

Petrobras

Sitting, waiting, wishing but no extra dividends came; Downgrading to Neutral

Rating Change: NEUTRAL | PO: 16.00 USD | Price: 16.70 USD

PBR did not announce extraordinary dividends tonight

When we resumed coverage of PBR in August 2023, our Buy rating was largely predicated on its enticing and higher cash return prospects vs. peers. Our expectations regarding attractive cash returns were supported by the fact that: 1) PBR did not have a statutory reserve, and therefore was unable to retain excess cash; and 2) a high probability of extraordinary dividends given its robust cash generation and strong balance sheet with leverage well below self-imposed caps. In October last year, PBR created a capital remuneration reserve which allowed for profit retention. Yet management indicated that dividends were still on the table and were also important for the government given its objective to reduce or zero out the fiscal deficit. In our view, the decision to not announce extraordinary dividends tonight heightens the risk perception at PBR and also suggests that the company could be pivoting to an agenda more focused on growth (leading to higher capex and M&A).

Downgrade to Neutral; new PO of R\$38/sh (from R\$48/sh)

As we have been flagging, we expect PBR's valuation to be driven by its total cash return prospects, especially given high yields that are being offered by global peers. In this regard, amid significantly lower expectations of total cash returns and heightened risk perception, we are downgrading Petrobras to Neutral and cutting our PO to R\$38/sh (US\$16.0/ADR) from R\$48/sh (US\$20.2/ADR).

Keeping cash for what? And lack of triggers in the horizon

Tonight's decision to pay only ordinary dividends heightens the risk perception at Petrobras particularly on the government influence regarding major capital allocation decisions. In our view, it suggests that the company could be pivoting to an agenda more focused on growth in renewables (triggering higher capex with lower returns) and increases the probability that the company could pursue M&A (RLAM refinery, petrochemicals, fuel distribution). We also see an overall lack of catalysts ahead given: 1) the market is already working with production forecasts above PBR's guidance; 2) capex is already guided to increase in 2025; and 3) minimum dividend yields look lower than peers for 2025.

Estimates(Dec) (US\$)	2021A	2022A	2023E	2024E	2025E
Common ADR EPS	3.05	5.61	3.94	3.64	2.46
Common ADR GAAP EPS	3.05	5.61	3.94	3.64	2.46
EPS Change (YoY)	NM	76.3%	-32.9%	-7.6%	-32.6%
Consensus EPS (Bloomberg)			0.78	0.73	0.69
Common ADR DPS	2.07	5.78	2.98	1.77	1.06
Pref ADR EPS (BRL)	8.22	14.49	9.73	8.99	6.06
Pref ADR DPS (BRL)	5.57	14.92	7.35	4.36	2.63
Valuation (Dec)					
P/E	5.0x	2.8x	4.2x	4.6x	6.8x
Dividend Yield	13.5%	36.2%	17.8%	10.6%	6.4%
EV / EBITDA*	2.7x	2.1x	2.8x	2.8x	3.4x
Free Cash Flow Yield*	57.2%	69.3%	52.1%	34.8%	17.7%
* For full definitions of <i>iQ</i> method SM measures, see page 7.					

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Refer to important disclosures on page 8 to 11. Analyst Certification on page 6. Price Objective Basis/Risk on page 6.

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Equity

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Caio Ribeiro

Research Analyst BofAS

caio.ribeiro@bofa.com

Leonardo Marcondes >> Research Analyst Merrill Lynch (Brazil) leonardo.marcondes@bofa.com

Stock Data

Price (Common ADR / Pref ADR)	16.70 USD / 16.36 USD
Price (Common / Pref)	41.26 BRL / 40.39 BRL
Price Objective (Common ADR /	16.00 USD / 16.00 USD
Pref ADR)	
Price Objective (Common / Pref)	38.00 BRL / 38.00 BRL
Date Established (Common ADR /	8-Mar-2024 /
Pref ADR)	8-Mar-2024
Date Established (Common / Pref)	8-Mar-2024 /
	8-Mar-2024
Investment Opinion	C-2-8 / C-2-8 / C-2-8 /
	C-2-8
52-Week Range	9.56 USD - 17.32 USD
Market Value (mn)	62,227 USD
Shares Outstanding (mn)	3721.2 / 6522.0 /
	7442.5 / 13044.0
Average Daily Value (mn)	19.01 USD
BofA Ticker / Exchange	PBR / NYS
BofA Ticker / Exchange	PBRA / NYS
BofA Ticker / Exchange	PBRQF / SAO
BofA Ticker / Exchange	PTRBF / SAO
Bloomberg / Reuters	PBR US / PBR.N
ROE (2023E)	33.2%
Net Dbt to Eqty (Dec-2022A)	25.2%

SOE - State-owned enterprise

iQprofile[™] Petrobras

<i>iQ</i> method [™] – Bus Performance*					
(US\$ Millions)	2021A	2022A	2023E	2024E	20251
Return on Capital Employed	17.0%	23.9%	16.5%	14.9%	10.5%
Return on Equity	30.6%	50.1%	33.2%	27.2%	16.3%
Operating Margin	46.6%	45.9%	40.7%	41.8%	35.1%
Free Cash Flow	32,546	41,182	32,439	21,650	10,988
<i>iQ</i> method SM – Quality of Earnings*					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025
Cash Realization Ratio	2.0x	1.4x	1.7x	1.7x	2.0
Asset Replacement Ratio	0.5x	0.7x	0.9x	1.3x	1.5
Tax Rate	29.2%	31.3%	31.9%	34.0%	34.0%
Net Debt-to-Equity Ratio Interest Cover	35.1% 7.6x	25.2% 16.3x	12.8% 10.0x	7.4% 8.3x	7.8% 6.7>
Income Statement Data (Dec)					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025
Sales	83,911	124,163	102,973	100,078	86,921
% Change	66.4%	41.7%	-20.8%	-2.8%	-13.1%
Gross Profit % Change	40,714 77.2%	64,690 52.1%	54,913 -18.9%	55,221 0.6%	44,541 -19.3%
EBITDA	50,769	70,181	55,095	55,052	43,953
% Change	153.8%	32.3%	-25.0%	-0.1%	-20.2%
Net Interest & Other Income	(10,984)	(3,729)	(4,170)	(5,786)	(6,219
Net Income (Adjusted)	19,883	36,596	25,716	23,763	16,018
% Change	NM	76.2%	-32.9%	-7.6%	-32.6%
(US\$ Millions)	2021A	2022A	2023E	2024E	2025
Net Income from Cont Operations (GAAP)	19,883	36,596	25,716	23,763	16,018
Depreciation & Amortization	11,687	13,206	13,167	13,262	13,464
Change in Working Capital	(3,293)	(1,232)	1,840	576	94
Deferred Taxation Charge	NA	NA	NA	NA	N/
Other Adjustments, Net	10,597	2,227	4,170	1,816	1,776
Capital Expenditure	(6,327)	(9,615)	(12,454)	(17,767)	(20,364
Free Cash Flow % Change	32,546	41,182	32,439	21,650	10,988
Share / Issue Repurchase	40.5% 0	21.1% 0	-24.7% (198)	-33.3%	- 49.2 %
Cost of Dividends Paid	(13,480)	(37,681)	(19,439)	(11,529)	(6,944
Change in Debt	(21,513)	(8,102)	(2,856)	0	(0,544
Balance Sheet Data (Dec)					
(US\$ Millions)	2021A	2022A	2023E	2024E	2025
Cash & Equivalents	11,183	12,188	19,483	22,994	21,915
Trade Receivables	8,284	7,362	6,823	6,026	5,709
Other Current Assets	12,687	15,288	10,209	9,965	9,602
Property, Plant & Equipment	108,483	109,653	121,188	131,318	143,751
Other Non-Current Assets	34,040	40,499	52,813	48,450	50,698
Total Assets	174,677	184,992	210,516	218,753	231,675
	3,647	3,534	4,445	4,445	4,445
Short-Term Debt			20,416	19,951	19,365
Other Current Liabilities	15,131	21,986			
Other Current Liabilities Long-Term Debt	15,131 32,120	26,068	25,453	25,453	25,453
Other Current Liabilities Long-Term Debt Other Non-Current Liabilities	15,131 32,120 53,836	26,068 64,389	25,453 78,962	25,453 75,429	25,453 79,862
Other Current Liabilities Long-Term Debt Other Non-Current Liabilities Total Liabilities	15,131 32,120 53,836 104,734	26,068 64,389 115,976	25,453 78,962 129,275	25,453 75,429 125,277	25,453 79,862 129,125
Other Current Liabilities Long-Term Debt Other Non-Current Liabilities	15,131 32,120 53,836	26,068 64,389	25,453 78,962	25,453 75,429	25,453 79,862 129,125 102,550 231,675

Company Sector

Oils

Company Description

Petrobras is a government-controlled enterprise that operates primarily in exploration and production and refining in Brazil. The company is expected to focus increasingly on its low-cost and high potential pre-salt developments in Brazil.

Investment Rationale

Our neutral view on Petrobras stems from concerns related to potential government influence over capital allocation decisions that are likely to negatively impact cash return yields. In addition, we also see an overall lack of catalysts ahead given: 1) the market is already working with production forecasts above PBR's guidance: 2) capex is already guided to increase in 25, and 3) minimum dividend yields look lower than peers for 25.

Stock Data

Average Daily Volume	17,368,292
Shares / Common	2.00

Quarterly Earnings Estimates

	2022	2023
Q1	1.31A	1.19A
Q2	1.70A	0.90A
Q3	1.35A	0.83A
Q4	1.27A	1.02E

Key Changes		
(BRL)	Previous	Current
Inv. Opinion	C-1-8	C-2-8
Inv. Rating	BUY	NEUTRAL
Price Obj.	48.00	38.00
2023E DPS	7.36	7.35



Sitting, waiting, wishing but no extra dividends came; Downgrading to Neutral

Downgrading Petrobras to Neutral; new PO of R\$38/sh (US\$16.0/ADR)

We are downgrading the stock to Neutral largely on the decision to not pay an extraordinary dividend this quarter which is a major disappointment given robust FCF generation and a strong balance sheet with leverage well below self-imposed caps. Our new PO of R\$38/shr reflects mostly an increase in our cost of equity assumption to 19.5% from a previous 17.2% given we are increasing our equity risk premium to 8.2% from 6.7%. In our view, investors will demand higher returns from PBR given the lack of transparency in capital allocation and renewed perception of government influence in important decisions at the company.

This decision to not pay an extraordinary dividend heightens the risk perception at Petrobras particularly regarding government influence on major capital allocation decisions. It also suggests that the company could be pivoting to an agenda more focused on growth in renewables (higher capex ahead) and increases the probability that the company could pursue M&A (RLAM refinery, petrochemicals, fuel distribution).

We also see an overall lack of triggers ahead given: 1) the market is already working with production forecasts above the company's guidance, 2) capex is already guided to increase in 2025 (USD21bn vs. USD18.5bn in 2024), 3) minimum dividend yields look lower than peers for 2025 (7% for PBR vs. Peers at 9% on average assuming Brent at USD70/bbl). Additionally, we forecast a lower oil price of USD70/bbl in 2025 vs. USD80/bbl and crack spreads are meant to normalize at lower levels (and PBR is more sensitive to oil prices than peers).

Petrobras's board did approve extraordinary dividends tonight

In our latest interactions with the company, management indicated that the government was supportive of extraordinary dividends especially due to Brazil's current fiscal situation. Tonight's announcement, however, showcases the opposite. In our view, the fact that the company distributed only ordinary dividends (which notably came below our estimates) increases significantly the uncertainty regarding future extraordinary dividends.

As we have been flagging, Petrobras's valuation is set to be driven by its total cash return, especially given the high yields that are being offered by global peers. In addition, we believe that investors likely demand higher total cash return yields from Petrobras vs. peers to account for potential government influence over strategic decisions such as investments, fuel pricing and dividend policies, among other things.

After tonight's decision, we believe that the market's concern over the government's influence on strategic decisions could increase. In this regard, we believe that investors will warrant even higher premiums in dividend yields vs. peers to account for this risk.

Last month we published the report: <u>LatAm Oil & Gas: Drilling for oil pays dividends</u>; <u>assessing 2024-25 total cash returns</u>, in which we showcased that the company's total cash return yields could be less attractive than global peers under the 45% FCF scenario for 2025.

In the exhibits below, we compare Petrobras's total cash return (assuming only the 45% FCF formula and a market cap of US\$100bn for Petrobras which is more in-line with the after-market pricing) vs. its peers. For 2024, we still see Petrobras yielding higher returns vs. its peers – however, as we discussed above, we believe investors could demand even stronger yields from the SOE given the concerns related to future capital allocation.

For 2025, given the higher capex guidance (US\$21bn vs. US\$18.5bn in 2024) as well as a normalization in crack spreads, PBR's returns are not that attractive reaching approximately 7% yield vs. the average of peers at 9%.



Exhibit 1: Total Cash Return 2024* - Sensitivity analysis for brent

Petrobras' total cash return is higher than peers in 2024

2024 Total Cash Return (US\$ million)					
Brent (US\$/bbl)	60	70	80	90	100
Petrobras	9.9%	11.5%	13.1%	14.7%	16.3%
Exxon	7.9%	7.9%	7.9%	7.9%	7.9%
Chevron	6.1%	7.2%	10.8%	10.8%	10.8%
BP	9.3%	9.9%	10.4%	11.0%	11.5%
Shell	10.7%	11.3%	11.9%	12.5%	13.1%
Total	9.8%	10.5%	11.2%	11.9%	12.7%
ENI	7.6%	8.4%	9.2%	10.0%	10.8%
PetroChina	4.2%	4.7%	5.4%	5.7%	6.2%
Sinopec	5.9%	6.2%	6.5%	6.8%	7.1%
Avg.	7.9%	8.6%	9.6%	10.1%	10.7%
Avg. ex-PBR	7.7%	8.3%	9.2%	9.6%	10.0%

Source: BofA Global Research Estimates | * assuming mkt cap of US\$100bn for PBR

BofA GLOBAL RESEARCH

Exhibit 2: Total Cash Return 2025* - Sensitivity analysis

Petrobras is not attractive vs. peers in 2025

2025 Total Cash Return (US\$ billion)					
Brent (US\$/bbl)	60	70	80	90	100
Petrobras	4.7%	7.0%	9.2%	11.5%	13.8%
Exxon	8.2%	8.2%	8.2%	8.2%	8.2%
Chevron	8.1%	10.0%	10.8%	10.8%	10.8%
BP	9.3%	9.9%	10.4%	11.0%	11.5%
Shell	10.1%	10.7%	11.3%	11.8%	12.4%
Total	10.2%	10.9%	11.6%	12.3%	13.0%
ENI	8.3%	9.1%	10.0%	10.9%	11.7%
PetroChina	4.1%	4.6%	5.4%	5.6%	6.2%
Sinopec	5.6%	6.0%	6.3%	6.6%	6.9%
Avg.	7.6%	8.5%	9.2%	9.9%	10.5%
Avg. ex-PBR	8.0%	8.7%	9.2%	9.7%	10.1%

Source: BofA Global Research Estimates |* the sensitivities assume the same oil prices for both years, which leads to differences in FCFE and working capital vs. BofAe / assuming mkt cap of US\$100bn for PBR

BofA GLOBAL RESEARCH

Capital allocation could be seen as a risk

Although it's not our base case that Petrobras will make any acquisitions this year, the likelihood of the company pursuing M&A has increased given it decided to not distribute any extraordinary dividends. In our view, M&A could potentially involve segments such as: renewables, refining, fuel distribution and petrochemicals. At the very least, Petrobras seems to be readying itself for a pick-up in growth ahead as it strives to pave the way towards lower carbon emission investments. This shift in focus generates additional concerns particularly as these investments typically generate lower returns vs. upstream projects.

Renewables

Petrobras' management has recently stated that its plans involve capturing 10% of Brazil's centralized wind and solar generation market by 2028. The company's latest 2024-28 Strategic Plan foresees Petrobras having around 5GW of solar and wind onshore capacity in operation or construction over the next five years. In this regard, the state-owned company expects to invest US\$5.2 billion in renewable energy over the same period.

Additionally, according to management, Petrobras intends to acquire 2 GW of onshore wind and solar assets still this year. Management also highlighted that all these projects will be in partnership with other companies (it intends to have at most 50% in these projects).

In our view, investment in renewables may prove to be positive over the long term, helping to reinforce the company's strategy to lower emissions. We highlight, however, that the renewables segment do bear lower returns compared to oil and gas assets and, at the same, it could result in some reduction in returns and available cash flow for dividends in the short-term.

Refining & Fuel distribution

The divestment of refineries and fuel distribution assets in the past was intended to create a more competitive market. This could reduce support for maintaining diesel and gasoline prices at levels below international prices.

For Petrobras, however, the divestment reduced the direct influence of the government in its profitability through fuel prices. Though greater competition could potentially lower prices and reduce Petrobras's profitability, the net effect on the equity value would be positive, in our view, by reducing the discount rate embedded in valuation.



Petrochemicals

As we have been discussing in our Monthly Petrochemical Monitor reports (see the latest: <u>LatAm Petrochemicals: Monthly Petrochemical Monitor: Mixed performances in January</u>), petrochemical spreads are at the lowest level seen over the past several years. This implies that if Petrobras increases its exposure to the segment in the short-term, returns from a potential M&A should be low.

In-line 4Q23 adjusted result

Dividends of R\$14.2billion + R\$2.7bn of buyback, below BofAe

Petrobras announced that its Board of Directors approved a dividend payment of R\$1.09/share (US\$0.44/ADR), which implies an amount of around R\$14.2bn and a yield of approx. 3.0%, below our expectations of approximately R\$1.30/share. The dividend proposed takes into account the amount of shares repurchased by the company during the quarter of R\$2.7bn. The dividend is to be paid in two equal installments (May-20/Jun-20 for shares and May-28/Jun-27 for ADRs). Petrobras's shares trade ex-div. on B3 and the NYSE as of Apr-26 - notably, the dividends per share are preliminary and may vary until Nov-21 as a result of the share buyback program.

4Q23 adj. EBITDA in-line with BofAe

4Q23 adj. EBITDA came in at US\$15.0bn (up 10% QoQ and +3% YoY), in line with our estimates. The adj. EBITDA excludes US\$1.2bn related to losses on decommissioning of returned/abandoned areas. Net income of US\$6.3bn was slightly below BofAe of US\$6.5bn.

FCFE continues robust at US\$5.9bn

Free cash flow to equity reached US\$5.9bn, driven by: 1) FCFO of US\$11.7bn; 2) capex of approx. US\$3.6bn; 3) financials expenses of US\$406mn; and 4) leasing payments of US\$1.8bn. Reported gross debt rose to US\$62.6bn, up 3% from 3Q23's US\$61.0bn mainly due to an increase in leasing liabilities with the start-up of the FPSO Sepetiba.



Price objective basis & risk

Petrobras (PBRQF / PBR)

Our price objective of US\$16.0/ADR (R\$38.0/share) is based on a discounted cash flow (DCF)-based valuation using the BofA base case oil price scenario, which assumes a Brent price of US\$80/bbl for 2024, and US\$70/bbl for 2025 and beyond. We use a 16.60% weighted-average cost of capital (WACC) and an long-term growth rate of 2.0%.

Upside and downside risks to achieving our price objective are more favorable or less favorable results from the following factors: (1) oil price trends, (2) political/economic developments in Brazil, (3) possible increase in global risk aversion/higher interest rate environment, and (4) operational delays in production/development projects.

Petrobras PN (PTRBF / PBRA)

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Analyst Certification

We, Caio Ribeiro and Leonardo Marcondes, 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.

Special Disclosures

The locally listed shares of Brazilian issuers may only be purchased by investors outside of Brazil who are eligible foreign investors within the meaning of applicable laws and regulations.

Latin America - Natural Resources Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
BUY				
	3R Petroleum	XPXXF	RRRP3 BZ	Leonardo Marcondes
	Alpek SAB de CV	ALPKF	ALPEKA MM	Leonardo Marcondes
	CSN	SIDHF	CSNA3 BZ	Caio Ribeiro
	CSN	SID	SID US	Caio Ribeiro
	Dexco SA	DURXF	DXCO3 BZ	Leonardo Neratika
	Empresas CMPC SA	XEMCF	CMPC CI	Leonardo Neratika
	Enauta Participacoes S.A.	QGEPF	ENAT3 BZ	Leonardo Marcondes
	Orbia	MXCHF	ORBIA* MM	Leonardo Marcondes
	Petro Rio	HRTPF	PRIO3 BZ	Caio Ribeiro
	PetroReconcavo	XPXYF	RECV3 BZ	Leonardo Marcondes
	Suzano	XXRTF	SUZB3 BZ	Caio Ribeiro
	Suzano S.A.	SUZ	SUZ US	Caio Ribeiro
	Ternium	TX	TX US	Caio Ribeiro
	Usiminas SA	USNZY	USNZY US	Caio Ribeiro
	Usiminas SA	USSPF	USIM5 BZ	Caio Ribeiro
	Vale	VALE	VALE US	Caio Ribeiro
	Vale	VALEF	VALE3 BZ	Caio Ribeiro
	Vibra Energia SA	XUBRF	VBBR3 BZ	Leonardo Marcondes



Latin America - Natural Resources Coverage Cluster

Investment rating	Company	BofA Ticker	Bloomberg symbol	Analyst
NEUTRAL				
	Bradespar	BRDQF	BRAP4 BZ	Caio Ribeiro
	Companhia Brasileira de Alumínio	XZUDF	CBAV3 BZ	Leonardo Neratika
	CSN Mineracao	XZRAF	CMIN3 BZ	Caio Ribeiro
	Ecopetrol S.A.	XESSF	ECOPETL CB	Caio Ribeiro
	Ecopetrol S.A.	EC	EC US	Caio Ribeiro
	Gerdau S. A.	GGBUF	GGBR4 BZ	Caio Ribeiro
	Gerdau S.A.	GGB	GGB US	Caio Ribeiro
	Metalurgica Gerdau	MZGPF	GOAU4 BZ	Caio Ribeiro
	Petrobras	PBRQF	PETR3 BZ	Caio Ribeiro
	Petrobras	PBR	PBR US	Caio Ribeiro
	Petrobras PN	PBRA	PBR/A US	Caio Ribeiro
	Petrobras PN	PTRBF	PETR4 BZ	Caio Ribeiro
	Ultrapar	XLRUF	UGPA3 BZ	Leonardo Marcondes
	Ultrapar Pa-ADR	UGP	UGP US	Leonardo Marcondes
UNDERPERFORM				
	Empresas Copec SA	PZDCF	COPEC CI	Leonardo Neratika
	Grupo Mexico	GMBXF	GMEXICOB MM	Caio Ribeiro
	Klabin S.A	XLWDF	KLBN11 BZ	Caio Ribeiro
	Klabin S.A	KLBAY	KLBAY US	Caio Ribeiro
	Southern Copper	SCCO	SCCO US	Caio Ribeiro
	YPF SA	YPF	YPF US	Leonardo Marcondes
	YPF SA	YPFSF	YPFD AR	Leonardo Marcondes
RSTR				
	Braskem SA-A	BAKAF	BRKM5 BZ	Leonardo Marcondes
	Braskem SA-ADR	BAK	BAK US	Leonardo Marcondes

IQmethod[™] Measures Definitions

Business Performance	Numerator	Denominator
Return On Capital Employed	NOPAT = (EBIT + Interest Income) \times (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 +	Sales
F	Other LT Liabilities	
EV / EBITDA	Enterprise Value	Basic EBIT + Depreciation + Amortization

Manethod 3^{ss} is the set of BofA Global Research standard measures that serve to maintain global consistency under three broad headings: Business Performance, Quality of Earnings, and validations. The key features of iQmethod are: A consistently structured, detailed, and transparent methodology. Guidelines to maximize the effectiveness of the comparative valuation process, and to identify some common pitfalls.

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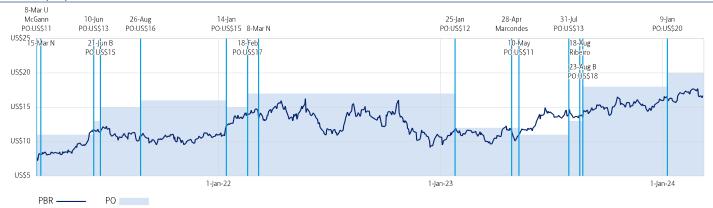
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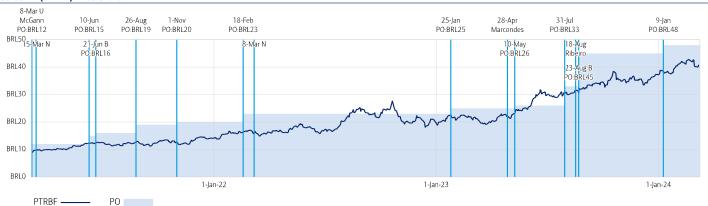
Petrobras ON (PBR) Price Chart



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.

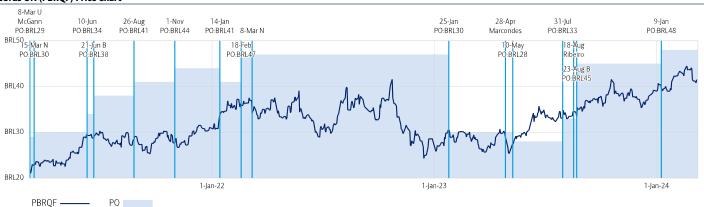
Petrobras PN (PTRBF) Price Chart



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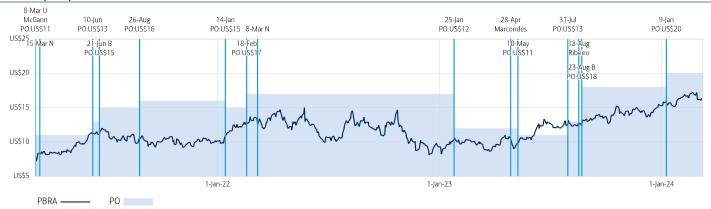
Petrobras ON (PBRQF) Price Chart



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Petrobras PN (PBRA) Price Chart



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Equity Investment Rating Distribution: Energy Group (as of 31 Dec 2023)

Coverage Universe	Count	Percent	Inv. Banking Relationships R1	Count	Percent
Buy	83	61.48%	Buy	64	77.11%
Hold	28	20.74%	Hold	21	75.00%
Sell	24	17.78%	Sell	18	75.00%

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 Ratings dispersion guidelines for coverage cluster^{R2} rating)

Buy	≥ 10%	≤ /0%
Neutral	≥ 0%	≤ 30%
Jnderperform	N/A	≥ 20%

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