

Latam Equity Quant

Consumer blues

Investment Strategy

Key takeaways

- BZ and US 10y real rates surged this week. Consumer names continue to underperform and are back to 2023 lows.
- Ibov ex-commodities trading at 16% discount vs historicals 2M ago, discount was only 5%.
- In September we saw positive foreign inflows into BZ local exchange, but all into futures.

Last week in numbers

Ibovespa has been flat since June. This week, the Brazilian index is -2.7% vs Mexbol -2.7%, SPX -0.5%, EM -2% in USD terms, total return.

More pain from US rates spike: US 10y real rates up 15bp this week, BZ 10y real rates up 25bp (Exhibit 3).

BZ consumer sector among the most hit by rates selloff and is back to March lows (USD terms, Exhibit 2). Consumer names are also in the middle of tax changes discussion (see *LatAm Thematic – Tax changes ahead, 11 April 2023*). Staples and C. Discretionary started to underperform the Ibovespa in the 2H. At the same time, Ibov is up 20% since March, in USD terms, mostly driven by Financials and Energy sectors.

Copom minutes had a hawkish tone but note BC would keep the pace of 50bps cut in next meetings (see [Brazil Watch](#)). We see selic at 9.5% at the end of this easing cycle.

LatAm valuation update: Ibov ex-commodities trades at around 16% disc. to hist. vs only 5% 2M ago (Exhibit 5). Mexbol is currently trading at 20% disc. to hist. (Exhibit 6).

BZ equity funds had -R\$0.5bn outflows last week, compared to an average of -R\$1bn/week outflows YTD (Exhibit 11).

Local hedge funds had R\$7bn outflows last week (Exhibit 11), but it would be -R\$1.7bn outflows after removing three outliers funds (which is in line with the weekly outflows YTD, -R\$1.6bn). We saw outflows from local hedge funds in the past four weeks, but in the past 3M, local multimarket funds had flat weekly flows.

Global EM equity funds had flat flows this week (Exhibit 14). YTD, global EM equity funds had US\$95bn inflows.

In September, we saw R\$9bn foreign inflows to B3, all into futures (Exhibit 13). Flows into BZ exchange are positive in 2023: +R\$15bn inflows (cash + futures + IPO/follow-ons).

See the latest [Flows to Know](#) report for details.

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Refer to important disclosures on page 15 to 17.

12606582

Timestamp: 29 September 2023 05:30AM EDT

29 September 2023

Investment Strategy
Latin America

David Beker >>

Bz Econ/FI & LatAm EQ Strategy
Merrill Lynch (Brazil)
+55 11 2188 4371
david.beker@bofa.com

Paula Andrea Soto, CFA >>

LatAm Equity Strategist
Merrill Lynch (Brazil)
+55 11 2188 4226
paula.soto@bofa.com

Carlos Peyrelongue >>

Research Analyst
Merrill Lynch (Mexico)
+52 55 5201 3276
carlos.peyrelongue@bofa.com

Mateus Conceicao >>

LatAm Equity Strategist
Merrill Lynch (Brazil)
+55 11 2188 4201
mateus.conceicao@bofa.com

Exhibit 1: LatAm Earnings Revision Ratio

Earnings Revision Ratio = #Up Revisions / #Down Revisions. Brazil ERR at 0.7. Sector details in Exhibit 24.

LatAm countries	Jul-23	Aug-23
Argentina	4.5	3.6
Brazil	0.7	0.8
Chile	0.9	0.8
Colombia	0.6	0.6
Mexico	0.8	0.8
Peru	0.6	0.7
LatAm	0.8	0.8

Source: BofA Global Research, Factset, Bloomberg
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BZ = Brazil

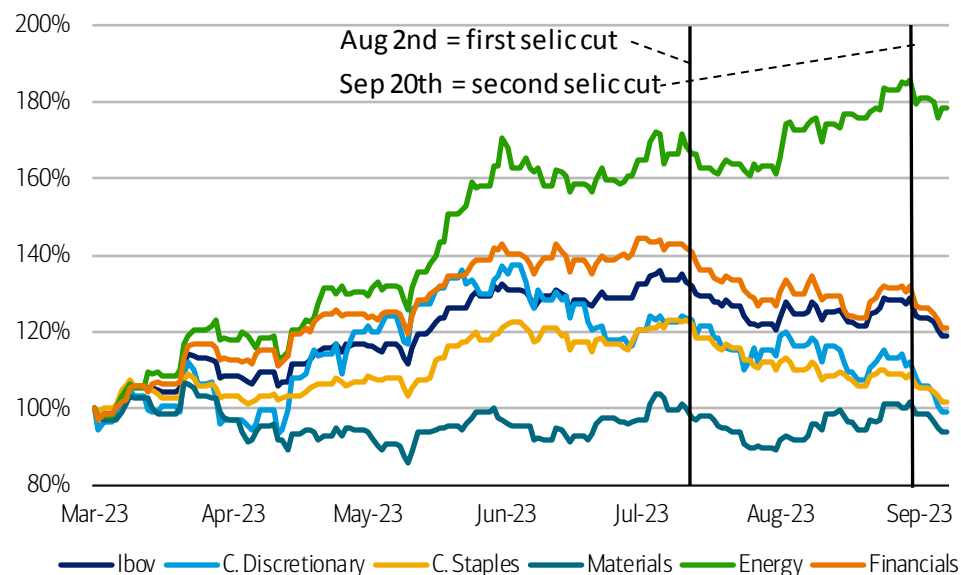
BC = Central Bank

EM = Emergent Markets

ERR = Earnings Revision Ratio

Exhibit 2: Brazil sectors performances (Mar-23 – Sep-23, USD terms total return)

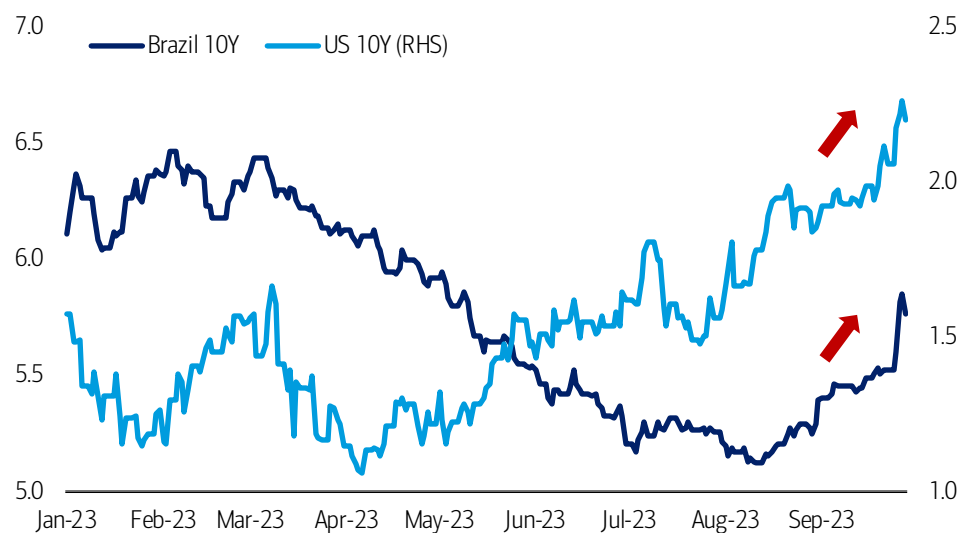
Energy sector went up 79% since Ibov YTD lows in March-23.



Source: Bloomberg

Exhibit 3: Brazil and US 10Y real rates in 2023

BZ 10y trending up since Aug-23.



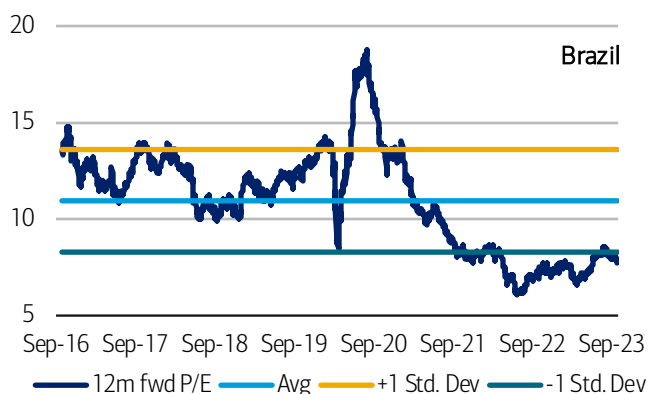
Source: Bloomberg

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LatAm valuation

Exhibit 4: Ibovespa P/E ratio (12m fwd)

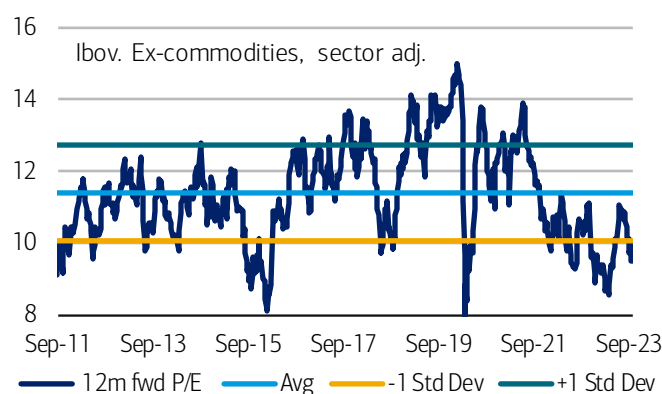
Trading at 1 Std Dev below historical average, mostly driven by commodities.



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Exhibit 5: Ibovespa P/E ratio (12m fwd, sector adjusted ex. commodities)

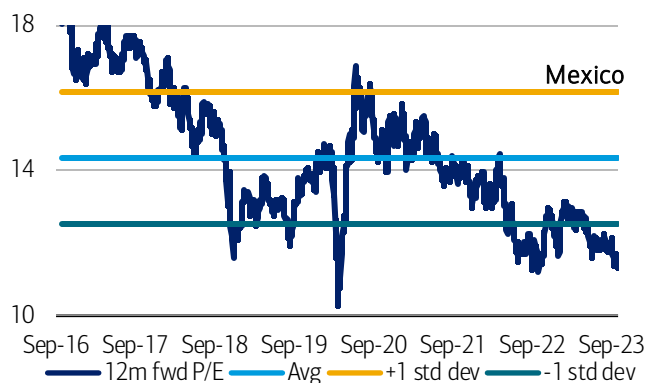
Ibov ex-commodities at 16% discount vs hist.



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Exhibit 6: Mexbol P/E ratio, Sep-16 to Sep-23

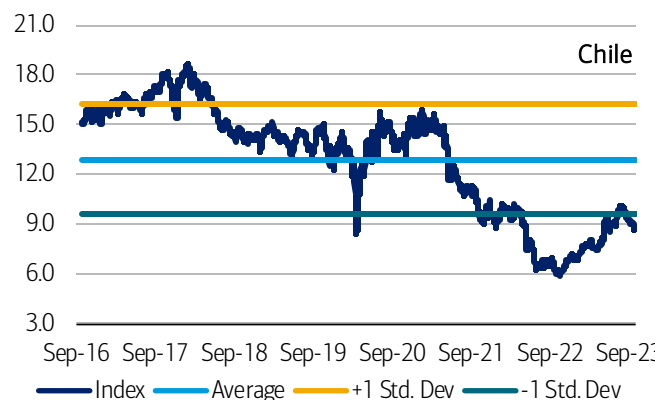
Trading at more than 1 Std Dev below historical average.



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Exhibit 7: IPSA P/E ratio, Sep-16 to Sep-23

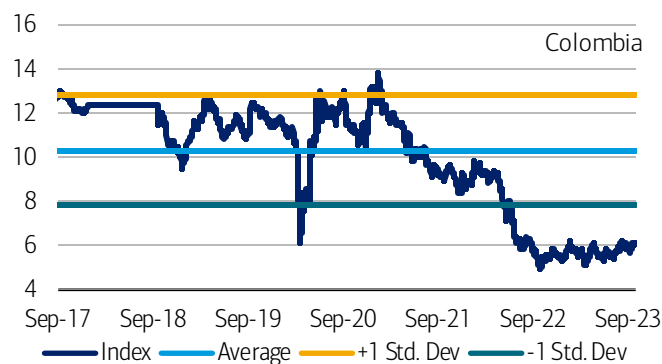
Trading at 1 Std Dev below historical average.



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Exhibit 8: Colcap P/E ratio, Sep-17 to Sep-23

Trading more than 1 Std Dev below historical average.



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Exhibit 9: Valuation summary

Brazil 28% discounted vs hist.

Country	Index	Current	Average	Std. Dev	Prem. to Hist	Prem. to EM*
Brazil	Ibov	7.8	10.9	2.7	-28%	-36%
BZ	Ex-commod.	9.5	11.4	1.3	-16%	-17%
Mexico	Mexbol	11.5	14.3	1.8	-20%	-4%
Chile	Ipsa	8.7	12.9	3.4	-32%	-28%
Peru	SPBLPGPT	8.9	12.2	2.6	-27%	-16%
Colombia	Colcap	6.2	10.3	2.5	-40%	-59%
Argentina	Merval	12.9	10.2	3.0	26%	-46%
EM	MXEF	11.5	12.2	1.2	-6%	-

Source: BofA Global Research, Bloomberg

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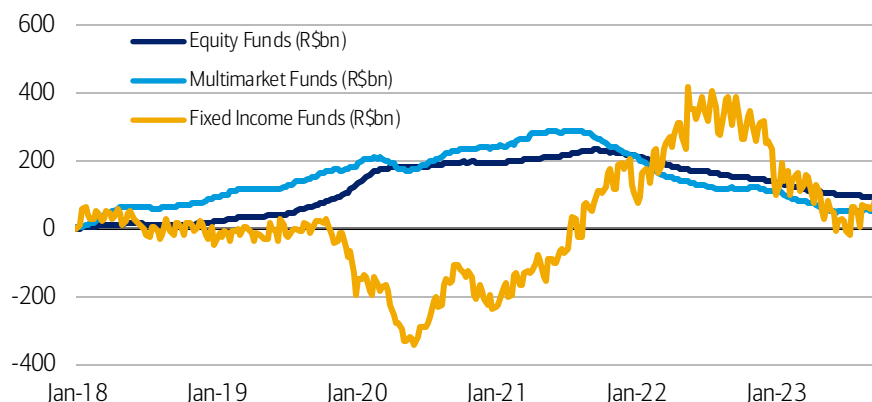


Flows & Positioning

Brazil flows

Exhibit 10: Cumulative flows into Brazil local fixed income, equity funds and local multimarket (hedge) funds (R\$bn)

Outflows from Brazil local equity and multimarket funds are slowing down in 2023.



Source: BofA Global Research, Economática

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Exhibit 11: Equity and Multimarket funds weekly flows (R\$m) (Brazil local funds)

Flow picture is improving in 2023

Equity and Multimarket funds weekly flows (R\$m)

Fund type (R\$ mn)	AUM	28-Jul	4-Aug	11-Aug	18-Aug	25-Aug	1-Sep	8-Sep	15-Sep	22-Sep	29-Sep*	2023	2022
Equity Funds	233,064	22	198	99	-470	-214	154	-399	-219	-536	-235	-30,883	-42,836
Foreign Investments	106,164	-129	-111	-165	-32	-92	-1,022	-176	-62	-144	-93	-4,876	-18,740
Ibovespa Active	38,842	-93	-194	-277	-163	-142	-46	-71	-85	-57	97	-7,239	-16,714
Sector	10,201	-7	2	-9	-11	-20	-11	10	49	13	61	281	-1,860
Value / Growth	17,261	-47	-67	-6	-10	-62	-221	8	-71	12	-38	-3,890	-6,745
Dividends	12,010	-108	4	44	4	80	92	92	128	32	39	-1,387	-434
Ibovespa Passive	10,997	-28	123	205	-116	61	131	6	28	45	-12	-389	-2,932
Small Caps	5,469	4	24	5	-10	72	49	26	24	41	9	-485	-2,243
Single Stocks	9,480	-27	-40	-22	-13	-20	-11	-31	-22	-19	1	-730	-2,225
ESG	245	0	0	0	0	-1	0	0	-1	0	0	-23	-366
Equity Funds (Total)	443,734	-414	-60	-127	-822	-336	-886	-535	-230	-613	-172	-49,621	-95,096
Equity Funds (Total ex. Foreign Invest.)	337,570	-284	50	37	-790	-244	136	-359	-168	-469	-79	-44,745	-76,355
Multimarket	843,347	965	-644	2,213	2,942	2,961	2,757	-691	-710	-3,803	-1,297	-22,722	-69,300
Foreign Investments	843,033	-994	-181	213	693	1,641	3,824	-131	-322	99	-244	-20,673	-22,102
Macro	253,713	-447	-585	-721	-778	-687	-1,022	-974	-476	-2,909	-666	-37,032	-14,754
Dynamic Multimarket	50,425	-83	30	74	95	-187	-126	138	-273	-248	-104	-3,479	-16,130
Specific Strategy	67,108	155	-240	178	153	68	2	-108	-19	52	-59	1,920	-2,279
Long/Short Directional	7,877	-35	0	-11	-6	-28	-33	-258	-123	-44	-2	-2,018	-3,384
Balanced	12,177	-135	-9	14	-26	-1	-42	15	8	-9	-6	-569	-54
Trading	3,777	-11	3	-1	-6	-16	-4	-6	-13	-21	-4	-485	-1,154
Long/Short Neutral	2,413	-14	-7	-3	-15	-23	11	-10	6	-16	-4	-341	-527
Protected Capital	761	-1	-1	-2	13	5	0	0	-1	0	0	86	-196
Multimarket Funds (Total)	2,084,631	-601	-1,634	1,955	3,065	3,731	5,366	-2,027	-1,923	-6,899	-2,388	-85,311	-129,878
Multimarket Funds (Total ex. Foreign Invest.)	1,241,598	393	-1,453	1,741	2,372	2,091	1,541	-1,895	-1,601	-6,998	-2,144	-64,639	-107,777

(*) Preliminary data, up to Wednesday.

Source: Economática

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Exhibit 12: Fixed Income funds weekly flows (R\$bn) (Brazil local funds)

Brazil local fixed income funds had inflows in Aug-23.

Fixed Income funds weekly flows

Fund type	AUM	1-Sep	8-Sep	15-Sep	22-Sep	29-Sep*	YTD
FI Short Duration - Invest. Grade	935	4.2	-8.0	4.1	-2.5	-1.6	-96.8
FI Short Duration Govt	855	-1.5	23.0	14.9	-24.1	-3.3	45.7
FI All Duration Credit	308	3.0	1.1	3.5	2.9	1.1	21.2
FI All Duration - Invest. Grade	746	-4.1	-5.6	4.9	6.4	-0.1	-13.6
FI All Duration Govt	241	-2.0	0.6	2.7	0.1	0.1	10.1
FI (Broad)	379	-10.6	2.9	6.4	-6.4	-0.3	14.7
Other	506	0.2	1.8	1.0	-0.5	0.1	-2.3
Fixed Income (Total) Ex. Foreign Invest.	3,965	-11	16	38	-24	-4	-21

(*) Preliminary data, up to Wednesday.

Source: Economática

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Exhibit 13: Foreign flow to B3 (R\$bn), Oct-22 to Sep-23

Flows are positive YTD

Month	Futures	Cash	IPO/follow-on	TOTAL
Oct-22	-3	14	0	11
Nov-22	5	3	0	8
Dec-22	-4	14	1	12
Jan-23	6	13	0	19
Feb-23	-9	-2	0	-11
Mar-23	-2	-2	2	-3
Apr-23	3	3	1	6
May-23	-6	-4	0	-10
Jun-23	-7	10	4	7
Jul-23	3	7	3	13
Aug-23	-3	-13	1	-15
Sep-23	11	-2	0	9
12M Cumulative	-5	40	11	46
2023 YTD	-4	9	10	15
2022	-2	101	17	116
2021	27	-7	44	64

Source: B3, Bloomberg

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Global flows**Exhibit 14: Cumulative flows into EM equity funds (US\$bn), 2018-2023**

EM flows were positive this week. US\$95bn YTD.



Source: EPFR

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Exhibit 15: Weekly flows to LatAm and EM funds (US\$mnn)

EM flows were positive this week. US\$95bn YTD.

Region	Week	% Current Assets	4 Weeks	% Current Assets	YTD	% Current Assets
LatAm	53	0.6%	(69)	-0.7%	758	8.1%
Brazil	(89)	-0.6%	(442)	-2.9%	(161)	-1.0%
Mexico	(30)	-0.3%	(118)	-1.3%	244	2.7%
Andean	(0)	0.0%	1	0.0%	(23)	-0.8%
LatAmTotal	(66)	-0.2%	(630)	-1.7%	845	2.3%
China	2,127	0.1%	4,370	0.3%	73,014	5.0%
EM Total	6	0.0%	894	0.1%	95,269	6.5%

Source: EPFR

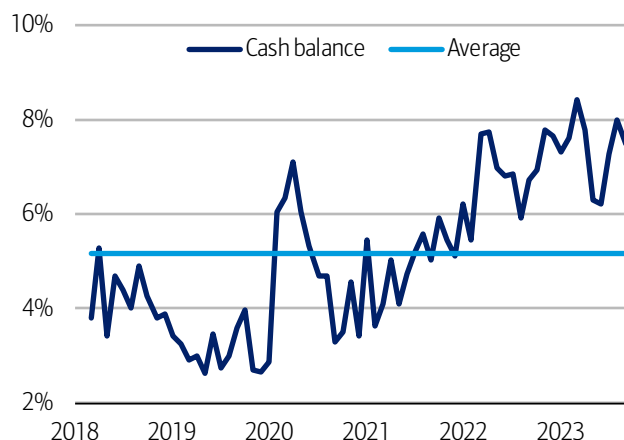
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LatAm positioning

Exhibit 16: Average cash position (2018-2023)

Cash levels at 7.5% in Sep-23, above hist avg (5%).

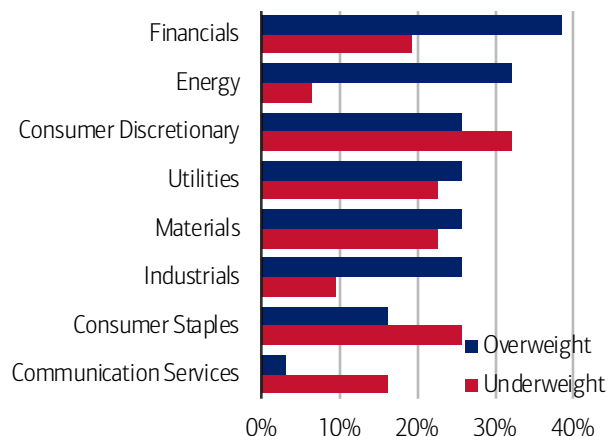


Source: LatAm Fund Manager Survey

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Exhibit 17: Which sectors among equities are you most underweight?

Participants are more underweight c. discretionary, staples and Communication Services than they are overweight.



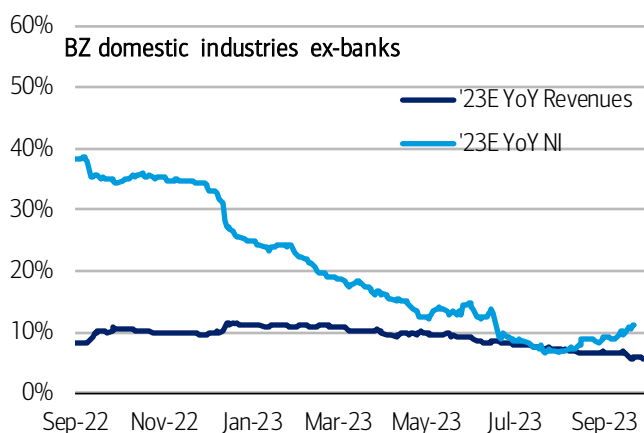
Source: LatAm Fund Manager Survey

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Consensus Earnings Revisions for Brazil

Exhibit 18: Brazil domestic industries: consensus revised NI downwards but still expected at 11% YoY growth

Brazil domestic industries (ex-banks) revenues vs NI consensus estimates (2023E YoY growth).



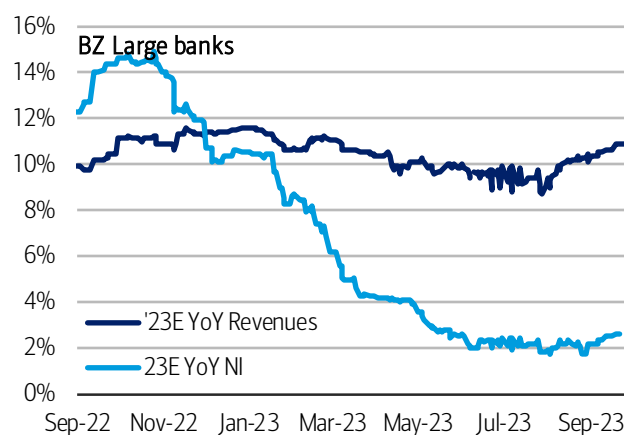
Consensus estimates.

Source: Bloomberg, BofA Global Research

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Exhibit 19: Brazil Banks: consensus revised NI downwards since Nov-22, but still expected at +3% YoY for 2023.

BZ large banks revenues vs NI consensus estimates (2023E YoY growth).



Consensus estimates.

Source: Bloomberg, BofA Global Research

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Earnings Revision Ratio (ERR)

The Earnings Revision Ratio measures the number of revisions for which the consensus EPS estimate has risen versus the number for which it has fallen.

An ERR above 1 means more upwards revisions than downwards revisions. However, historically analysts tend to start overly optimistic and do more downwards revisions down the line. As a result, **the overall historical average of the 3-month ERR is close to 0.8.**

Exhibit 20: LatAm 3-month ERR – country details

Brazil 3-month ERR at 0.8 in Aug-23.

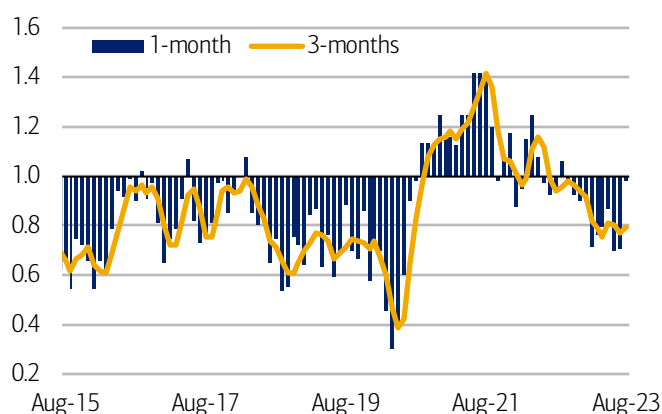
LatAm countries	12m Avg	Jun-23	Jul-23	Aug-23	1M Chg in 3M ERR
Argentina	2.4	4.9	4.5	3.6	-0.86
Brazil	0.7	0.7	0.7	0.8	0.08
Chile	0.9	0.7	0.9	0.8	-0.04
Colombia	0.8	0.6	0.6	0.6	-0.02
Mexico	1.1	1.1	0.8	0.8	-0.02
Peru	0.8	0.7	0.6	0.7	0.09
LatAm	0.9	0.8	0.8	0.8	0.03

Source: BofA Global Research, Factset, Bloomberg

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Exhibit 21: LatAm Earnings Revision Ratio (Aug 15-Aug 23)

3-month ERR at 0.8 in Aug-23.



Source: BofA Global Research, Factset, Bloomberg

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Exhibit 22: LatAm 3-month ERR – sector details

Financials and HC show the highest ERR (1.6 and 1.3 respectively).

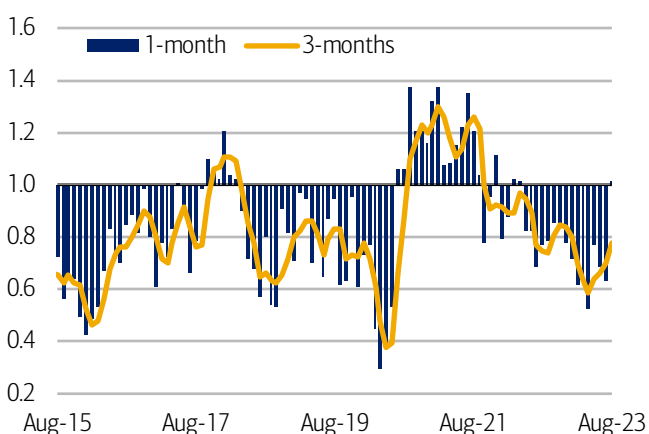
LatAm sectors	12m Avg	Jun-23	Jul-23	Aug-23	1M Chg in 3M ERR
C. Discretionary	0.8	0.8	0.8	1.0	0.21
C. Staples	0.9	0.9	0.7	0.7	0.00
Energy	0.9	0.8	0.8	0.8	0.00
Financials	1.5	1.2	1.3	1.6	0.22
Health Care	0.5	0.3	0.7	1.3	0.61
Industrials	0.9	0.8	0.7	0.7	-0.01
IT	1.3	1.6	1.8	1.1	-0.64
Materials	0.7	0.6	0.5	0.5	-0.04
Real Estate	1.0	0.6	0.9	0.9	0.01
Communication	0.7	0.7	0.6	0.8	0.19
Utilities	1.0	1.0	1.1	1.0	-0.10
LatAm	0.9	0.8	0.8	0.8	0.03

Source: BofA Global Research, Factset, Bloomberg

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Exhibit 23: Brazil Earnings Revision Ratio (Aug 15-Aug 23)

Financials and communication show highest ERR in August.



Source: BofA Global Research, Factset, Bloomberg

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Exhibit 24: Brazil 3-month ERR – sector details

Financials and communication show highest ERR in August.

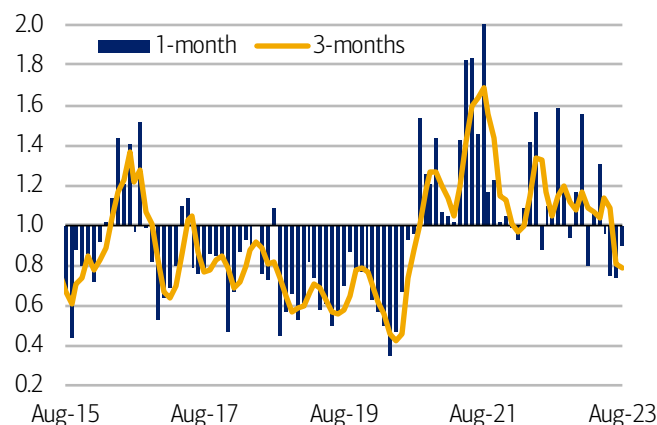
Brazil sectors	12m Avg	Jun-23	Jul-23	Aug-23	1M Chg in 3M ERR
C. Discretionary	0.5	0.5	0.6	0.8	0.21
C. Staples	0.7	0.6	0.7	0.8	0.08
Energy	0.9	0.8	0.7	0.8	0.12
Financials	1.1	1.2	1.4	1.9	0.44
Health Care	0.5	0.3	0.5	1.2	0.65
Industrials	0.8	0.6	0.8	0.9	0.05
IT	1.3	2.0	2.1	1.2	-0.92
Materials	0.6	0.4	0.3	0.3	0.00
Real Estate	1.3	0.7	1.1	0.9	-0.20
Communication	1.3	1.1	1.6	3.0	1.44
Utilities	0.9	0.8	0.7	0.8	0.04
Brazil	0.7	0.7	0.7	0.8	0.08

Source: BofA Global Research, Factset, Bloomberg

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Exhibit 25: Mexico Earnings Revision Ratio (Aug 15-Aug 23)

Financials has the highest ERR in Mexico (1.7 in August).



Source: BofA Global Research, Factset, Bloomberg

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Exhibit 26: Mexico 3-month ERR – sector details

Financials has the highest ERR in Mexico (1.7 in August).

Mexico sectors	12m Avg	Jun-23	Jul-23	Aug-23	1M Chg in 3M ERR
C. Discretionary	1.3	1.5	1.0	1.0	0.04
C. Staples	1.4	1.2	0.7	0.8	0.03
Energy	NA	NA	NA	NA	NA
Financials	3.5	1.7	1.8	1.7	-0.15
Health Care	NA	NA	NA	NA	NA
Industrials	1.3	1.0	0.5	0.5	-0.02
IT	NA	NA	NA	NA	NA
Materials	0.7	1.1	0.7	0.6	-0.12
Real Estate	0.9	0.5	0.7	0.8	0.11
Communication	0.5	0.4	0.4	0.6	0.11
Utilities	NA	NA	NA	NA	NA
Mexico	1.1	1.1	0.8	0.8	-0.02

Source: BofA Global Research, Factset, Bloomberg

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ERR methodology

The Earnings Revision Ratio (ERR) is calculated as follows: $ERR = \frac{\# \text{Up Revisions}}{\# \text{Down Revisions}}$, where:

Up Revisions = All instances when an analyst revises an estimate up.

Down Revisions = All instances when an analyst revises an estimate down.

We look at 1-Month and 3-Month ERRs; the former may anticipate market turns, while the latter is less volatile. Each company may contribute more than once as the total number of analyst revisions are considered. A company covered by several analysts will have a higher weight in the ratio.

The considered universe is composed of all companies within our current LatAm Coverage countries (Argentina, Brazil, Chile, Colombia, Mexico and Peru). A company will be included in the sample if at least one of the following variables is listed as one of said countries: country of risk, country of incorporation, country of registration, country of Headquarters, and country of top revenue. Panama's Copa Holdings is the only exception to the rule and was also added to the sample. Number of companies with at least one revision in the last 12 months: Argentina: 35, Brazil: 185, Chile: 37, Colombia: 20, Mexico: 106, Peru: 19.

Stock screens

Exhibit 27: Value screen

Within this screen, homebuilders, supermarkets and oil have the best performance YTD.

Company	Country	Industry	BBG Ticker	BofA Ticker	P/E 2023E	P/E 2024E	Net Debt/EBITDA	30D Performance (local crncy)	YTD Performance (local crncy)
Banrisul	BZ	Banks-Retail	BRSR6 BZ	XGRBF	5.2	4.2	0.5	-4%	26%
Petrobras PN	BZ	Oils	PETRA BZ	PTBFB	4.2	4.7	0.7	6%	41%
Petro-Rio	BZ	Oil & Gas Producers	PRIO3 BZ	HRTPF	7.0	4.9	1.5	3%	27%
Metalurgica Gerdau	BZ	Steels	GOAU4 BZ	MZGPF	3.9	5.2	0.5	-6%	-13%
IFS	BZ	Banks-Retail	IFS US	IFS	6.6	5.4	0.5	-2%	-3%
Adecoagro	BZ	Food-Commodities	AGRO US	AGRO	7.1	5.5	0.5	1%	40%
Copa	CO	Airlines	CPA US	CPA	5.9	5.6	0.7	-14%	6%
COPASA	BZ	Water Utilities	CSMG3 BZ	CSAOF	5.7	5.6	0.5	-8%	9%
Gentera	BZ	Banks-Retail	GENTERA* MM	CMPRF	6.6	5.7	0.5	-2%	-5%
Bci	BZ	Banks-Retail	BCI CI	BZCIF	6.1	5.9	0.5	-8%	7%
SQM	CL	Fertilizers	SQM US	SQM	5.8	6.0	0.2	-8%	-27%
Liverpool Puerto	BZ	Retailing-Broadline/Department Stores	LIVEPOLC MM	ELPQF	7.1	6.5	0.5	-16%	-20%
Alpek	BZ	Chemicals-Major	ALPEKA MM	ALPKF	10.2	6.5	0.5	-12%	-46%
Ternium	MX	Steels	TX US	TX	5.4	6.6	-0.8	-4%	31%
Sanepar	BZ	Water Utilities	SAPR11 BZ	XJALF	6.3	6.7	0.5	-3%	25%
Regional	BZ	Banks-Retail	RA MM	RGNLF	7.6	6.9	0.5	-1%	-11%
Credicorp	BZ	Banks-Retail	BAP US	BAP	7.4	7.0	0.5	-11%	-5%
Bajio	BZ	Banks-Retail	BBAJIOO MM	BBAJF	6.3	7.1	0.5	3%	-7%
Alfa	BZ	Industrials/Multi-Industry	ALFAA MM	ALFFF	10.6	7.1	0.5	3%	-4%
Banorte	BZ	Banks-Retail	GFNORTEO MM	GBOOF	8.1	7.4	0.5	0%	6%
Median								-4%	1%

Source: BofA Global Research, Bloomberg.

Stocks are selected from our LatAm universe of coverage regardless of the rating. Stocks must have at least 5y of trading. Screen criteria: Mkt Cap>US\$1bn. 2021E and 2022E fwd P/E ratio below MSCI LatAm median P/E. Net Debt/EBITDA <2 (this condition is ignored for Financials). If results exceed 20 companies, those with the lowest 2022E P/E ratio are selected. Fundamental ratings are not part of the screening criteria. This screen is not a recommended list either individually or as a group of stocks. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decision. Fundamental ratings are not part of the screening criteria.

BofA GLOBAL RESEARCH

Exhibit 28: Growth screen

Many traditional retail and e-commerce names in this screen.

Company	Country	Industry	BBG Ticker	BofA Ticker	P/E 2024E	Div. Yield 2023E	30D Performance (local crncy)	YTD Performance (local crncy)
Magazine Luiza	BZ	Retailing-Hardlines	MGLU3 BZ	MGZZF	62.1	0%	-30%	-25%
Mercado Libre	BZ	Internet/e-Commerce	MELI US	MELI	44.2	0%	-2%	51%
Brasil Foods	BZ	Food Processors	BRFS3 BZ	BRFFF	36.4	0%	6%	23%
Omega Geração	BZ	Renewable Energy	MEGA3 BZ	XZQAF	35.6	0%	-11%	1%
Raia Drogasil	BZ	Drug Store Chains	RADL3 BZ	RAIAF	29.2	1%	-1%	20%
WEG	BZ	Industrials/Multi-Industry	WEGE3 BZ	WGSEF	27.4	2%	0%	-6%
Rumo Logística	BZ	Rail Transport/Railroads	RAIL3 BZ	RUMOF	22.2	0%	0%	22%
Falabella	BZ	Retailing-Broadline/Department Stores	FALAB CI	XDIYF	21.8	1%	-5%	21%
Natura	BZ	Cosmetics/Personal Care	NTCO3 BZ	XZVAF	20.4	0%	-5%	28%
DASA	BZ	Healthcare Technology & Distribution	DASA3 BZ	DIAOF	20.3	0%	4%	-6%
TOTVS	BZ	Server & Enterprise Software	TOTS3 BZ	XBEGF	20.2	1%	-7%	-3%
Smartfit	BZ	Leisure	SMFT3 BZ	XSMRF	20.1	0%	-6%	53%
Cuervo	BZ	Spirits, Wines & Ciders	CUERVO* MM	BCCLF	19.9	1%	-11%	0%
Vesta	MX	Real Estate/Property	VESTA* MM	VESTF	18.9	2%	-9%	26%
Bimbo	BZ	Bakers	BIMBOA MM	GRBMF	17.7	1%	-4%	3%
Alsea	BZ	Restaurants	ALSEA* MM	ALSSF	17.5	0%	5%	73%
Energisa	BZ	Utilities-Other	ENGI11 BZ	XLXGF	16.5	3%	0%	7%
AES Brasil	BZ	Electric Utilities	AESB3 BZ	XDFDF	16.5	2%	-4%	13%
Eneva	BZ	Electric Utilities	ENEV3 BZ	XZUMF	16.3	1%	-2%	1%
Localiza	BZ	Car Rental	RENT3 BZ	LZRFF	15.6	2%	-10%	8%
Median							-4%	11%

Source: BofA Global Research, Bloomberg.

Stocks are selected from our LatAm universe of coverage regardless of the rating. Stocks must have at least 5y of trading. Screen criteria: Mkt Cap>US\$1bn. 2021E and 2022E fwd P/E ratio above MSCI LatAm median P/E. Dividend yield (2022E) below MSCI LatAm dividend yield. If results exceed 20 companies, those with the highest 2022E P/E ratio are selected. Fundamental ratings are not part of the screening criteria. This screen is not a recommended list either individually or as a group of stocks. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decision.

BofA GLOBAL RESEARCH

Exhibit 29: High dividend screen

This screen encompasses many utilities and banks.

Company	Country	Industry	BBG Ticker	BofA Ticker	Div. Yield 2023E	30D Performance (local crncy)	YTD Performance (local crncy)
Petrobras PN	BZ	Oils	PETR4 BZ	PTRBF	22.0	6%	41%
Danhos	BZ	REITs	DANHOS13 MM	GRFFF	12.1	-8%	-16%
CSN	BZ	Steels	CSNA3 BZ	SIDHF	11.8	-1%	-17%
Sanepar	BZ	Water Utilities	SAPR11 BZ	XJALF	10.8	-3%	25%
BB Seguridade	BZ	Insurance - Multi-line	BBSE3 BZ	XBDPF	10.1	2%	-6%
Banco do Brasil	BZ	Banks-Retail	BBAS3 BZ	XBBAF	10.0	-2%	37%
Auren Energia	BZ	Electric Utilities	AURE3 BZ	XZMXF	9.7	-3%	-8%
Usiminas	BZ	Steels	USIM5 BZ	USSPF	9.2	-5%	-8%
CPFL Energia	BZ	Electric Utilities	CPFE3 BZ	XPFGF	9.1	-2%	3%
Banco de Chile	CL	Banks-Retail	CHILE CI	XHNDF	9.1	-3%	4%
Banorte	BZ	Banks-Retail	GFNORTEO MM	GBOOF	8.8	0%	6%
Bajio	BZ	Banks-Retail	BBAJ100 MM	BBAJF	8.8	3%	-7%
Alpek	BZ	Chemicals-Major	ALPEKA MM	ALPKF	8.5	-12%	-46%
SQM	CL	Fertilizers	SQM US	SQM	8.4	-8%	-27%
TAESA	BZ	Electric Utilities	TAE11 BZ	XTAEF	8.3	-1%	0%
Banrisul	BZ	Banks-Retail	BRSR6 BZ	XGRBF	8.1	-4%	26%
Fibra Uno	BZ	REITs	FUNO11 MM	FBASF	8.0	9%	22%
Engie	BZ	Electric Utilities	EGIE3 BZ	XZDDF	7.7	-3%	9%
Cielo	BZ	Financial Services-Consumer/Commercial	CIEL3 BZ	CIOXF	7.7	-9%	-34%
Megacable	BZ	Telecom Services-Wireless/Cellular	MEGACPO MM	MHSDF	7.6	-5%	-24%
Median						-3%	-3%

Source: BofA Global Research, Bloomberg

Stocks are selected from our LatAm universe of coverage regardless of the rating. Stocks must have at least 5y of trading. Screen criteria: Mkt Cap>US\$1bn. Dividend yield

(2022E) above MSCI LatAm dividend yield. If results exceed 20 companies, those with the highest dividend yield are selected. Fundamental ratings are not part of the screening criteria. This screen is not a recommended list either individually or as a group of stocks. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decision.

BofA GLOBAL RESEARCH

Exhibit 30: Defensive screen

Many bond proxies, Utilities, Soft Drinks and Telecom.

Company	Country	Industry	BBG Ticker	BofA Ticker	Beta	Net Debt/EBITDA	30D Performance (local crncy)	YTD Performance (local crncy)
Cuervo	BZ	Spirits, Wines & Ciders	CUERVO* MM	BCCLF	-0.1	0.5	-11%	0%
Cementos Argo	BZ	Building Materials	CEMARGOS CB	XGSAF	-0.1	0.5	69%	41%
Soriana	BZ	Supermarkets/Food Retailers	SORIANAB MM	ONZBF	-0.1	0.5	11%	1%
GMexico Transportes	BZ	Rail Transport/Railroads	GMXT* MM	GMXTF	0.0	0.5	-2%	7%
Arca	BZ	Soft Drinks	AC* MM	EMBFV	0.0	0.5	-4%	0%
Fibra PL	BZ	REITs	FIBRAPL MM	FBBPF	0.0	0.5	0%	9%
Kimberly Clark	BZ	Cosmetics/Personal Care	KIMBERA MM	KCDMF	0.0	0.5	-10%	9%
Prom y Oper Infra	BZ	Toll Road Operators	PINFRA* MM	PYOIF	0.1	0.5	-7%	-1%
Terraflina	BZ	REITs	TERRA13 MM	CBAOF	0.1	0.5	-5%	11%
Bimbo	BZ	Bakers	BIMBOA MM	GRBMF	0.1	0.5	-4%	3%
Liverpool Puerto	BZ	Retailing-Broadline/Department Stores	LIVEPOLC MM	ELPQF	0.1	0.5	-16%	-20%
Gruma	BZ	Food Producers	GRUMAB MM	GPAGF	0.1	0.5	0%	14%
PARAUCO	BZ	Real Estate/Property	PARAUCO CI	XNNJF	0.1	0.5	-1%	15%
Megacable	BZ	Telecom Services-Wireless/Cellular	MEGACPO MM	MHSDF	0.1	0.5	-5%	-24%
Alfa	BZ	Industrials/Multi-Industry	ALFAA MM	ALFFF	0.1	0.5	3%	-4%
Bci	BZ	Banks-Retail	BCI CI	BZCIF	0.1	0.5	-8%	7%
Gentera	BZ	Banks-Retail	GENTERA* MM	CMPRF	0.2	0.5	-2%	-5%
Qualitas	BZ	Insurance - Non-Life	Q* MM	QUCOF	0.2	0.5	-2%	53%
Fibra MQ	BZ	REITs	FIBRAMQ MM	DBMBF	0.2	0.5	-8%	5%
Alsea	BZ	Restaurants	ALSEA* MM	ALSSF	0.2	0.5	5%	73%
Median							-3%	6%

Source: BofA Global Research, Bloomberg

Stocks are selected from our LatAm universe of coverage regardless of the rating. Stocks must have at least 5y of trading. Screen criteria: Mkt Cap>US\$1bn. Net Debt/EBITDA <2 (this condition is ignored for Financials).

Beta relative to the local index <0.9. If results exceed 20 companies, those with the lowest beta are selected. Fundamental ratings are not part of the screening criteria.

This screen is not a recommended list either individually or as a group of stocks. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decision.

BofA GLOBAL RESEARCH

Exhibit 31: High Beta screen

Several Banks and Retail names in this screen.

Company	Country	Industry	BBG Ticker	BofA Ticker	Beta	Net Debt/EBITDA	30D Performance (local crncy)	YTD Performance (local crncy)
Magazine Luiza	BZ	Retailing-Hardlines	MGLU3 BZ	MGZZF	2.0	4.0	-30%	-25%
Banco inter	BZ	Banks-Retail	INTR US	INTR	1.9	NA	-13%	68%
Estacio	BZ	Education & Training Services	YDUQ3 BZ	ECPCF	1.6	2.7	-5%	93%
B3 SA	BZ	Financial Services-Consumer/Commercial	B3SA3 BZ	XIMAF	1.6	NA	-10%	-8%
Ecorodovias	BZ	Toll Road Operators	ECOR3 BZ	XVEDF	1.6	4.1	-4%	71%
BTG Pactual	BZ	Banks-Retail	BPAC11 BZ	XNXCF	1.5	NA	-7%	28%
Cosan	BZ	Energy Commodities	CSAN3 BZ	CSAIF	1.4	3.7	-7%	-1%
CSN	BZ	Steels	CSNA3 BZ	SIDHF	1.3	3.7	-1%	-17%
Natura	BZ	Cosmetics/Personal Care	NTCO3 BZ	XZVAF	1.3	4.2	-5%	28%
Localiza	BZ	Car Rental	RENT3 BZ	LZRFF	1.3	4.1	-10%	8%
DASA	BZ	Healthcare Technology & Distribution	DASA3 BZ	DIAOF	1.3	4.9	4%	-6%
Aliansce	BZ	Real Estate/Property	ALSO3 BZ	XCCGF	1.3	4.7	-7%	31%
Dexco	BZ	Forest Products	DXCO3 BZ	DURXF	1.2	4.0	-7%	14%
Alpargatas	BZ	Footwear	ALPA4 BZ	SRDDF	1.2	28.9	-15%	-47%
Banco do Brasil	BZ	Banks-Retail	BBAS3 BZ	XBBAF	1.2	NA	-2%	37%
Iguatemi	BZ	Real Estate/Property	IGTI11 BZ	XBGQF	1.2	2.3	-6%	8%
Embraer	BZ	Aerospace	ERJ US	ERJ	1.2	2.6	-13%	24%
MRV	BZ	Homebuilders	MRVE3 BZ	XVEMF	1.2	26.2	-14%	35%
Median							-7%	19%

Source: BofA Global Research, Bloomberg

Stocks are selected from our LatAm universe of coverage regardless of the rating. Stocks must have at least 5y of trading. Screen criteria: Mkt Cap>US\$1bn. Net Debt/EBITDA >2 (this condition is ignored for Financials). Beta relative to the local index >1.1. If results exceed 20 companies, those with the highest beta are selected. Fundamental ratings are not part of the screening criteria.

This screen is not a recommended list either individually or as a group of stocks. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decision. Fundamental ratings are shown only for information and are not part of the screening criteria

BofA GLOBAL RESEARCH

Exhibit 32: List of stocks within our coverage most discounted to historicals

Commodity exporters with large earnings this and next year have depressed ratios, as well as many financial names.

Company	Country	Industry	BBG Ticker	BofA Ticker	Discount to hist.	Current Valuation	10-Year Avg. Valuation	Net Debt/EBITDA	30D Performance (local crncy)	YTD Performance (local crncy)
Embraer	BZ	Aerospace	ERJ US	ERJ	-76%	6.5	26.7	2.6	-13%	24%
YPF SA	AR	Oil & Gas Producers	YPF US	YPF	-72%	2.2	7.7	2.2	-15%	37%
Rumo Logistica	BZ	Rail Transport/Railroads	RAIL3 BZ	RUMOF	-70%	22.2	75.0	2.4	0%	22%
Omega Geração	BZ	Renewable Energy	MEGA3 BZ	XZQAF	-67%	35.6	108.5	7.9	-11%	1%
Cielo	BZ	Financial Services-Consumer/Commercial	CIEL3 BZ	CIOXF	-65%	4.6	13.2	NA	-9%	-34%
Magazine Luiza	BZ	Retailing-Hardlines	MGLU3 BZ	MGZZF	-55%	0.5	1.2	4.0	-30%	-25%
Natura	BZ	Cosmetics/Personal Care	NTCO3 BZ	XZVAF	-54%	1.0	2.1	4.2	-5%	28%
Ecorodovias	BZ	Toll Road Operators	ECOR3 BZ	XVEDF	-53%	7.1	15.0	4.1	-4%	71%
Fleury	BZ	Healthcare Technology & Distribution	FLRY3 BZ	XPOXF	-51%	12.1	24.5	2.5	0%	3%
Eletrobras	BZ	Electric Utilities	ELET3 BZ	CAIFF	-38%	7.3	11.7	2.8	-1%	-14%
BTG Pactual	BZ	Banks-Retail	BPAC11 BZ	XNXCF	-35%	17.2	26.2	NA	-7%	28%
Arcos Dorados	BZ	Restaurants	ARCO US	ARCO	-32%	5.2	7.7	3.4	-8%	13%
Banco de Chile	CL	Banks-Retail	CHILE CI	XHNDF	-32%	1.9	2.8	NA	-3%	4%
CSN	BZ	Steels	CSNA3 BZ	SIDHF	-30%	4.6	6.5	3.7	-1%	-17%
Alpargatas	BZ	Footwear	ALPA4 BZ	SRDDF	-27%	9.5	13.0	28.9	-15%	-47%
Localiza	BZ	Car Rental	RENT3 BZ	LZRFF	-24%	15.6	20.6	4.1	-10%	8%
Banco do Brasil	BZ	Banks-Retail	BBAS3 BZ	XBBAF	-24%	0.8	1.1	NA	-2%	37%
Dexco	BZ	Forest Products	DXCO3 BZ	DURXF	-23%	5.9	7.7	4.0	-7%	14%
Assaí Atacadista	BZ	Supermarkets/Food Retailers	ASA13 BZ	XFCXF	-22%	5.7	7.4	4.1	2%	-37%
Brasil Foods	BZ	Food Processors	BRFS3 BZ	BRFFF	-21%	6.1	7.7	6.9	6%	23%
Median									-6%	10%

Source: BofA Global Research, Bloomberg

Stocks are selected from our LatAm universe of coverage regardless of the rating. Stocks must have at least 5y of trading. Screen criteria: Mkt Cap>US\$1bn. Net Debt/EBITDA <2 (this condition is ignored for Financials). Valuation ratio < 10y hist avg (or longest available). Valuation ratios are chosen according to a company's sector: for Materials, Energy, Airlines and C. Staples EV/EBITDA is used; for Retail EV/Sales is used; for Financials Price/Book Value is used. For remaining sectors Price/Earnings is used. If results exceed 20 companies, those with the greatest discounts to historicals are selected.

This screen is not a recommended list either individually or as a group of stocks. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decision. Fundamental ratings are shown only for information and are not part of the screening criteria

BofA GLOBAL RESEARCH

Stock screens methodology

Our monthly screens are a quantitative approach for monitoring performance across several investment strategies. The screens are generated through a quantitative process, using consensus projections and historical data. There are two main steps to the selection process: filtering and ranking. For each screening process, filter criteria is applied first, then resulting assets are ranked according to the core variable for each strategy. Each month, we select and rank the 20 stocks that best fit the screen criteria. The stocks are selected from our universe of coverage in LatAm regardless of the rating but must have a market cap above US\$1bn.

There are 5 different screens: Growth, Value, Dividends, Defensive and High Beta. Our Growth screen looks for companies with high projected growth that reinvests free cash flow. Our Value screen looks for companies with low or moderate leverage that are trading at a discounted valuation. The Dividends screen looks for companies with high dividend yields, supported by low moderate leverage. Defensive screen looks for assets with solid performance and lowest volatility while High beta screen looks for market-dependent assets with high leverage and volatility. We also provide a list of stocks within our coverage that are most discounted to historicals.

Out-of-consensus

Our out-of-consensus rank identifies companies where our estimates most diverge from consensus, according to EPS, (current and next year), EBITDA (current and next year), Sales (current and next year), ROE (current and next year) and Price Objective.

Details on how the views are ranked at the end of this section.

Our out of consensus highlights can fall in one of the following categories:

- Out of consensus in an upwards direction: stocks with a positive out of consensus Rank and BofA Buy rating, but less than 50% Buy ratings from consensus.
- Out of consensus in a downwards direction: stocks with a negative out of consensus Rank and BofA Neutral/Underperform rating, but more than 50% Buy ratings from consensus.

Exhibit 33: Top out of consensus stocks

Buy-rated stocks with a positive out of consensus ranking. 3 buy-rated stocks according to BofA are not buy-rated by most of consensus (highlighted).

Company name	BBG ticker	BofA ticker	Sector	Market Cap	Rank	BofA Rating	Consensus Rating			EPS Crncy	2023 EPS		2024 EPS	
							Buy	Hold	Sell		BofA	Cons.	BofA	Cons.
Coca-Cola Femsa	KOFUBL MM	COCSE	C. Staples	16,458	10.0	BUY	43%	57%	0%	MXN	9.8	9.3	11.9	10.5
Arca	AC* MM	EMBV	C. Staples	15,436	9.6	BUY	74%	21%	5%	MXN	11.0	10.0	13.3	11.2
Vitru Limited	VTRU US	VTRU	C. Discretionary	542	9.5	BUY	83%	17%	0%	BRL	8.3	7.7	13.0	11.7
TOTVS	TOTS3 BZ	XBEGF	IT	3,270	9.3	BUY	77%	23%	0%	BRL	0.9	1.0	1.3	1.3
Bajio	BBAJIO MM	BBAJF	Financials	3,846	9.1	BUY	31%	56%	13%	MXN	9.5	9.1	8.8	8.1
Parque Arauco	PARAU CO	XNNJF	Real Estate	1,245	8.4	BUY	70%	30%	0%	CLP	136.9	89.4	155.8	102.3
Vibra Energia SA	VBBR3 BZ	XUBRF	C. Discretionary	4,347	8.3	BUY	88%	13%	0%	BRL	1.6	1.3	1.6	1.9
Petro Rio	PRIO3 BZ	HRTPF	Energy	8,302	8.2	BUY	83%	11%	6%	USD	1.6	1.4	3.0	2.0
Cuervo	CUERVO* MM	BCCLF	C. Staples	8,631	8.0	BUY	71%	21%	7%	MXN	1.8	1.7	2.6	2.1
Natura &Co	NTCO3 BZ	XZVAF	C. Staples	4,079	7.9	BUY	46%	54%	0%	BRL	-0.3	-0.4	0.1	0.7
YDUQS	YDUQ3 BZ	ECPCF	C. Discretionary	1,200	7.7	BUY	73%	27%	0%	BRL	1.2	1.1	1.7	1.9
VTEX	VTEX US	VTEX	Telecom	945	7.6	BUY	67%	33%	0%	USD	0.0	-0.1	0.1	0.0
Afya Limited	AFYA US	AFYA	C. Discretionary	1,472	7.4	BUY	80%	20%	0%	BRL	7.0	5.8	8.2	7.7
Hapvida	HAPV3 BZ	XDUFF	Health Care	6,675	7.3	BUY	92%	8%	0%	BRL	0.1	0.0	0.2	0.2
XP Inc.	XP US	XP	Financials	12,571	7.1	BUY	73%	27%	0%	BRL	8.2	7.7	9.7	9.5

Highlighted rows: Out of consensus in an upwards direction. Stocks with a positive out of consensus Rank and BofA Buy rating, but less than 50% Buy ratings from consensus.

This screen is not a recommended list either individually or as a group of stocks. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decision. **Source:** BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH

Exhibit 34: Bottom out of consensus stocks

Neutral/Underperform-rated stocks with a negative out of consensus ranking. 10 Neutral/Underperform-rated stocks according to BofA are Buy-rated by most of consensus (highlighted).

Company name	BBG ticker	BofA ticker	Sector	Market Cap	Rank	BofA Rating	Consensus Rating			EPS Crncy	2023 EPS		2024 EPS	
							Buy	Hold	Sell		BofA	Cons.	BofA	Cons.
Liverpool	LIVEPOLC MM	ELPQF	C. Discretionary	7,524	-10.0	UND	47%	35%	18%	MXN	11.9	13.0	13.0	14.2
Cencosud	CENCOSUD CI	XCSCF	C. Staples	5,239	-9.9	NEU	69%	23%	8%	CLP	153.2	166.6	189.1	196.2
Even	EVEN3 BZ	EVCNF	C. Discretionary	248	-9.7	UND	44%	44%	11%	BRL	0.8	0.8	0.7	1.1
Alsea	ALSEA* MM	ALSSF	C. Discretionary	2,934	-9.6	UND	63%	26%	11%	MXN	1.8	2.5	2.3	3.6
M. Dias Branco	MDIA3 BZ	XDMIF	C. Staples	2,402	-9.5	NEU	60%	40%	0%	BRL	2.7	2.5	3.7	3.7
CBD	PCAR3 BZ	GPSAF	C. Staples	180	-8.9	UND	15%	77%	8%	BRL	-3.2	-3.2	-1.5	-1.1
Cyrela Brazil	CYRE3 BZ	XCBMF	C. Discretionary	1,591	-8.8	UND	80%	13%	7%	BRL	2.0	2.2	2.0	2.7
CCR	CCRO3 BZ	CDCRF	Industrials	5,125	-8.6	UND	75%	8%	17%	BRL	0.7	0.7	0.9	0.8
CVC	CVCB3 BZ	CVCBF	C. Discretionary	233	-7.8	UND	0%	71%	29%	BRL	-1.3	-1.0	-0.5	-0.2
Adcoagro	AGRO US	AGRO	C. Staples	1,250	-7.5	NEU	57%	43%	0%	USD	1.6	1.6	2.1	2.1
Itau Unibanco	ITUB4 BZ	ITUBF	Financials	48,763	-7.4	NEU	83%	17%	0%	BRL	3.6	3.6	4.0	3.9
Petz	PETZ3 BZ	XUXUF	C. Discretionary	429	-7.3	NEU	58%	42%	0%	BRL	0.2	0.1	0.3	0.3
CTEEP	TRPL4 BZ	XOETF	Utilities	3,416	-7.1	UND	20%	67%	13%	BRL	2.1	2.2	2.3	2.8
Randon	RAPT4 BZ	RPRTF	Industrials	703	-6.8	NEU	64%	36%	0%	BRL	1.5	1.5	1.4	1.6
Lojas Renner SA	LREN3 BZ	LORPF	C. Discretionary	2,560	-6.6	UND	69%	25%	6%	BRL	1.1	1.1	1.2	1.4

Highlighted rows: Out of consensus in a downwards direction. Stocks with a negative out of consensus Rank and BofA Neutral/Underperform rating, but more than 50% Buy ratings from consensus.

This screen is not a recommended list either individually or as a group of stocks. Investors should consider the fundamentals of the companies and their own individual circumstances/objectives before making any investment decision. **Source:** BofA Global Research, Bloomberg

BofA GLOBAL RESEARCH



Out-of-Consensus Rank Methodology

Our Out-of-Consensus Rank is a -10;10 scale that measures where BofA analyst estimates are diverging from market consensus. The closer the rank is to the extremes, the farther BofA estimates are from market consensus, which is based on Bloomberg consensus estimates.

For all stocks within our coverage, we look at the following forecasts:

EPS, (current and next year), EBITDA (current and next year), Sales (current and next year), ROE (current and next year) and Price Objective.

For each variable, the z-score is calculated as follows:

z-score = (BofA estimate – consensus estimate) / consensus estimate std dev

A z-score will be excluded from the sample if:

- Either BofA or consensus estimate is missing
- Number of estimates that make up the consensus is less than 3.
- Consensus has zero standard deviation
- For EPS, EBITDA and SALES, scores for both years are needed to avoid seasonality. If one year is missing the other will also be excluded.
- Z-score > 5. Such cases are probably because of lack of reliable data.
- ROE z-scores are only considered for financials

A company will be excluded from the sample if:

- Does not have a PO z-score
- It has a PO z-score but does not have a z-score for at least one other variable
- It has a PO z-score but does not have a ROE z-score (financials only)

For each variable, z-scores are ranked and scaled into [-10;10]. The most out of consensus the estimate is, the closer to the range boundaries. The average rank is computed for all companies. For any given company, the average rank will only consider the available variables. The average rank is then re-scaled again from -10 to 10 to obtain the final Out Of Consensus Rank.

This Out-of-Consensus Rank methodology was inspired by [European Beat Factor - Out-of-consensus stocks under BofA Global Research coverage](#)

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Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster ^{R1}
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

^{R1} 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.

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