombia, as well as into new products in Brazil should offset expected risk-adjusted margin expansion related to credit growth. We reduce our '24/'25 net income estimates by 4/10% to \$1.9/\$2.9bn. We increase our PO to \$11.7 (from \$10) as we apply a target P/E multiple of 20x to our '25E EPS estimate, which is in line with other high growth financial companies. We change our methodology from a DDM-based valuation to a P/E based valuation, as we think a target multiple is more appropriate considering the company's high growth phase. We reiterate Neutral on balanced risk-reward.

(please refer to page 3 for key operating highlights)

Estimates (Dec) (US\$)	2022A	2023A	2024E	2025E	2026E
EPS	0.04	0.24	0.41	0.62	0.85
GAAP EPS	(0.08)	0.21	0.38	0.58	0.81
EPS Change (YoY)	NA	500.0%	70.8%	51.2%	37.1%
Consensus EPS (Bloomberg)			0.40	0.55	0.60
DPS	0	0	0	0	0
Valuation (Dec)					
P/E	259.0x	43.2x	25.3x	16.7x	12.2x
GAAP P/E	NM	49.3x	27.3x	17.9x	12.8x

* For full definitions of *IQmethod*SM measures, see page 6.

22 February 2024

Equity

Key Changes

(US\$)	Previous	Current
Price Obj.	10.00	11.70

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Stock Data

Price	10.36 USD
Price Objective	11.70 USD
Date Established	22-Feb-2024
Investment Opinion	C-2-9
52-Week Range	4.13 USD -10.50 USD
Mrkt Val / Shares Out (mn)	51,688 USD / 4,989.2
Free Float	77.5%
Average Daily Value	386.48 USD
BofA Ticker / Exchange	NU / NYS
Bloomberg / Reuters	NU US / NU.N
ROE (2024E)	0%
ESGMeter TM	NLA

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](#)".

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Refer to important disclosures on page 7 to 9. Analyst Certification on page 5. Price Objective Basis/Risk on page 5.

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Timestamp: 22 February 2024 11:46PM EST

iQprofileSM Nubank

Income Statement Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Interest Income	2,007	4,403	6,818	10,402	14,641
% change	195.5%	119.3%	54.9%	52.6%	40.8%
Net Fee Income	1,061	1,373	1,694	2,047	2,373
Securities Gains / (Losses)	NA	NA	NA	NA	NA
Total Operating Income	3,068	5,776	8,512	12,449	17,014
Operating Expenses	(1,975)	(1,946)	(2,709)	(3,606)	(4,615)
% change	118.7%	-1.4%	39.2%	33.1%	28.0%
Provisions Expense	(1,405)	(2,285)	(3,097)	(4,687)	(6,633)
% change	192.3%	62.7%	35.5%	51.3%	41.5%
Operating Pre-Tax Income	(312)	1,545	2,706	4,156	5,766
Operating Net Income to Comm S/Hold.	(367)	1,036	1,894	2,909	4,036
GAAP Net Income	(367)	1,036	1,894	2,909	4,036

Balance Sheet Data (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Total Assets	29,917	43,345	52,318	66,838	83,288
Average Interest Earning Assets	23,542	31,289	41,329	57,336	72,794
Total Gross Customer Loans	1,673	3,202	4,871	7,271	11,424
% change	40.1%	91.4%	52.1%	49.3%	57.1%
Total Customer Deposits	15,809	23,691	28,925	35,750	45,634
% change	63.5%	49.9%	22.1%	23.6%	27.6%
Tangible Equity	NA	NA	NA	NA	NA
Common Shareholders' Equity	4,891	6,406	8,481	10,880	14,818

Key Metrics (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Net Interest Margin	8.53%	14.07%	16.50%	18.14%	20.11%
Effective Tax Rate	NM	32.9%	30.0%	30.0%	30.0%
Loan / Deposit Ratio	10.6%	13.5%	16.8%	20.3%	25.0%
Tangible Common Equity / Assets	0%	0%	0%	0%	0%
ROA	NA	NA	NA	NA	NA
ROE	NA	NA	NA	NA	NA
RoTE	NA	NA	NA	NA	NA
Dividend Payout Ratio	NA	0%	0%	0%	0%
Efficiency Ratio (Cost / Income Ratio)	64.4%	33.7%	31.8%	29.0%	27.1%
Billings Growth	NA	NA	NA	NA	NA
Share / Issue Repurchase	NA	NA	NA	NA	NA
Cost of Dividends Paid	0	0	0	0	0
Change in Debt	NA	NA	NA	NA	NA

Quality of Earnings (Dec)

(US\$ Millions)	2022A	2023A	2024E	2025E	2026E
Total Non-Interest Inc / Operating Inc	34.6%	23.8%	19.9%	16.4%	13.9%
Loan Loss Reserves / Total Loans	0%	0%	0%	0%	0%

Company Sector

Financial Services-Consumer/Commercial

Company Description

Nubank (NU) is a rapidly growing Brazilian neobank founded in 2013 initially focusing on customer-friendly credit cards. The company has grown to more than 70mn active clients and offers a wide variety of financial products like personal loans, checking accounts, and brokerage accounts. It is also expanding geographically into Mexico and Colombia.

Investment Rationale

We believe Nu offers a strong value proposition compared to neobank peers and incumbent players and has ample runway to grow across LatAm due to its exceptionally low customer acquisition costs. However, current valuation leaves limited upside.

Stock Data

Average Daily Volume

37,304,900

Quarterly Earnings Estimates

	2023	2024
Q1	0.04A	0.09E
Q2	0.05A	0.09E
Q3	0.07A	0.11E
Q4	0.08A	0.12E

Key highlights

Clients and engagement (+): total client base of 94mn increased 4.8mn and the activity ratio remained stable at 83%, the highest level of the series. In Mexico the client base reached 5.2mn (+900k QoQ) and in Colombia 800k (flattish QoQ).

Loans and NIM (=): loan book growth accelerated to 62% YoY from 59% in 3Q23 reflecting an acceleration in personal loan growth (+88% YoY from 62%), while credit card expanded 56% YoY (vs 58% in 3Q). NIM declined 20bp QoQ negatively impacted by higher funding costs (especially on higher deposit remuneration in Mexico).

Asset quality (+): NPL over 90 days remained stable at 6.1%, while the cost of risk fell 250bp QoQ, to 14.1% of loans, partially supported by higher recoveries. The renegotiated book reached 9.6% of loans from 7.4% in 4Q22 and 3.3% in 4Q21. The coverage ratio remained relatively stable at 225%.

Fee income (=): grew 28% YoY reflecting card TPV growth of 37% (same pace from 3Q23). Fees accounted for 22% of the top line, well below 31% in 4Q22, evidencing challenges to diversify revenue sources. Net ARPAC (including NII) reached \$7.6, higher than \$7.2 in 3Q23 and \$5.6 in 4Q22.

Expenses (-): came 12% above BofAe impacted by marketing expenses dedicated to grow high-income segment in Brazil and related to Mexico's expansion. Opex increased 30% YoY (excluding one-off effects in 4Q22), well below revenue expansion (+75%). All in, the efficiency ratio deteriorated to 34% from 33% in 3Q23.

Capital (+): CET1 increased to 11.4% from 9.1% in 3Q23, with an increase of 16% of credit risk RWA offset by 34% reduction in operational risk RWA.

Exhibit 1: Nubank - 4Q23 review

Net income came 16% below BofAe

	4Q22	3Q23	4Q23E	4Q23A	YoY	QoQ	vs. BofAe
Net interest income	688	1,195	1,409	1,346	96%	13%	-4%
Net fees	306	347	396	390	28%	12%	-1%
Operating revenue	994	1,542	1,804	1,736	75%	13%	-4%
Operating expenses	803	503	519	583	-27%	16%	12%
Provision charges	415	628	685	592	43%	-6%	-13%
Earnings before taxes	(224)	412	601	560	nmf	36%	-7%
Taxes	76	109	169	199	162%	83%	17%
Net income - GAAP	(300)	303	431	361	nmf	19%	-16%
EPS - GAAP	(0.06)	0.06	0.09	0.07	nmf	19%	-16%
EPS - non-GAAP	0.02	0.07	0.10	0.08	246%	11%	-17%
ROE - GAAP	-24.9%	21.0%	28.0%	23.5%	nmf	12%	-16%
ROE - non-GAAP	9.2%	24.7%	31.1%	25.8%	179%	4%	-17%
Total assets	29,917	35,693	39,781	43,345	45%	21%	9%
Total loans, gross	11,243	15,407	17,643	18,202	62%	18%	3%
Deposits	15,809	19,117	21,422	23,691	50%	24%	11%
Shareholders equity	4,891	5,889	6,441	6,406	31%	9%	-1%
Clients (mn)	74.6	89.1	94.1	93.9	26%	5%	0%
Net adds (mn)	4.2	5.4	5.0	4.8	14%	-11%	-4%
Active clients (mn)	61.2	73.8	77.4	78.0	27%	6%	1%
% of total	82.0%	82.8%	82.3%	83.1%	103 bp	24 bp	77 bp
TPV (R\$bn)	23.8	29.0	32.7	32.6	37%	12%	0%
Take rate (card)	1.09%	1.04%	1.04%	1.05%	-4 bp	1 bp	1 bp
NIM	10.5%	15.0%	16.2%	14.8%	423 bp	-23 bp	-143 bp
NPLs/Gross loans	5.2%	6.1%	6.3%	6.1%	90 bp	0 bp	-20 bp
Cost of Risk	15.9%	16.6%	16.6%	14.1%	-175 bp	-250 bp	-247 bp
Efficiency ratio	81%	33%	29%	34%	-4719 bp	97 bp	484 bp
Effective tax rate	-34%	26%	28%	36%	6935 bp	918 bp	734 bp
Monthly ARPAC	8.2	10.0	10.6	10.6	30%	6%	0%
Monthly CTS	0.9	0.9	0.9	0.9	2%	4%	5%

Source: Company reports and BofA Global Research estimates.

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Exhibit 2: Nubank – new vs old estimates

We reduced our '24 net income estimate by 4% and '25 by 10%

USD mn	2023	2024E			2025E		
	Actual	Old	New	% Chg	Old	New	% Chg
Net interest income	4,403	7,047	6,818	-3%	10,536	10,402	-1%
Net fees	1,373	1,797	1,694	-6%	2,246	2,047	-9%
Operating revenue	5,776	8,844	8,512	-4%	12,782	12,449	-3%
Operating expenses	1,946	2,566	2,709	6%	3,443	3,606	5%
Op. inc. bfr provs and taxes	3,830	6,277	5,803	-8%	9,339	8,843	-5%
Provision charges	2,285	3,466	3,097	-11%	4,742	4,687	-1%
Earnings before taxes	1,545	2,811	2,706	-4%	4,597	4,156	-10%
Taxes	509	843	812	-4%	1,379	1,247	-10%
Net income - GAAP	1,036	1,968	1,894	-4%	3,218	2,909	-10%
Net income - non-GAAP	1,202	2,164	2,053	-5%	3,417	3,088	-10%
EPS - GAAP	0.21	0.39	0.38	-3%	0.64	0.58	-9%
EPS - non-GAAP	0.24	0.43	0.41	-4%	0.68	0.62	-9%
ROE - GAAP	18.3%	25.9%	25.4%	-47 bps	31.9%	30.1%	-185 bps
ROE - non-GAAP	21.3%	28.5%	27.6%	-92 bps	33.9%	31.9%	-197 bps
Total assets	43,345	54,368	52,318	-4%	66,599	66,838	0%
Total loans, gross	18,202	27,352	27,689	1%	39,978	40,470	1%
Deposits	23,691	27,232	28,925	6%	34,241	35,750	4%
Shareholders equity	6,406	8,742	8,481	-3%	11,428	10,880	-5%
Clients (mn)	93.9	112.7	111.1	-1%	129.1	125.1	-3%
Active clients (mn)	78.0	91.3	90.0	-1%	103.3	100.1	-3%
% of total	83.1%	81.0%	81.0%	0 bps	80.0%	80.0%	0 bps
Take rate (card)	1.1%	1.0%	1.1%	1 bps	1.0%	1.1%	1 bps
NIM	14.1%	16.8%	16.5%	-34 bps	18.4%	18.1%	-28 bps
Efficiency ratio	34%	29%	32%	281 bps	27%	29%	203 bps
Effective tax rate	33%	30%	30%	0 bps	30%	30%	0 bps
Cost of Risk	14.9%	15.5%	13.6%	-196 bps	13.9%	13.5%	-33 bps
NPLs/Gross loans	6.1%	6.0%	5.8%	-20 bps	5.6%	5.4%	-20 bps
LLR/NPLs	235%	247%	232%	-1473 bps	255%	243%	-1176 bps
Monthly ARPAC	9.6	11.1	11.2	1%	13.5	13.7	2%
Monthly CTS	0.8	1.0	1.0	7%	1.2	1.3	9%

Source: BofA Global Research estimates, company report

BofA GLOBAL RESEARCH

Price objective basis & risk

Nubank (NU)

We calculate our price objective of \$11.7 based on a target P/E multiple of 20x our '25 EPS estimate, which is in line with other high growth financial companies.

Downside risks to our price objective are: margin pressure from increased investments in new geographies and products as well as adverse changes to the regulatory environment. Upside risks are faster growth into new geographies, products and segments.

Analyst Certification

We, Mario Pierry, Antonio Ruetter and Flavio Yoshida, hereby certify that the views each of us has expressed in this research report accurately reflect each of our respective personal views about the subject securities and issuers. We also certify that no part of our respective compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

Latin America - Financials Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	B3	XIMAF	B3SA3 BZ	Mario Pierry
	B3	BOLSY	BOLSY US	Mario Pierry
	Bajio	BBAJF	BBAJIO MM	Ernesto Gabilondo
	Banco do Brasil	XBBAF	BBAS3 BZ	Mario Pierry
	Banco do Brasil	BDORY	BDORY US	Mario Pierry
	Banco Santander Chile	BSAC	BSAC US	Ernesto Gabilondo
	Banco Santander Chile	XLDTF	BSAN CI	Ernesto Gabilondo
	Banorte	GBOOF	GFNORTEO MM	Mario Pierry
	Banorte	GBOOY	GBOOY US	Mario Pierry
	Bci	BZCIF	BCI CI	Ernesto Gabilondo
	BTG Pactual	XNXCF	BPAC11 BZ	Flavio Yoshida
	Caixa Seguridade	XDXUF	CXSE3 BZ	Mario Pierry
	Credicorp Ltd	BAP	BAP US	Ernesto Gabilondo
	Gentera	CMPRF	GENTERA* MM	Ernesto Gabilondo
	Grupo BMV	BOMXF	BOLSAA MM	Ernesto Gabilondo
	IFS	IFS	IFS US	Ernesto Gabilondo
	Inter	XBZIF	INBR32 BZ	Mario Pierry
	Inter	INTR	INTR US	Mario Pierry
	Itau Unibanco	ITUBF	ITUB4 BZ	Mario Pierry
	Itau Unibanco	ITUB	ITUB US	Mario Pierry
	PagSeguro Digital Ltd	PAGS	PAGS US	Mario Pierry
	Regional	RGNLF	RA MM	Ernesto Gabilondo
	StoneCo	STNE	STNE US	Mario Pierry
	XP Inc.	XP	XP US	Mario Pierry
NEUTRAL				
	ABC Brasil	XBABF	ABCB4 BZ	Flavio Yoshida
	Banco Pan	XQSFF	BPAN4 BZ	Flavio Yoshida
	Banrisul	XGRBF	BRSR6 BZ	Flavio Yoshida
	BB Seguridade	XBDPF	BBSE3 BZ	Mario Pierry
	BB Seguridade	BBSEY	BBSEY US	Mario Pierry
	Bradesco	BRDPF	BBDC4 BZ	Mario Pierry
	Bradesco -A	BBD	BBD US	Mario Pierry
	Nubank	NU	NU US	Mario Pierry
	Porto Seguro	PSGUF	PSSA3 BZ	Mario Pierry
	Santander Brasil	XCBDF	SANB11 BZ	Mario Pierry
	Santander Brasil	BSBR	BSBR US	Mario Pierry
UNDERPERFORM				
	Banco Chile-ADR	BCH	BCH US	Ernesto Gabilondo
	Banco de Chile	XHNDF	CHILE CI	Ernesto Gabilondo
	Banco Macro	BMA	BMA US	Ernesto Gabilondo



Latin America - Financials Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
	Banco Macro	BCVMF	BMA AR	Ernesto Gabilondo
	GFinbur	GPFOF	GFINBURO MM	Ernesto Gabilondo
	Grupo Financiero Galicia	GGAL	GGAL US	Ernesto Gabilondo
	Grupo Financiero Galicia	GGABF	GGAL AR	Ernesto Gabilondo
	Qualitas	QUCOF	Q* MM	Ernesto Gabilondo
	Supervielle	SUPV	SUPV US	Ernesto Gabilondo
	Supervielle	XAZFF	SUPV AR	Ernesto Gabilondo
RSTR				
	Bancolombia	CIB	CIB US	Ernesto Gabilondo
	Bancolombia	XAFFF	PFBCOLO CB	Ernesto Gabilondo
	Cielo	CIOXF	CIEL3 BZ	Mario Pierry
	Cielo	CIOXY	CIOXY US	Mario Pierry

iQmethodSM Measures Definitions**Business Performance**

Return On Capital Employed

Return On Equity
Operating Margin
Earnings Growth
Free Cash Flow

Quality of Earnings

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

Valuation Toolkit

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

EV / EBITDA

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

Numerator

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

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

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

Denominator

Net Income
Depreciation
Pre-Tax Income
Total Equity
Interest Expense

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.

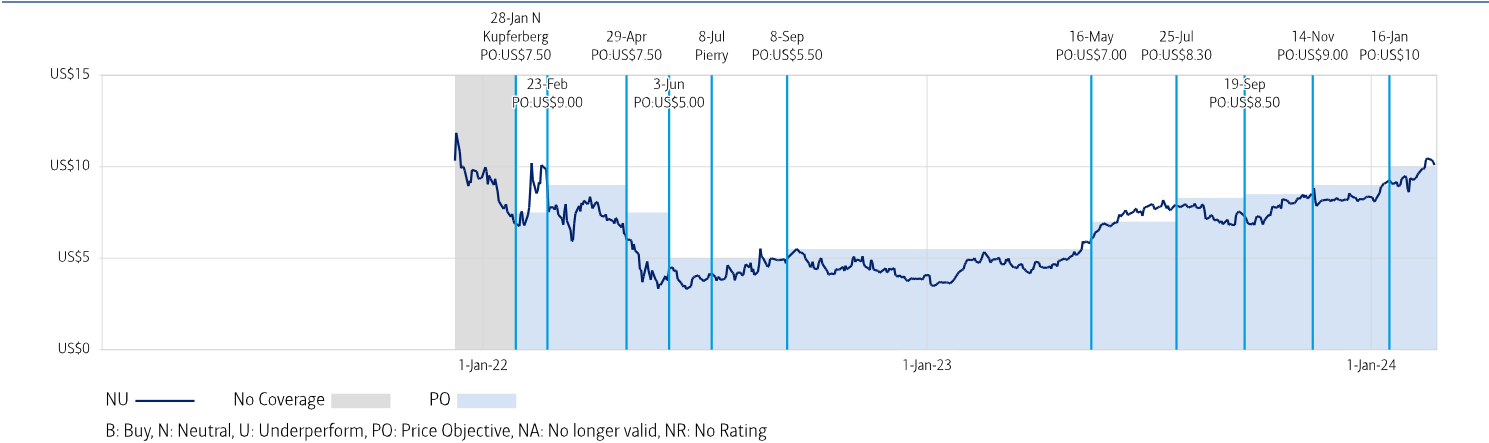
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Disclosures

Important Disclosures

Nubank (NU) 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: Financial Services Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships ^{R1}	Count	Percent
Buy	156	53.79%	Buy	94	60.26%
Hold	72	24.83%	Hold	48	66.67%
Sell	62	21.38%	Sell	35	56.45%

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.

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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%
Underperform	N/A	≥ 20%

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