

Latam Equity Quant

EM flows remain focused on China

Investment Strategy

Key takeaways

- LatAm equity markets underperformed this week driven by lower commodity prices. We also saw higher inflation in BZ and US.
- Ibov ex-commodities trading at an 8% disc. vs historicals while Mexico trades at a 7% discount.
- Global EM equity funds had six weeks of inflows, but mostly into China.

Last year in numbers

Performance of the week: Ibov -1.3%, Mexbol -1.7%, EM -0.7%, SPX +1.8%. In USD terms, total return. Lower commodity prices this week were key factors for LatAm weak performance (Oil -1.7%, Iron ore -3.2%).

Valuation update: Ibov ex-commodities now trades at around 8% disc. to hist, Exhibit 4). Mexbol is currently trading at 7% disc. to hist. (Exhibit 5).

Dec Inflation in BZ and in the US surprised to the upside. In BZ, inflation in Dec was above market expectations, driven by higher food prices. We still expect selic rate cuts of 50bp in the next meetings (see our report: [Brazil Watch](#)) and terminal selic at 9.5%. In the US, services inflation remain sticky-high, but our US economics team still expects the first Fed cut in March (see the report: [US Watch](#)).

Outflows from local equity/hedge funds in Brazil continue. R\$1.8bn net outflows from local equity funds last week, above avg of the past 3M (-R\$1bn/week). In 2023, outflows from BZ equity funds reached R\$57bn, but their AUM still grew thanks to a positive performance (+19% on avg for equity funds, according to ANBIMA).

Small outflows from hedge funds last week. We saw R\$4bn outflows from local hedge funds last week, close to the weekly avg of the last 3M (-R\$3.7bn, Exhibit 10). However, if we remove two outlier funds, outflows would be only -R\$0.8bn. In 2023, local hedge funds had R\$108bn outflows, but their AUM also grew as performance was positive last year (+10% on avg).

We saw inflows into EM equity funds in the past 6 weeks, after almost 2 months with no inflows. US\$2.3bn inflows into EM equity funds this week (Exhibit 14) but flows went mostly into China (Exhibit 1). YTD, EM equity funds had +US\$6bn inflows. Last year, we saw US\$94bn net inflows into Global EM equity funds (Exhibit 13).

Foreign inflows into Brazil local exchange (B3) are flat YTD (Exhibit 12). B3 had R\$60bn foreign inflows last year (flows picked up in Oct-23, Exhibit 12). For more details see the report [Flows to Know](#).

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Refer to important disclosures on page 15 to 17.

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Investment Strategy
Latin America

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Exhibit 1: LatAm Earnings Revision Ratio

Earnings Revision Ratio = #Up Revisions / #Down Revisions. Brazil ERR at 0.9. Sector details in Exhibit 23.

LatAm countries	Nov-23	Dec-23
Argentina	1.1	1.2
Brazil	0.8	0.9
Chile	1.0	0.9
Colombia	0.6	0.6
Mexico	0.8	0.8
Peru	0.4	0.4
LatAm	0.8	0.8

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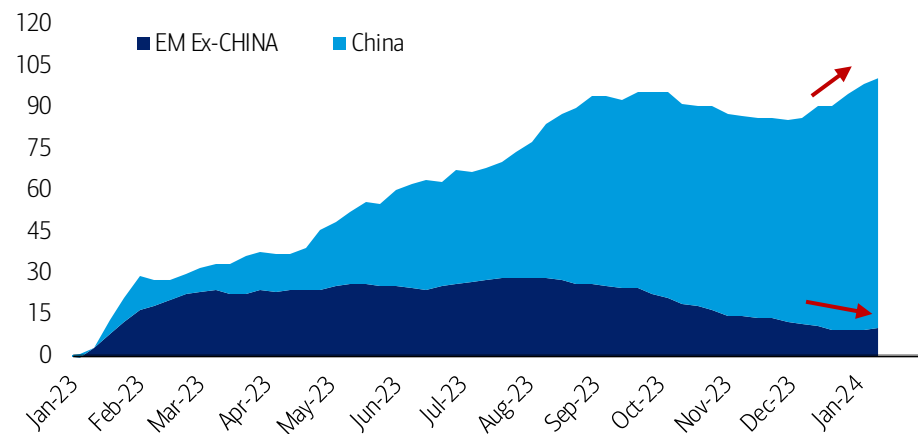
BZ = Brazil

EM = Emergent Markets

ERR = Earnings Revision Ratio

Exhibit 2: Cumulative flows into EM equity funds (Jan-23 – Jan-24)

Inflows in the past 6 weeks went mostly into China



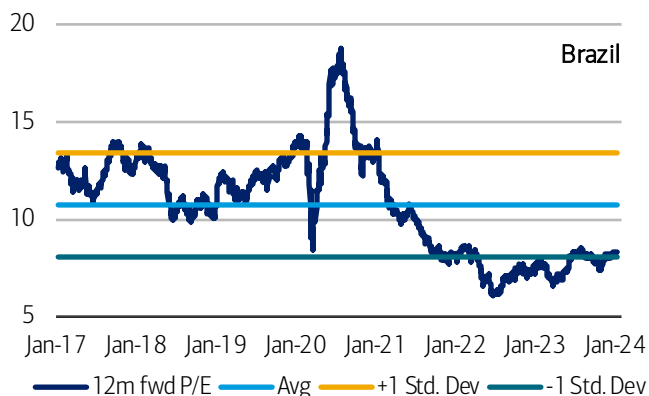
Source: EPFR

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LatAm valuation

Exhibit 3: Ibovespa P/E ratio (12m fwd)

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

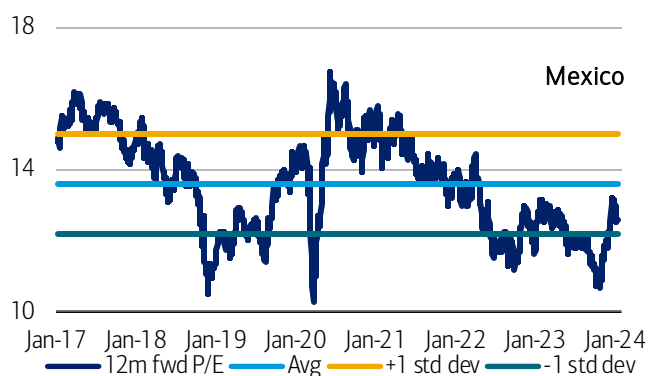


Source: BofA Global Research, Bloomberg

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Exhibit 5: Mexbol P/E ratio, Jan-17 to Jan-24

Trading below historical average.

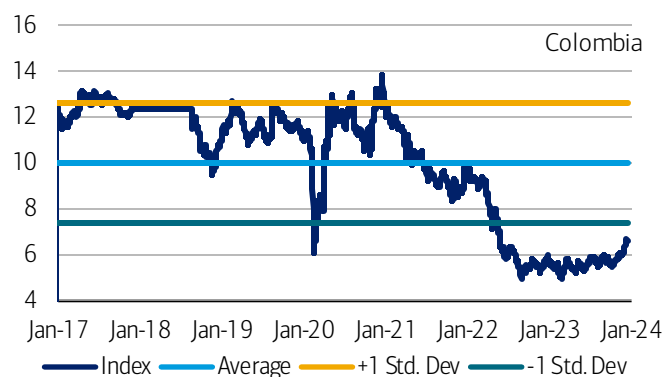


Source: BofA Global Research, Bloomberg

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Exhibit 7: Colcap P/E ratio, Jan-17 to Jan-24

Trading more than 1 Std Dev below historical average.

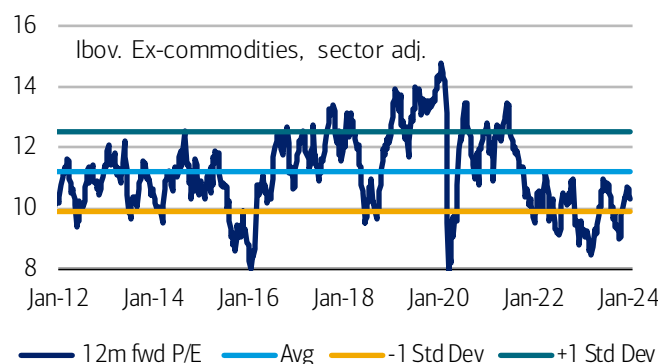


Source: BofA Global Research, Bloomberg

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Exhibit 4: Ibovespa P/E ratio (12m fwd, sector adjusted ex. commodities)

Ibov ex-commodities at 8% discount vs hist



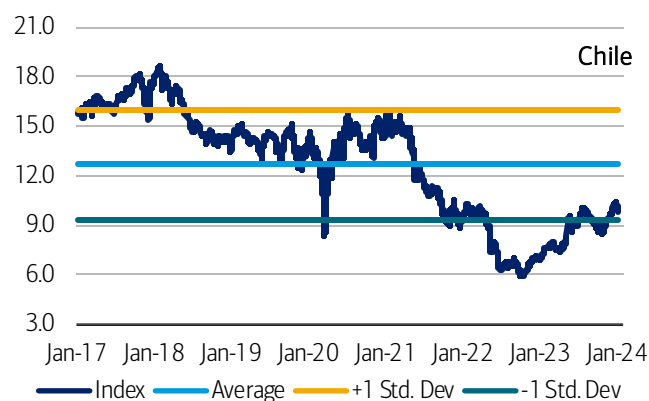
Note: Sector weights were adjusted and kept constant through time.

Source: BofA Global Research, Bloomberg

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Exhibit 6: IPSA P/E ratio, Jan-17 to Jan-24

Trading 1 Std Dev below historical average.



Source: BofA Global Research, Bloomberg

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Exhibit 8: Valuation summary

Brazil 23% discounted vs hist.

Country	Index	Current	Average	Std. Dev	Prem. to Hist	Prem. to EM*
Brazil	Ibov	8.3	10.7	2.7	-23%	-31%
BZ Ex-commod.		10.3	11.2	1.3	-8%	-10%
Mexico	Mexbol	12.6	13.6	1.4	-7%	11%
Chile	Ipsa	9.8	12.7	3.4	-22%	-12%
Peru	SPBLPGPT	11.0	12.1	2.6	-9%	4%
Colombia	Colcap	6.7	10.0	2.6	-34%	-49%
Argentina	Merval	6.2	9.7	3.0	-36%	-99%
EM	MXEF	11.4	12.2	1.2	-6%	-

Source: BofA Global Research, Bloomberg

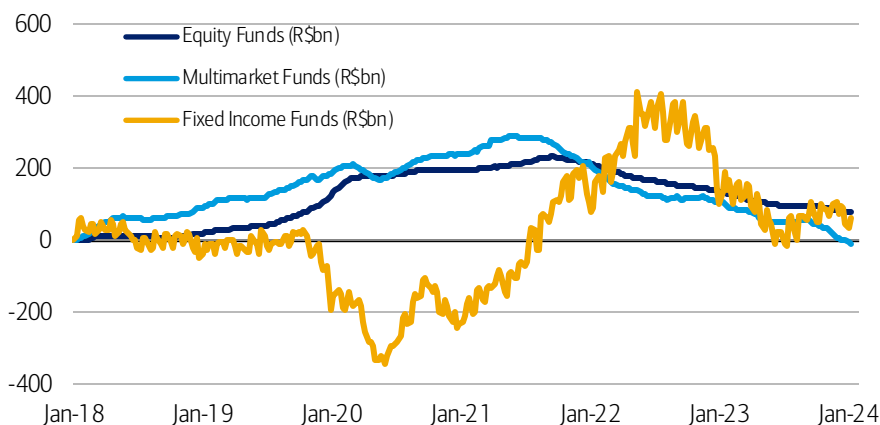
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Flows & Positioning

Brazil flows

Exhibit 9: Cumulative flows into Brazil local fixed income, equity funds and local multimarket (hedge) funds (R\$bn)

R\$57bn outflows from local equity funds in 2023.



Source: BofA Global Research, Economática

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Exhibit 10: Equity and Multimarket funds weekly flows (R\$mnn) (Brazil local funds)

R\$57bn outflows from local equity funds in 2023.

Fund type (R\$ mn)	AUM	10-Nov	17-Nov	24-Nov	1-Dec	8-Dec	15-Dec	22-Dec	29-Dec	5-Jan	12-Jan*	2024	2023	2022
Free Portfolio	255,834	-597	-323	-679	21	-162	-982	-111	-547	-1,064	-398	-1,462	-35,568	-42,836
Closed-end Funds	121,037	1	15	21	331	2	4	-523	148	2	2	3	373	2,377
Index Enhanced	43,894	-392	-640	-639	-213	-145	-421	-583	-124	-669	-217	-886	-11,081	-16,714
Value / Growth	18,621	-94	-56	-104	-150	63	33	-4	-67	-85	5	-80	-4,634	-6,745
FMP - FGTS	13,001	-22	-26	-43	-34	-35	-42	-39	-20	-25	-7	-32	-1,269	4,462
Dividends	12,092	-83	-249	-78	-198	11	-116	-479	-105	-77	3	-74	-2,658	-434
Sector	11,690	-17	-28	-20	-11	-10	-21	-16	-5	-10	-8	-17	420	-1,860
Indexed	11,068	-260	-242	-130	-290	-95	-249	-104	-116	79	14	94	-2,045	-2,932
Small Caps	5,873	-10	25	-13	18	-23	-13	-64	-18	-33	-1	-34	-453	-2,243
Single Stocks	10,156	-25	-14	-52	-8	-26	-41	-22	-14	-1	-5	-6	-967	-2,225
Sustainability / Governance	52	0	0	2	0	0	0	0	0	0	0	0	0	-366
Foreign Investments	148,890	3,044	-131	123	-11	109	-196	498	4,030	-548	-18	-567	21,794	-18,740
Equity Funds (Total)	652,208	1,543	-1,669	-1,611	-544	-311	-2,042	-1,449	3,162	-2,431	-630	-3,062	-36,088	-88,257
Equity Funds (Total ex. Foreign Invest.)	369,279	-1,479	-1,527	-1,712	-831	-387	-1,809	-1,385	-996	-1,859	-607	-2,466	-56,986	-76,355
Free Portfolio	837,669	-1,989	-3,202	-1,988	-3,407	332	-2,540	-1,809	2,043	-2,550	-2,710	-5,260	-36,493	-69,300
Foreign Investments	767,929	-8,217	-4,705	-1,950	-2,825	-1,834	-10,537	-10,396	-2,411	-3,381	105	-3,276	-69,450	-22,102
Macro	234,371	-2,115	-1,900	-2,837	-2,876	-1,798	-1,259	-1,320	-1,134	-1,287	-533	-1,820	-61,875	-14,754
Dynamic	46,925	-341	-318	-228	-578	-258	-132	-264	-291	-26	-41	-66	-7,210	-16,130
Specific Strategy	69,173	-19	48	-286	-404	-154	67	-537	62	-27	15	-12	2,110	-2,279
Long/Short Directional	7,733	-52	-29	-31	-58	-21	-2	10	-93	-125	4	-121	-2,555	-3,384
Balanced / Mixed	11,985	3	-16	-98	-49	36	-6	-48	-31	42	-20	23	-1,065	-54
Trading	3,515	-9	-12	-25	-11	-4	-8	-18	13	-8	-3	-11	-625	-1,154
Long/Short Neutral	2,365	26	8	-14	-18	-33	-13	-4	-9	-12	-2	-15	-381	-527
Protected Capital	809	0	-1	0	-2	0	-1	-1	0	0	0	0	73	-196
Multimarket Funds (Total)	1,982,474	-12,711	-10,127	-7,456	-10,228	-3,735	-14,432	-14,387	-1,851	-7,375	-3,185	-10,560	-177,471	-129,878
Multimarket Funds (Total ex. Foreign Invest.)	1,214,545	-4,495	-5,422	-5,507	-7,404	-1,900	-3,895	-3,991	560	-3,994	-3,290	-7,283	-108,022	-107,777

(*) Preliminary data, up to Wednesday.

Source: Economática

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Exhibit 11: Fixed Income funds weekly flows (R\$bn) (Brazil local funds)

Brazil local fixed income funds had inflows YTD

Fund type	AUM	15-Dec	22-Dec	29-Dec	5-Jan	12-Jan*	YTD
Short Duration Inv. Grade	1,008	-0.4	-7.0	3.5	5.8	2.2	8.0
Short Duration Sovereign	841	-14.4	-10.6	-4.6	14.9	12.7	27.6
All Duration Credit	362	0.2	1.8	0.9	1.2	1.9	3.1
All Duration Inv. Grade	753	2.8	-3.6	-3.8	-3.2	1.5	-1.6
All Duration Sovereign	230	1.5	-2.1	-6.7	3.7	3.7	7.4
Simple	343	1.8	-17.4	-3.6	6.9	2.3	9.2
Other	483	-0.5	-0.7	-0.2	1.9	0.8	2.7
Fixed Income (Total)	4,015	-9	-40	-14	31	25	56
Ex. Foreign Invest.							

(*) Preliminary data, up to Wednesday.

Source: Economica

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Exhibit 12: Foreign flow to B3 (R\$bn), Feb-23 to Jan-24

Foreign flows into B3 local exchange (B3) flat YTD.

Month	Futures	Cash	IPO/follow-on	TOTAL
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	3	-13
Sep-23	10	-2	0	8
Oct-23	5	-3	0	2
Nov-23	9	21	0	30
Dec-23	-7	17	0	11
Jan-24	-2	3	0	0
12M Cumulative	-6	35	12	41
2024 YTD	-2	3	0	0
2023	2	45	12	60
2022	-2	101	17	116

Source: B3, Bloomberg

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Global flows

Exhibit 13: Cumulative flows into EM equity funds (US\$bn), 2018-2024

EM equity funds had US\$2.3bn inflows this week.



Source: EPFR

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Exhibit 14: Weekly flows to LatAm and EM funds (US\$mn)

EM equity funds had US\$2.3bn inflows this week

Region	Week	% Current Assets	4 Weeks	% Current Assets	YTD	% Current Assets
LatAm	(69)	-0.6%	(121)	-1.1%	(103)	-1.0%
Brazil	(59)	-0.3%	37	0.2%	(111)	-0.6%
Mexico	(75)	-0.7%	(40)	-0.4%	(161)	-1.5%
Andean	9	0.3%	(97)	-3.0%	(103)	-3.1%
LatAmTotal	(189)	-0.4%	(198)	-0.5%	(471)	-1.1%
China	1,834	0.1%	10,757	0.7%	5,434	0.4%
EM Total	2,344	0.2%	10,215	0.7%	6,024	0.4%

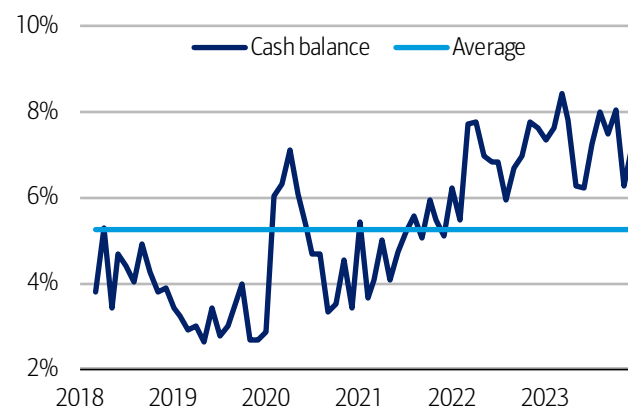
Source: EPFR

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LatAm positioning

Exhibit 15: Average cash position (2018-2023)

Cash levels at 7.1% in Dec-23, above historical avg of 5.3%.

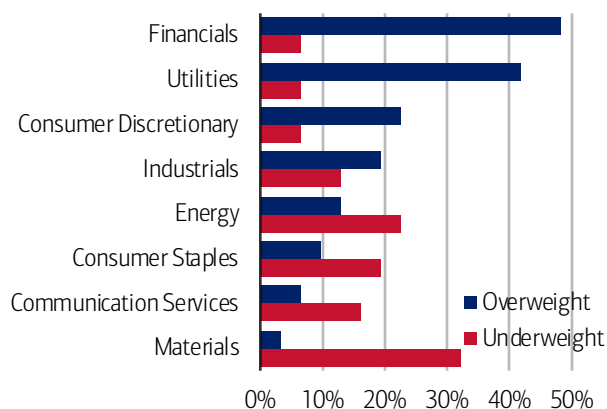


Source: LatAm Fund Manager Survey

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Exhibit 16: Which sectors among equities are you most underweight?

Participants are more underweight Materials, Communication Services, C. Staples and Energy than they are overweight.



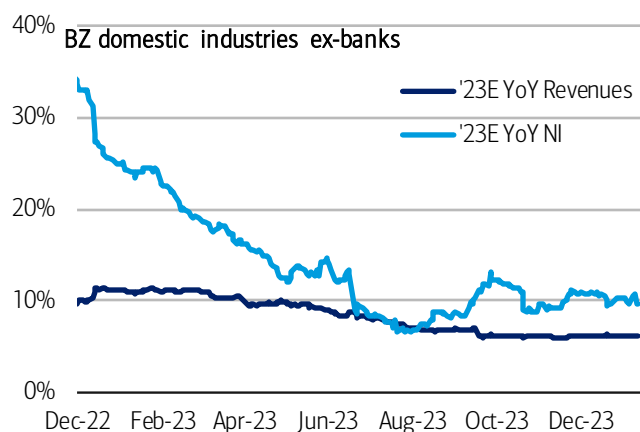
Source: LatAm Fund Manager Survey

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Consensus Earnings Revisions for Brazil

Exhibit 17: Brazil domestic industries: consensus revised NI downwards but still expected at 10% YoY growth

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



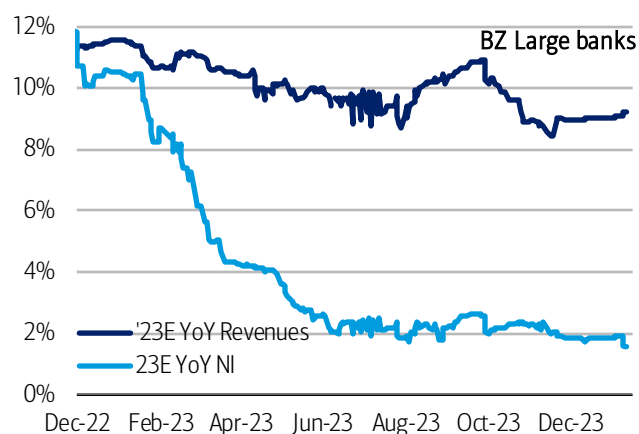
Consensus estimates.

Source: Bloomberg, BofA Global Research

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Exhibit 18: Brazil Banks: consensus revised NI downwards since Nov-22, but still expected at +2% 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 19: LatAm 3-month ERR – country details

Brazil 3-month ERR at 0.9 in Dec-23.

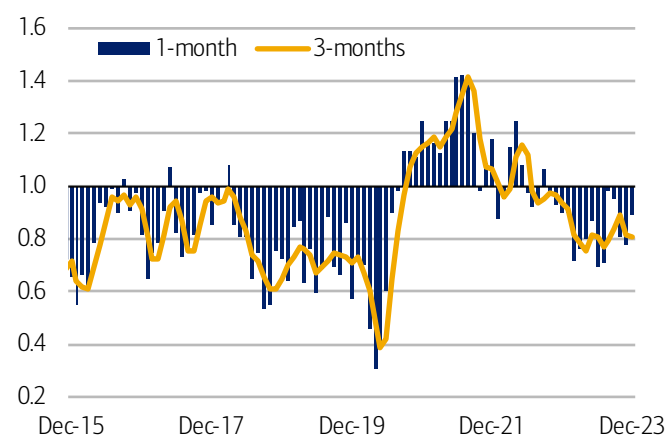
LatAm countries	12m Avg	Oct-23	Nov-23	Dec-23	1M Chg in 3M ERR
Argentina	2.5	2.1	1.1	1.2	0.13
Brazil	0.7	0.9	0.8	0.9	0.02
Chile	0.8	0.8	1.0	0.9	-0.07
Colombia	0.7	0.9	0.6	0.6	0.00
Mexico	1.0	0.9	0.8	0.8	-0.04
Peru	0.7	0.8	0.4	0.4	-0.09
LatAm	0.8	0.9	0.8	0.8	-0.01

Source: BofA Global Research, Factset, Bloomberg

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Exhibit 20: LatAm Earnings Revision Ratio (Dec 15-Dec 23)

3-month ERR at 0.9 in Oct-23.

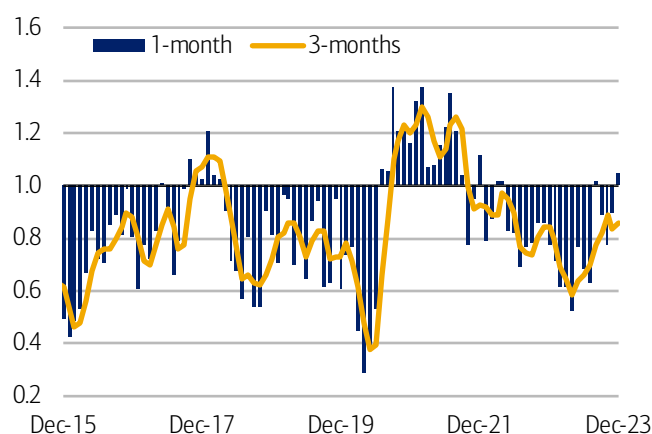


Source: BofA Global Research, Factset, Bloomberg

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Exhibit 22: Brazil Earnings Revision Ratio (Dec 15-Dec 23)

Communication and Real State show highest ERR in December.



Source: BofA Global Research, Factset, Bloomberg

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Exhibit 21: LatAm 3-month ERR – sector details

IT shows the highest ERR (1.9).

LatAm sectors	12m Avg	Oct-23	Nov-23	Dec-23	1M Chg in 3M ERR
C. Discretionary	0.8	0.9	0.9	0.8	-0.05
C. Staples	0.8	0.8	0.8	1.0	0.17
Energy	0.9	1.4	1.1	1.0	-0.09
Financials	1.3	1.4	1.1	1.0	-0.12
Health Care	0.7	1.0	0.6	0.6	0.03
Industrials	0.8	0.7	0.7	0.8	0.02
IT	1.3	0.9	1.5	1.9	0.37
Materials	0.6	0.6	0.5	0.5	-0.05
Real Estate	1.1	1.5	1.6	1.8	0.26
Communication	0.8	1.0	1.0	1.0	0.00
Utilities	1.1	1.4	1.5	1.5	-0.01
LatAm	1.0	2.0	1.0	0.6	-0.40

Source: BofA Global Research, Factset, Bloomberg

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Exhibit 23: Brazil 3-month ERR – sector details

Communication and Real State show highest ERR in December.

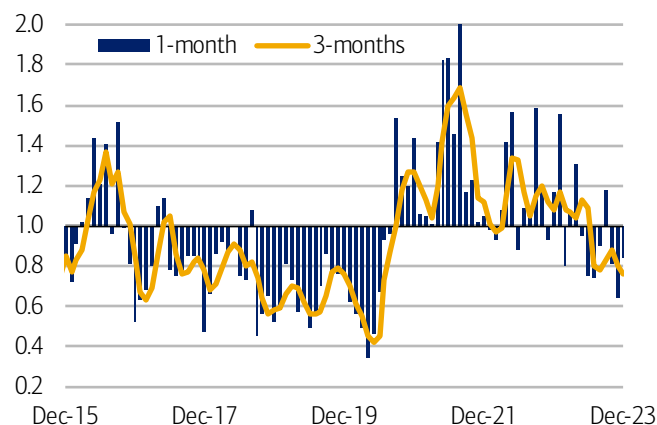
Brazil sectors	12m Avg	Oct-23	Nov-23	Dec-23	1M Chg in 3M ERR
C. Discretionary	0.6	1.0	0.9	0.8	-0.17
C. Staples	0.6	0.6	0.6	0.8	0.21
Energy	0.9	1.5	1.2	1.1	-0.03
Financials	1.2	1.5	1.2	1.1	-0.13
Health Care	0.6	0.9	0.5	0.6	0.06
Industrials	0.7	0.7	0.7	0.7	0.06
IT	1.4	0.9	1.8	2.4	0.57
Materials	0.5	0.5	0.5	0.5	-0.02
Real Estate	2.3	5.0	8.0	4.5	-3.50
Communication	3.7	19.0	4.8	4.3	-0.47
Utilities	1.1	1.4	1.5	1.5	0.02
Brazil	0.7	0.9	0.8	0.9	0.02

Source: BofA Global Research, Factset, Bloomberg

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Exhibit 24: Mexico Earnings Revision Ratio (Dec 15-Dec 23)

Financials has the highest ERR in Mexico (1.6 in December).



Source: BofA Global Research, Factset, Bloomberg

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Exhibit 25: Mexico 3-month ERR – sector details

Financials has the highest ERR in Mexico (1.6 in December).

Mexico sectors	12m Avg	Oct-23	Nov-23	Dec-23	1M Chg in 3M ERR
C. Discretionary	1.1	0.6	0.5	0.6	0.06
C. Staples	1.1	1.2	1.2	1.4	0.18
Energy	NA	NA	NA	NA	NA
Financials	2.4	1.8	1.9	1.6	-0.29
Health Care	NA	NA	NA	NA	NA
Industrials	0.9	0.7	0.7	0.7	-0.04
IT	NA	NA	NA	NA	NA
Materials	0.8	0.6	0.6	0.5	-0.05
Real Estate	0.8	1.0	0.8	1.1	0.33
Communication	0.4	0.4	0.3	0.1	-0.14
Utilities	NA	NA	NA	NA	NA
Mexico	1.0	0.9	0.8	0.8	-0.04

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 26: Value screen

Within this screen, homebuilders, food-commodities 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)
Petrobras PN	BZ	Oils	PETR4 BZ	PTBFB	4.1	4.1	0.8	12%	2%
Petro-Rio	BZ	Oil & Gas Producers	PRI03 BZ	HRTPF	7.2	5.2	1.1	4%	-1%
Ternium	MX	Steels	TX US	TX	9.1	5.3	-0.8	5%	-5%
Ecopetrol	CO	Oil & Gas Producers	ECOPETL CB	XESSF	5.5	5.3	1.6	-4%	1%
Vale ON	BZ	Non-Ferrous-Mining	VALE3 BZ	VALEF	6.6	5.7	0.6	-1%	-6%
Copa	CO	Airlines	CPA US	CPA	6.4	6.0	0.6	0%	-7%
Metalurgica Gerdau	BZ	Steels	GOAU4 BZ	MZGPF	3.6	6.1	0.4	-3%	-8%
Gerdau	BZ	Steels	GGBR4 BZ	GGBUF	4.6	6.4	0.5	-7%	-11%
Cemig	BZ	Electric Utilities	CMIG4 BZ	CEMCF	5.5	6.5	1.1	10%	5%
COPASA	BZ	Water Utilities	CSMG3 BZ	CSAOF	6.3	7.1	1.4	10%	8%
Sanepar	BZ	Water Utilities	SAPR11 BZ	XJALF	7.0	7.4	1.5	2%	-1%
Sao Martinho	BZ	Food-Commodities	SMT03 BZ	SRTOF	8.3	7.8	1.9	-7%	-9%
Liverpool Puerto	MX	Retailing-Broadline/Department Stores	LIVEPOLC MM	ELPQF	8.6	7.8	0.9	11%	-2%
SQM	CL	Fertilizers	SQM US	SQM	6.6	8.9	0.2	1%	-17%
Danhos	MX	REITs	DANHOS13 MM	GRFFF	10.0	9.4	1.9	7%	2%
CPFL Energia	BZ	Electric Utilities	CPFE3 BZ	XPFGF	9.1	9.5	1.5	3%	-1%
Engie	BZ	Electric Utilities	EGIE3 BZ	XZDDF	10.6	9.8	1.9	0%	-4%
Megacable	MX	Telecom Services-Wireless/Cellular	MEGACPO MM	MHSDF	11.6	10.6	1.5	-6%	0%
AMX	MX	Telecom Services-Wireless/Cellular	AMXB MM	AMXVF	11.7	10.7	2.0	-2%	-1%
Median								1%	-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 27: 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	66.1	0%	-4%	1%
Omega Geração	BZ	Renewable Energy	SRNA3 BZ	XZQAF	62.6	0%	9%	-4%
Mercado Libre	BZ	Internet/e-Commerce	MELI US	MELI	46.9	0%	-2%	1%
Marfrig	BZ	Food Processors	MRFG3 BZ	MRRTF	44.1	1%	-3%	-4%
Brasil Foods	BZ	Food Processors	BRFS3 BZ	BRFFF	36.8	0%	-9%	-9%
Raia Drogasil	BZ	Drug Store Chains	RADL3 BZ	RAIAF	32.3	1%	-1%	-4%
Eneva	BZ	Electric Utilities	ENEV3 BZ	XZUMF	27.8	1%	0%	-6%
WEG	BZ	Industrials/Multi-Industry	WEGE3 BZ	WGSEF	26.5	2%	-1%	-6%
TOTVS	BZ	Server & Enterprise Software	TOTS3 BZ	XBEGF	24.6	1%	0%	-4%
Vesta	MX	Real Estate/Property	VESTA* MM	VESTF	24.3	2%	2%	-4%
Alpargatas	BZ	Footwear	ALPA4 BZ	SRDDF	23.0	0%	1%	-11%
Falabella	CL	Retailing-Broadline/Department Stores	FALAB CI	XDIYF	23.0	1%	2%	1%
DASA	BZ	Healthcare Technology & Distribution	DASA3 BZ	DIAOF	22.1	0%	2%	-4%
Natura	BZ	Cosmetics/Personal Care	NTCO3 BZ	XZVAF	22.0	0%	-2%	-1%
AES Brasil	BZ	Electric Utilities	AESB3 BZ	XDFDF	21.2	1%	9%	2%
Rumo Logistica	BZ	Rail Transport/Railroads	RAIL3 BZ	RUMOF	21.1	0%	3%	1%
Ultrapar	BZ	Oil Refining & Marketing	UGPA3 BZ	XLRUF	18.2	2%	7%	3%
Bimbo	MX	Bakers	BIMBOA MM	GRBMF	18.1	1%	-3%	-1%
Localiza	BZ	Car Rental	RENT3 BZ	LZRFF	16.8	2%	1%	-4%
CCR	BZ	Toll Road Operators	CCRO3 BZ	CDCRF	16.8	3%	-1%	-3%
Median							0%	-4%

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 28: 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	PTBFB	21.2	12%	2%
Ecopetrol	CO	Oil & Gas Producers	ECOPETL CB	XESSF	17.3	-4%	1%
CSN	BZ	Steels	CSNA3 BZ	SIDHF	15.6	4%	-9%
Auren Energia	BZ	Electric Utilities	AURE3 BZ	XZMXF	14.7	2%	0%
Alpek	MX	Chemicals-Major	ALPEKA MM	ALPKF	12.3	-6%	-5%
Metalurgica Gerdau	BZ	Steels	GOAU4 BZ	MZGPF	12.1	-3%	-8%
SQM	CL	Fertilizers	SQM US	SQM	10.5	1%	-17%
Danhos	MX	REITs	DANHOS13 MM	GRFFF	10.1	7%	2%
BB Seguridade	BZ	Insurance - Multi-line	BBSE3 BZ	XBDPF	9.9	7%	-1%
Banco do Brasil	BZ	Banks-Retail	BBAS3 BZ	XBBAF	8.7	4%	-1%
Bradespar	BZ	Non-Ferrous-Mining	BRAP4 BZ	BRDQF	8.6	-1%	-6%
TAESA	BZ	Electric Utilities	TAE11 BZ	XTAEF	8.6	4%	-2%
Banco de Chile	CL	Banks-Retail	CHILE CI	XHNDF	8.5	1%	-4%
SLC Agrícola	BZ	Food-Commodities	SLCE3 BZ	SLCJF	8.4	-9%	-6%
Vale ON	BZ	Non-Ferrous-Mining	VALE3 BZ	VALEF	8.4	-1%	-6%
Banorte	MX	Banks-Retail	GFNORTEO MM	GBOOF	7.9	-1%	-3%
Megacable	MX	Telecom Services-Wireless/Cellular	MEGACPO MM	MHSDF	7.9	-6%	0%
CPFL Energia	BZ	Electric Utilities	CPFE3 BZ	XPFGF	7.8	3%	-1%
Median						2%	-2%

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 29: 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)
Soriana	MX	Supermarkets/Food Retailers	SORIANAB MM	ONZBF	0.2	1.9	6%	-4%
Chedraui	MX	Supermarkets/Food Retailers	CHDRAUIB MM	GCHF	0.3	1.9	0%	-2%
Copa	CO	Airlines	CPA US	CPA	0.3	0.6	0%	-7%
Auren Energia	BZ	Electric Utilities	AURE3 BZ	XZMXF	0.4	0.6	2%	0%
Danhos	MX	REITs	DANHOS13 MM	GRFFF	0.4	1.9	7%	2%
Qualitas	MX	Insurance - Non-Life	Q* MM	QUCOF	0.4	NA	-5%	-6%
BB Seguridade	BZ	Insurance - Multi-line	BBSE3 BZ	XBDPF	0.4	NA	7%	-1%
Coca-Cola Andina	CL	Soft Drinks	ANDINAB CI	AKOBF	0.4	2.0	8%	6%
Grupo Financiero Galicia	AR	Banks-Retail	GGAL US	GGAL	0.4	NA	-9%	-9%
Engie	BZ	Electric Utilities	EGIE3 BZ	XZDDF	0.4	1.9	0%	-4%
Banco Macro	AR	Banks-Retail	BMA US	BMA	0.5	NA	-6%	-11%
Liverpool Puerto	MX	Retailing-Broadline/Department Stores	LIVEPOLC MM	ELPQF	0.5	0.9	11%	-2%
Vivo	BZ	Telecom Equipment-Wireless/Cellular	VIVT3 BZ	XCPTF	0.5	0.7	-6%	-6%
TIM	BZ	Telecom Services-Wireless/Cellular	TIMS3 BZ	XZUAF	0.5	1.2	-5%	-5%
Gruma	MX	Food Producers	GRUMAB MM	GPAGF	0.5	1.7	-2%	0%
AmBev	BZ	Brewers	ABEV3 BZ	AVBPF	0.5	-0.6	-5%	-1%
Arca	MX	Soft Drinks	AC* MM	EMBF	0.5	0.5	-2%	-2%
Grupo BMV	MX	Other Financials	BOLSAA MM	BOMXF	0.5	NA	1%	-5%
Coca-Cola FEMSA	MX	Soft Drinks	KOFUBL MM	COCSF	0.5	0.8	-3%	-6%
Sanepar	BZ	Water Utilities	SAPR11 BZ	XJALF	0.6	1.5	2%	-1%
Median							0%	-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. 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 30: 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	2.3	3.0	-4%	1%
Banco inter	BZ	Banks-Retail	INTR US	INTR	1.9	NA	9%	-3%
Cemex	MX	Building Materials	CX US	CX	1.8	3.0	10%	1%
Volaris	MX	Airlines	VOLARA MM	CTTRF	1.7	4.5	4%	-7%
B3 SA	BZ	Financial Services-Consumer/Commercial	B3SA3 BZ	XIMAF	1.7	NA	1%	-4%
Banco Pan	BZ	Banks-Retail	BPAN4 BZ	XQSFF	1.6	NA	5%	-6%
Cogna	BZ	Education & Training Services	COGN3 BZ	KROTF	1.6	3.4	2%	-5%
Ecorodovias	BZ	Toll Road Operators	ECOR3 BZ	XVEDF	1.6	3.7	-1%	-3%
Televisa	MX	Cable TV	TLEVICPO MM	GRPFF	1.6	2.8	-14%	-16%
Estacio	BZ	Education & Training Services	YDUQ3 BZ	ECPCF	1.5	2.4	-1%	-7%
CSN	BZ	Steels	CSNA3 BZ	SIDHF	1.5	3.2	4%	-9%
BTG Pactual	BZ	Banks-Retail	BPAC11 BZ	XNXCF	1.4	NA	9%	0%
Cosan	BZ	Energy Commodities	CSAN3 BZ	CSAIF	1.4	3.2	12%	-1%
GFINbursa	MX	Banks-Retail	GFINBURO MM	GPFOF	1.3	NA	3%	-4%
Localiza	BZ	Car Rental	RENT3 BZ	LZRFF	1.3	3.6	1%	-4%
Brasil Foods	BZ	Food Processors	BRFS3 BZ	BRFFF	1.3	5.4	-9%	-9%
Credicorp	PE	Banks-Retail	BAP US	BAP	1.3	NA	18%	-1%
DASA	BZ	Healthcare Technology & Distribution	DASA3 BZ	DIAOF	1.3	5.0	2%	-4%
Embraer	BZ	Aerospace	ERJ US	ERJ	1.3	2.3	-7%	-3%
Dexco	BZ	Forest Products	DXCO3 BZ	DURXF	1.2	4.7	7%	-3%
Median							3%	-4%

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 31: 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)
Cogna	BZ	Education & Training Services	COGN3 BZ	KROTF	-91%	11.8	134.7	3.4	2%	-5%
Televisa	MX	Cable TV	TLEVICPO MM	GRPFF	-83%	1.8	10.2	2.8	-14%	-16%
Eneva	BZ	Electric Utilities	ENEV3 BZ	XZUMF	-79%	9.9	46.5	4.9	0%	-6%
Rumo Logistica	BZ	Rail Transport/Railroads	RAIL3 BZ	RUMOF	-71%	21.1	73.1	2.3	3%	1%
Embraer	BZ	Aerospace	ERJ US	ERJ	-67%	8.8	26.8	2.3	-7%	-3%
Magazine Luiza	BZ	Retailing-Hardlines	MGLU3 BZ	MGZZF	-53%	0.5	1.2	3.0	-4%	1%
Cielo	BZ	Financial Services-Consumer/Commercial	CIEL3 BZ	CIOXF	-48%	6.7	13.0	NA	9%	2%
Ecorodovias	BZ	Toll Road Operators	ECOR3 BZ	XVEDF	-45%	8.2	14.8	3.7	-1%	-3%
Gentera	MX	Banks-Retail	GENTERA* MM	CMPRF	-44%	1.5	2.6	NA	16%	-2%
Banrisul	BZ	Banks-Retail	BRSR6 BZ	XGRBF	-43%	0.6	1.0	NA	13%	2%
Bradesco	BZ	Banks-Retail	BBDC4 BZ	BRDPF	-42%	1.1	1.8	NA	-2%	-7%
Volaris	MX	Airlines	VOLARA MM	CTTRF	-40%	4.6	7.7	4.5	4%	-7%
GFINbursa	MX	Banks-Retail	GFINBURO MM	GPFOF	-37%	8.9	14.2	NA	3%	-4%
BB Seguridade	BZ	Insurance - Multi-line	BBSE3 BZ	XBDPF	-36%	8.3	13.0	NA	7%	-1%
Brasil Foods	BZ	Food Processors	BRFS3 BZ	BRFFF	-35%	5.9	9.1	5.4	-9%	-9%
Alpek	MX	Chemicals-Major	ALPEKA MM	ALPKF	-32%	4.4	6.4	2.7	-6%	-5%
Cencosud	CL	Retailing-Broadline/General Merchandisers	CENCOSUD CI	XCSCF	-32%	6.5	9.5	3.4	0%	-1%
DASA	BZ	Healthcare Technology & Distribution	DASA3 BZ	DIAOF	-29%	6.0	8.4	5.0	2%	-4%
Adecoagro	AR	Food-Commodities	AGRO US	AGRO	-29%	4.3	6.0	2.2	-3%	-2%
Median									1%	-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. 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.

Disclosures

Important Disclosures

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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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