

Latam Equity Quant

The Carnival of zero flows

Investment Strategy

Key takeaways

- US\$3bn inflows into EM equities this week, most of which went into China ETFs.
- No marginal buyer in Brazil: no EM inflows (ex-China), local funds posting small outflows, foreigners net sellers YTD.
- Ibovespa ex-commodities trades at 10% discount vs historicals.

Last week in numbers

Performance of the week. Ibov -0.6% (considering Carnival holidays in BZ on Jan 12th and 13th), Mexbol flat, SPX flat, EM +0.3%. Lower iron ore prices were the biggest headwinds in BZ (-2% this week). YTD, the weak iron ore performance (-10.2% YTD) is also a key factor explaining the poor Ibov performance (Ibov was down 7%, in USD terms, total return). Materials remain biggest underweight sector in LatAm in Feb-24 (Exhibit 15).

In our [LatAm Fund Manager Survey](#), we see less conviction on Ibov and BRL. Cash was slightly up in Feb but seemingly at neutral levels. Meanwhile, the [Global Fund Manager Survey](#) is the most bullish FMS in two years, cash levels cut to 4.2% from 4.8% as global growth expectations hit two-year highs and investors go all-in on US tech.

Valuations remain discounted in LatAm. In Brazil, Ibov ex-commodities trades at 10% discount vs historicals (vs around 5% discount in the beginning of 2024, Exhibit 3). Mexbol now trades at 8% discount vs historicals (Exhibit 7).

Outflows from BZ equity funds are getting smaller. Outflows from BZ local equity funds were flat last week and in the last month, compared to the average of -R\$0.8bn/week in the last 3M (Exhibit 9). Hedge funds continue to have outflows but also smaller. Last week, we saw R\$0.8bn outflows into local hedge funds, compared to -R\$3bn/week in the last three months, Exhibit 9).

No foreign flows in Brazil YTD (Exhibit 11). In fact, we saw R\$18bn outflows from foreigners in BZ local exchange YTD, mostly redeemed from cash equities (Exhibit 11).

US\$3bn inflows into EM this week, most of which went into China (Exhibit 13) This is the 11th consecutive week of inflows into EM. Note that Central Huijin (China sovereign fund), which just vowed to boost ETF holdings (see [China's Equity Strategist's Diary](#)).

For more details see [Flows to know](#).

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Refer to important disclosures on page 14 to 16.

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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 22.

LatAm countries	Dec-23	Jan-24
Argentina	1.2	1.2
Brazil	0.9	1.0
Chile	0.9	1.0
Colombia	0.6	0.3
Mexico	0.8	1.0
Peru	0.4	0.6
LatAm	0.8	0.9

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

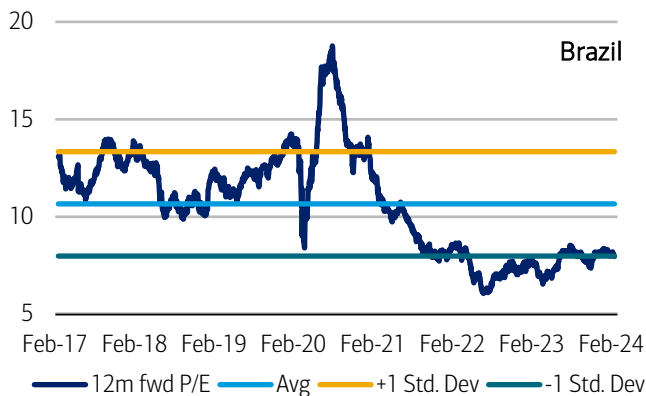
EM = Emerging Markets

ERR = Earnings Revision Ratio

LatAm valuation

Exhibit 2: Ibovespa P/E ratio (12m fwd)

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

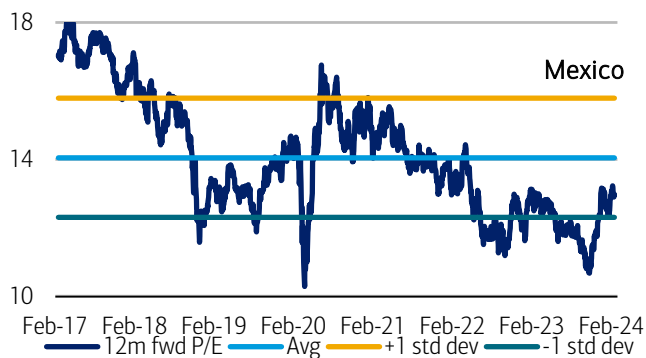


Source: BofA Global Research, Bloomberg

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Exhibit 4: Mexbol P/E ratio, Feb-17 to Feb-24

Trading at 8% discount vs hist.

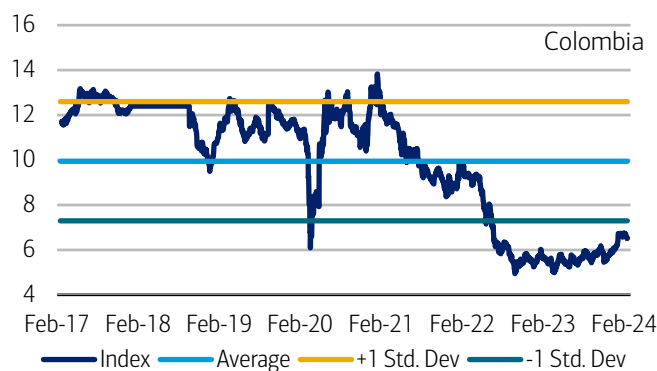


Source: BofA Global Research, Bloomberg

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Exhibit 6: Colcap P/E ratio, Feb-17 to Feb-24

Trading more than 1 Std Dev below historical average.

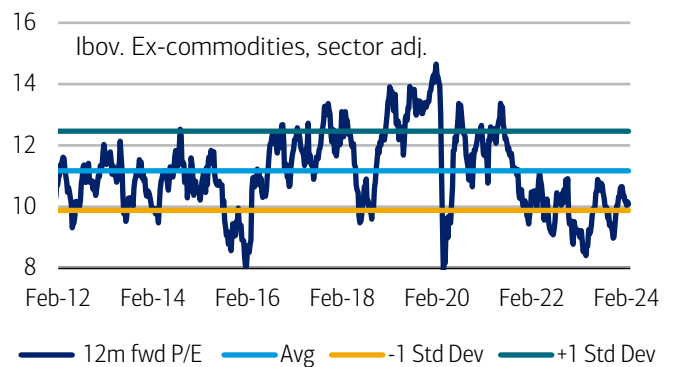


Source: BofA Global Research, Bloomberg

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Exhibit 3: Ibovespa P/E ratio (12m fwd, sector adjusted ex. commodities)

Ibov ex-commodities at 10% discount vs hist.



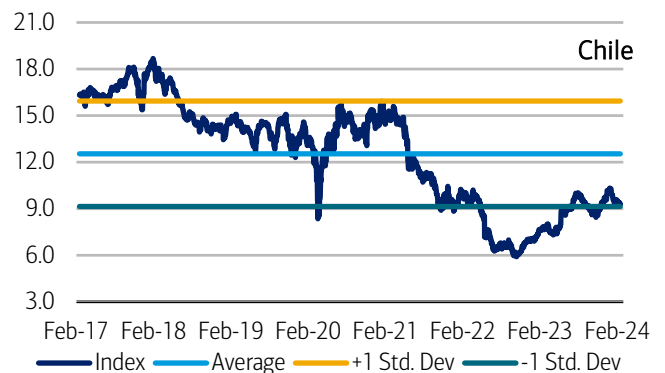
Note: Sector weights were adjusted and kept constant through time.

Source: BofA Global Research, Bloomberg

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Exhibit 5: IPSA P/E ratio, Feb-17 to Feb-24

Trading 1 Std Dev below historical average.



Source: BofA Global Research, Bloomberg

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Exhibit 7: Valuation summary

Brazil 25% discounted vs hist.

Country	Index	Current	Average	Std. Dev	Prem. to Hist	Prem. to EM*
Brazil	Ibov	8.0	10.7	2.7	-25%	-34%
BZ Ex-commod.		10.1	11.2	11.2	-10%	-13%
Mexico	Mexbol	13.0	14.0	1.7	-8%	13%
Chile	Ipsa	9.3	12.5	3.4	-26%	-19%
Peru	SPBLPGPT	11.7	12.1	2.6	-3%	8%
Colombia	Colcap	6.5	9.9	2.7	-35%	-50%
Argentina	Merval	6.2	9.6	3.0	-35%	-30%
EM	MXEF	11.6	12.2	1.2	-5%	-

Source: BofA Global Research, Bloomberg

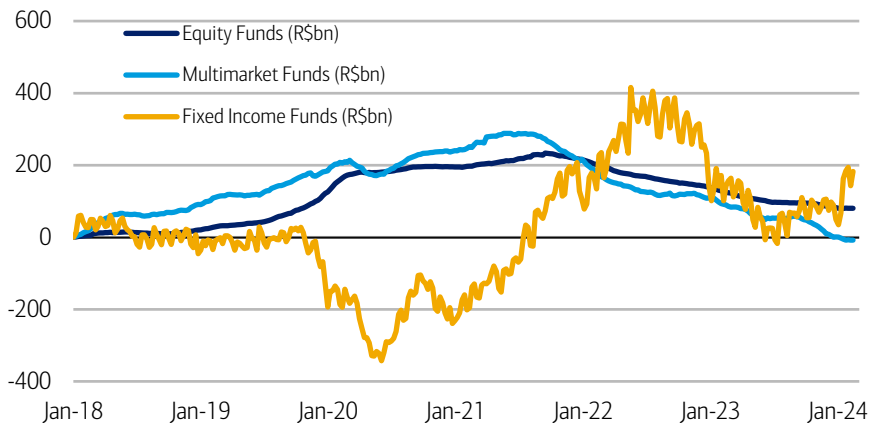
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Flows & Positioning

Brazil flows

Exhibit 8: 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 9: Equity and Multimarket funds weekly flows (R\$m) (Brazil local funds)

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

Fund type (R\$ mn)	AUM	15-Dec	22-Dec	29-Dec	5-Jan	12-Jan	19-Jan	26-Jan	2-Feb	9-Feb	16-Feb*	2024	2023	2022
Free Portfolio	255,270	-982	-111	-547	-1,145	-482	636	831	8	-99	0	-251	-35,568	-42,836
Closed-end Funds	126,379	4	-523	148	-272	34	37	15	99	18	0	-70	373	2,377
Index Enhanced	42,085	-421	-583	-124	-669	-383	-10	-54	-256	-86	0	-1,457	-11,081	-16,714
Value / Growth	18,354	33	-4	-67	-85	-30	56	178	-112	85	0	91	-4,634	-6,745
FMP - FGTS	12,993	-42	-39	-20	-25	-29	-41	-27	-49	-32	0	-203	-1,269	4,462
Dividends	11,824	-116	-479	-105	-77	-6	-69	19	23	27	0	-84	-2,658	-434
Sector	11,367	-21	-16	-5	-10	-16	-12	-9	-5	-12	0	-63	420	-1,860
Indexed	10,736	-249	-104	-116	115	43	-32	82	62	3	0	273	-2,045	-2,932
Small Caps	5,403	-13	-64	-18	-33	-8	-4	-16	-101	-20	0	-182	-453	-2,243
Single Stocks	10,148	-41	-22	-14	-1	0	-16	-41	6	62	0	10	-967	-2,225
Sustainability / Governance	40	0	0	0	0	0	-9	0	0	0	0	-10	0	-366
Foreign Investments	154,694	-196	498	4,030	868	256	-17	47	109	76	0	1,339	21,794	-18,740
Equity Funds (Total)	659,294	-2,042	-1,449	3,162	-1,335	-622	519	1,028	-216	20	0	-606	-36,088	-88,257
Equity Funds (Total ex. Foreign Invest.)	365,227	-1,809	-1,385	-996	-1,905	-883	540	992	-375	-41	0	-1,672	-56,986	-76,355
Free Portfolio	810,560	-2,540	-1,809	2,043	1,083	-2,363	-2,743	-1,801	1,877	711	0	-3,235	-36,493	-69,300
Foreign Investments	794,836	-10,537	-10,396	-2,411	-1,372	-995	-761	-2,220	-475	-1,999	0	-7,822	-69,450	-22,102
Macro	232,511	-1,259	-1,320	-1,134	-1,284	-514	-126	-603	-825	-1,440	0	-4,792	-61,875	-14,754
Dynamic	46,328	-132	-264	-291	-26	-122	-134	-131	-283	-236	0	-933	-7,210	-16,130
Specific Strategy	71,011	67	-537	62	-27	254	-4	11	105	146	0	485	2,110	-2,279
Long/Short Directional	7,223	-2	10	-93	-122	-1	-27	50	-13	-19	0	-133	-2,555	-3,384
Balanced / Mixed	12,107	-6	-48	-31	42	-12	-20	11	-70	15	0	-34	-1,065	-54
Trading	3,088	-8	-18	13	0	-1	-10	-11	3	-1	0	-19	-625	-1,154
Long/Short Neutral	2,408	-13	-4	-9	-12	-3	-2	0	-1	-1	0	-18	-381	-527
Protected Capital	780	-1	-1	0	0	0	-13	0	-14	0	0	-27	73	-196
Multimarket Funds (Total)	1,980,851	-14,432	-14,387	-1,851	-1,719	-3,757	-3,839	-4,696	305	-2,824	0	-16,529	-177,471	-129,878
Multimarket Funds (Total ex. Foreign Invest.)	1,186,016	-3,895	-3,991	560	-346	-2,762	-3,078	-2,476	780	-825	0	-8,707	-108,022	-107,777

(*) Preliminary data, up to Wednesday (not available because of the Carnaval holidays in Brazil).

Source: Economática

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Exhibit 10: Fixed Income funds weekly flows (R\$bn) (Brazil local funds)

Brazil local fixed income funds had R\$97bn inflows YTD

Fund type	AUM	19-Jan	26-Jan	2-Feb	9-Feb	16-Feb*	YTD
Short Duration Inv. Grade	1,034	0.5	2.1	-7.1	2.4	0.0	12.2
Short Duration Sovereign	950	14.2	3.1	-16.0	29.5	0.0	88.0
All Duration Credit	372	3.3	1.9	-2.2	3.2	0.0	11.9
All Duration Inv. Grade	759	4.8	1.9	-9.9	-2.3	0.0	5.1
All Duration Sovereign	239	-1.1	0.8	-4.8	0.9	0.0	5.8
Simple	372	0.1	2.3	-10.4	5.1	0.0	24.1
Other	487	-0.5	-1.7	-0.9	0.9	0.0	0.7
Fixed Income (Total)	4,207	21	10	-51	40	0	148
Ex. Foreign Invest.							

(*) Preliminary data, up to Wednesday (not available because of the Carnival holidays in Brazil).

Source: Economática

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Exhibit 11: Foreign flow to B3 (R\$bn), Feb-23 to Jan-24

Foreign flows into BZ local exchange (B3) had R\$18bn outflows YTD.

Month	Futures	Cash	IPO/follow-on	TOTAL
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	-5	-8	1	-12
Feb-24	-1	-4	0	-5
12M Cumulative	-1	22	13	34
2024 YTD	-6	-12	1	-18
2023	2	45	13	60
2022	-2	101	17	116

Source: B3, Bloomberg

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Global flows**Exhibit 12: Cumulative flows into EM equity funds (US\$bn), 2018-2024**

EM equity funds had US\$51bn inflows YTD.



Source: EPFR

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Exhibit 13: Weekly flows to LatAm and EM funds (US\$m)

EM inflows YTD went almost entirely into China.

Region	Week	% Current Assets	4 Weeks	% Current Assets	YTD	% Current Assets
LatAm	(57)	-0.5%	(105)	-0.9%	(229)	-1.9%
Brazil	(144)	-0.9%	(374)	-2.2%	(486)	-2.9%
Mexico	77	0.8%	48	0.5%	(224)	-2.3%
Andean	(3)	-0.1%	(16)	-0.5%	(136)	-4.4%
LatAmTotal	(120)	-0.3%	(404)	-1.0%	(1,023)	-2.4%
China	2,956	0.2%	41,032	2.6%	48,826	3.1%
EM Total	3,093	0.2%	42,740	2.7%	51,256	3.3%

Source: EPFR

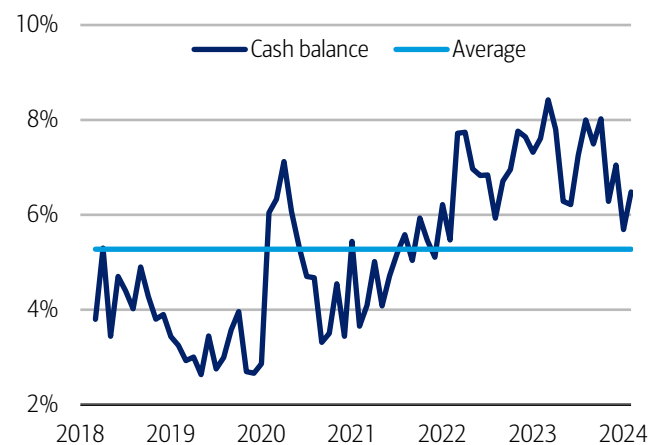
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LatAm positioning

Exhibit 14: Average cash position (2018-2024)

Cash levels increased to 6.5% in Feb-24, vs 5.7% last month

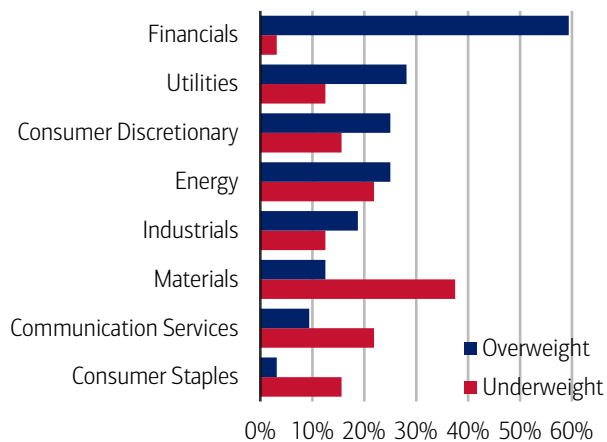


Source: LatAm Fund Manager Survey

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Exhibit 15: Which sectors among equities are you most underweight?

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



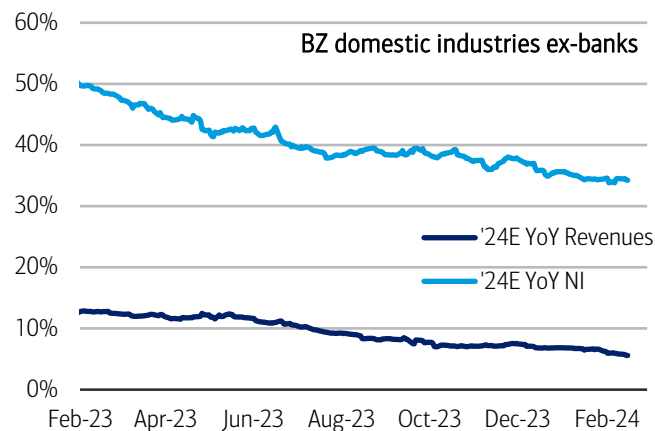
Source: LatAm Fund Manager Survey

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Consensus Earnings Revisions for Brazil

Exhibit 16: Brazil domestic industries: consensus revised NI downwards but still expected at 34% YoY growth

Brazil domestic industries (ex-banks) revenues vs NI consensus estimates (2024E YoY growth).



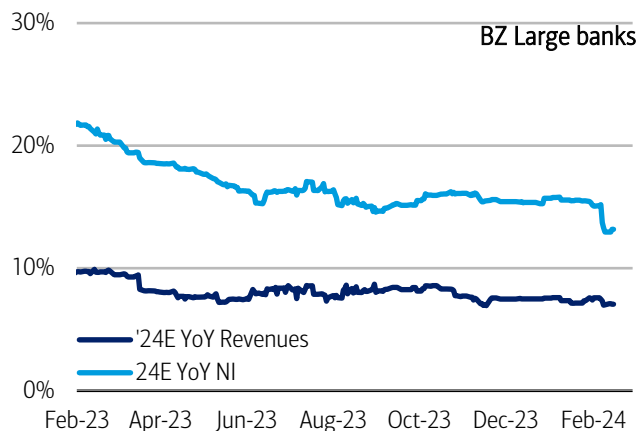
Consensus estimates.

Source: Bloomberg, BofA Global Research

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Exhibit 17: Brazil Banks: consensus revised NI downwards since Jan-23, but still expected at +13% YoY for 2024.

BZ large banks revenues vs NI consensus estimates (2024 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 18: LatAm 3-month ERR – country details

Brazil 3-month ERR at 0.9 in Jan-24.

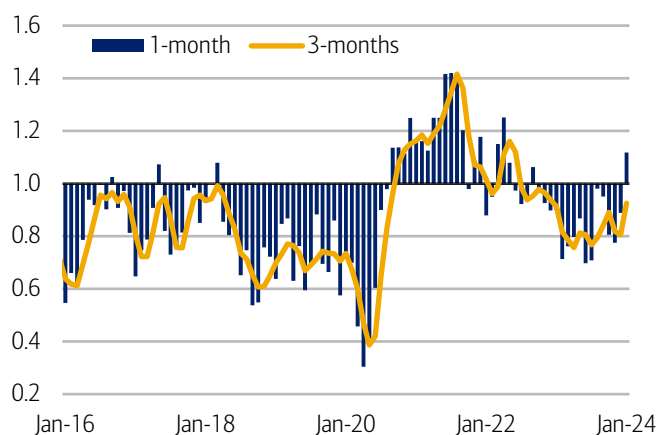
LatAm countries	12m Avg	Nov-23	Dec-23	Jan-24	1M Chg in 3M ERR
Argentina	2.5	1.1	1.2	1.2	0.01
Brazil	0.8	0.8	0.9	1.0	0.11
Chile	0.8	1.0	0.9	1.0	0.02
Colombia	0.6	0.6	0.6	0.3	-0.22
Mexico	0.9	0.8	0.8	1.0	0.19
Peru	0.7	0.4	0.4	0.6	0.26
LatAm	0.8	0.8	0.8	0.9	0.12

Source: BofA Global Research, Factset, Bloomberg

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Exhibit 19: LatAm Earnings Revision Ratio (Jan 16-Jan 24)

3-month ERR at 0.9 in Jan-24.



Source: BofA Global Research, Factset, Bloomberg

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Exhibit 20: LatAm 3-month ERR – sector details

IT shows the highest ERR (2.2).

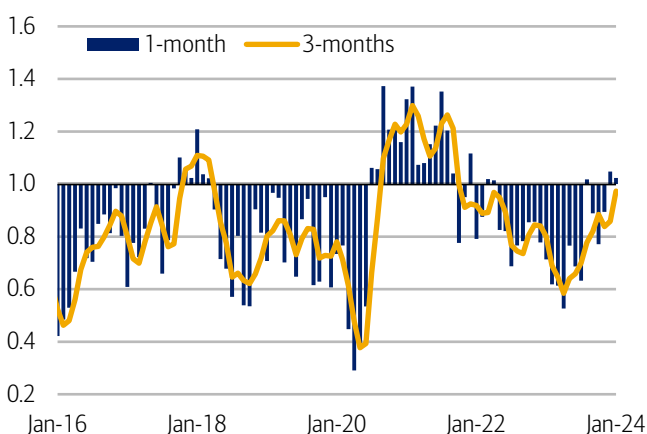
LatAm sectors	12m Avg	Nov-23	Dec-23	Jan-24	1M Chg in 3M ERR
C. Discretionary	0.8	0.9	0.8	0.8	-0.01
C. Staples	0.8	0.8	1.0	1.0	0.00
Energy	0.9	1.1	1.0	0.7	-0.27
Financials	1.3	1.1	1.0	1.1	0.13
Health Care	0.7	0.6	0.6	0.7	0.04
Industrials	0.8	0.7	0.8	0.9	0.12
IT	1.3	1.5	1.9	2.2	0.39
Materials	0.6	0.5	0.5	0.7	0.25
Real Estate	1.2	1.6	1.8	2.1	0.25
Communication	0.8	1.0	1.0	1.4	0.33
Utilities	1.1	1.5	1.5	1.2	-0.24
LatAm	0.8	0.8	0.8	0.9	0.12

Source: BofA Global Research, Factset, Bloomberg

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Exhibit 21: Brazil Earnings Revision Ratio (Jan 16-Jan 24)

Brazil 3-month ERR nearing to 1 in Jan-24.



Source: BofA Global Research, Factset, Bloomberg

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Exhibit 22: Brazil 3-month ERR – sector details

Communication and IT show highest ERR in December.

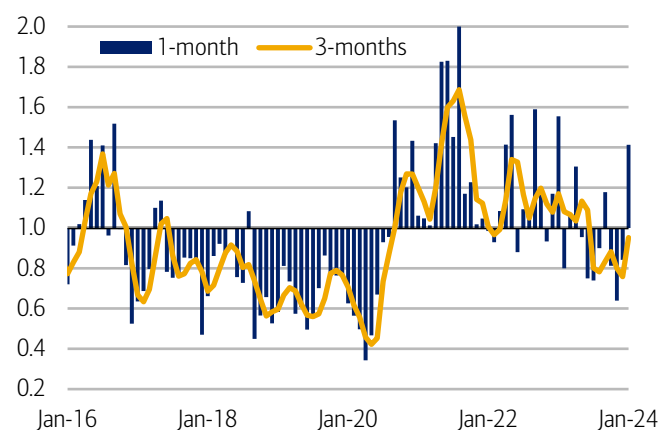
Brazil sectors	12m Avg	Nov-23	Dec-23	Jan-24	1M Chg in 3M ERR
C. Discretionary	0.6	0.9	0.8	0.7	-0.08
C. Staples	0.6	0.6	0.8	1.0	0.23
Energy	0.9	1.2	1.1	0.8	-0.29
Financials	1.2	1.2	1.1	1.2	0.12
Health Care	0.6	0.5	0.6	0.6	0.02
Industrials	0.7	0.7	0.7	0.8	0.07
IT	1.5	1.8	2.4	2.9	0.53
Materials	0.5	0.5	0.5	0.8	0.27
Real Estate	2.3	8.0	4.5	1.8	-2.75
Communication	3.8	4.8	4.3	3.7	-0.62
Utilities	1.1	1.5	1.5	1.3	-0.24
Brazil	0.8	0.8	0.9	1.0	0.11

Source: BofA Global Research, Factset, Bloomberg

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Exhibit 23: Mexico Earnings Revision Ratio (Jan 16-Jan 24)

Mexico 3-month ERR at 1 in Jan-24.



Source: BofA Global Research, Factset, Bloomberg

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Exhibit 24: Mexico 3-month ERR – sector details

Financials has the highest ERR in Mexico (2.1 in Jan-24).

Mexico sectors	12m Avg	Nov-23	Dec-23	Jan-24	1M Chg in 3M ERR
C. Discretionary	1.0	0.5	0.6	0.6	0.03
C. Staples	1.1	1.2	1.4	1.0	-0.43
Energy	NA	NA	NA	NA	NA
Financials	2.2	1.9	1.6	2.1	0.54
Health Care	NA	NA	NA	NA	NA
Industrials	0.8	0.7	0.7	0.9	0.21
IT	NA	NA	NA	NA	NA
Materials	0.8	0.6	0.5	0.8	0.28
Real Estate	0.9	0.8	1.1	1.7	0.58
Communication	0.4	0.3	0.1	0.1	-0.04
Utilities	NA	NA	NA	NA	NA
Mexico	0.9	0.8	0.8	1.0	0.19

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 25: Value screen

Within this screen, utilities and retail 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)
Vale ON	BZ	Non-Ferrous-Mining	VALE3 BZ	VALEF	5.8	5.0	0.6	-7%	-15%
Ternium	MX	Steels	TX US	TX	9.2	5.0	-0.8	-7%	-12%
Petrobras PN	BZ	Oils	PETR4 BZ	PTRBF	4.4	5.1	0.8	10%	13%
Petro-Rio	BZ	Oil & Gas Producers	PRI03 BZ	HRTPF	7.2	5.2	1.1	-3%	-3%
Copa	CO	Airlines	CPA US	CPA	6.3	5.6	0.7	9%	-5%
Ecopetrol	CO	Oil & Gas Producers	ECOPETL CB	XESSF	5.5	5.7	1.6	-1%	-2%
Metalurgica Gerdau	BZ	Steels	GOAU4 BZ	MZGPF	3.7	6.4	0.4	0%	-10%
Sanepar	BZ	Water Utilities	SAPR11 BZ	XJALF	6.3	6.6	1.6	-10%	-10%
Cemig	BZ	Electric Utilities	CMIG4 BZ	CEMCF	5.2	6.8	1.1	-3%	0%
COPASA	BZ	Water Utilities	CSMG3 BZ	CSAOF	6.2	6.8	1.4	-3%	6%
Gerdau	BZ	Steels	GGBR4 BZ	GGBUF	4.7	7.2	0.5	0%	-13%
SQM	CL	Fertilizers	SQM US	SQM	5.5	8.1	0.2	-15%	-31%
Liverpool Puerto	MX	Retailing-Broadline/Department Stores	LIVEPOLC MM	ELPQF	9.4	8.5	0.9	12%	9%
CPFL Energia	BZ	Electric Utilities	CPFE3 BZ	XPFGF	8.6	8.9	1.5	-3%	-6%
AMX	MX	Telecom Services-Wireless/Cellular	AMXB MM	AMXVF	10.9	9.3	2.0	-2%	-3%
Engie	BZ	Electric Utilities	EGIE3 BZ	XZDDF	10.1	9.3	1.9	-3%	-10%
GMexico	MX	Non-Ferrous-Mining	GMEXICOB MM	GMBXF	12.2	9.3	0.4	3%	-8%
Usiminas	BZ	Steels	USIM5 BZ	USSPF	10.8	9.4	0.0	17%	6%
Danhos	MX	REITs	DANHOS13 MM	GRFFF	9.2	9.6	1.9	-5%	-1%
Coca-Cola Andina	CL	Soft Drinks	ANDINAB CI	AKOBF	11.3	10.2	1.6	3%	10%
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. 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 26: 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	71.0	0%	-4%	-4%
Omega Geração	BZ	Renewable Energy	SRNA3 BZ	XZQAF	66.8	0%	4%	-2%
Mercado Libre	BZ	Internet/e-Commerce	MELI US	MELI	50.8	0%	6%	13%
Brasil Foods	BZ	Food Processors	BRFS3 BZ	BRFFF	44.1	0%	9%	3%
Raia Drogasil	BZ	Drug Store Chains	RADL3 BZ	RAIAF	31.0	1%	-8%	-13%
WEG	BZ	Industrials/Multi-Industry	WEGE3 BZ	WGSEF	25.5	2%	-1%	-10%
Natura	BZ	Cosmetics/Personal Care	NTCO3 BZ	XZVAF	24.6	0%	1%	-3%
Falabella	CL	Retailing-Broadline/Department Stores	FALAB CI	XDIYF	24.0	1%	11%	4%
FEMSA	MX	Brewers	FEMSAUBD MM	FMXUF	23.3	2%	9%	10%
DASA	BZ	Healthcare Technology & Distribution	DASA3 BZ	DIAOF	21.9	0%	-16%	-24%
Rumo Logística	BZ	Rail Transport/Railroads	RAIL3 BZ	RUMOF	20.3	0%	4%	3%
AES Brasil	BZ	Electric Utilities	AESB3 BZ	XDFDF	20.1	2%	-14%	-17%
TOTVS	BZ	Server & Enterprise Software	TOTS3 BZ	XBEGF	18.8	1%	-5%	-9%
Eneva	BZ	Electric Utilities	ENEV3 BZ	XZUMF	18.7	1%	-4%	-11%
Ultrapar	BZ	Oil Refining & Marketing	UGPA3 BZ	XLRUF	18.1	2%	8%	11%
Bimbo	MX	Bakers	BIMBOA MM	GRBMF	17.8	1%	-10%	-9%
Alsea	MX	Restaurants	ALSEA* MM	ALSSF	17.4	0%	8%	3%
Assaí Atacadista	BZ	Supermarkets/Food Retailers	ASAI3 BZ	XFCXF	16.9	1%	-7%	0%
Alpargatas	BZ	Footwear	ALPA4 BZ	SRDDF	14.9	0%	3%	-11%
Localiza	BZ	Car Rental	RENT3 BZ	LZRFF	14.6	2%	-14%	-18%
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. 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 27: High dividend screen

This screen encompasses many utilities, banks and commodities.

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	19.3	10%	13%
Ecopetrol	CO	Oil & Gas Producers	ECOPETL CB	XESSF	17.6	-1%	-2%
CSN	BZ	Steels	CSNA3 BZ	SIDHF	15.0	8%	-6%
Alpek	MX	Chemicals-Major	ALPEKA MM	ALPKF	13.7	-8%	-14%
SQM	CL	Fertilizers	SQM US	SQM	12.5	-15%	-31%
Metalurgica Gerdau	BZ	Steels	GOAU4 BZ	MZGPF	12.3	0%	-10%
Bradespar	BZ	Non-Ferrous-Mining	BRAP4 BZ	BRDQF	10.7	-7%	-15%
BanColombia	CO	Banks-Multinational/Universal	PFBICOLO CB	XAFFF	10.4	1%	3%
BB Seguridade	BZ	Insurance - Multi-line	BBSE3 BZ	XBDPF	10.2	-1%	-2%
Danhos	MX	REITs	DANHOS13 MM	GRFFF	10.0	-5%	-1%
Vale ON	BZ	Non-Ferrous-Mining	VALE3 BZ	VALEF	9.5	-7%	-15%
TAESA	BZ	Electric Utilities	TAE11 BZ	XTAEF	9.5	-4%	-6%
Banrisul	BZ	Banks-Retail	BRSR6 BZ	XGRBF	9.5	11%	12%
Banco do Brasil	BZ	Banks-Retail	BBAS3 BZ	XBBAF	9.2	4%	5%
CPFL Energia	BZ	Electric Utilities	CPFE3 BZ	XPFGF	8.7	-3%	-6%
Cemig	BZ	Electric Utilities	CMIG4 BZ	CEMCF	8.0	-3%	0%
Cemex	MX	Building Materials	CX US	CX	7.9	4%	-1%
SLC Agricola	BZ	Food-Commodities	SLCE3 BZ	SLCJF	7.8	4%	0%
Ternium	MX	Steels	TX US	TX	7.7	-7%	-12%
Fibra Uno	MX	REITs	FUNO11 MM	FBASF	7.5	2%	-2%
Median						-1%	-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 28: 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	0.1	1.9	0%	-4%
Danhos	MX	REITs	DANHOS13 MM	GRFFF	0.4	1.9	-5%	-1%
BB Seguridade	BZ	Insurance - Multi-line	BBSE3 BZ	XBDPF	0.4	NA	-1%	-2%
Auren Energia	BZ	Electric Utilities	AURE3 BZ	XZMXF	0.4	1.9	-2%	-2%
Chedraui	MX	Supermarkets/Food Retailers	CHDRAUIB MM	GCHEF	0.4	1.9	21%	21%
Coca-Cola Andina	CL	Soft Drinks	ANDINAB CI	AKOBF	0.4	1.6	3%	10%
TIM	BZ	Telecom Services-Wireless/Cellular	TIMS3 BZ	XZUAF	0.4	0.9	6%	1%
Vivo	BZ	Telecom Equipment-Wireless/Cellular	VIVT3 BZ	XCPTF	0.5	0.7	7%	1%
Grupo Financiero Galicia	AR	Banks-Retail	GGAL US	GGAL	0.5	NA	29%	17%
Copa	CO	Airlines	CPA US	CPA	0.5	0.7	9%	-5%
Engie	BZ	Electric Utilities	EGIE3 BZ	XZDDF	0.5	1.9	-3%	-10%
Banco Macro	AR	Banks-Retail	BMA US	BMA	0.5	NA	21%	9%
Qualitas	MX	Insurance - Non-Life	Q* MM	QUCOF	0.5	NA	20%	13%
AmBev	BZ	Brewers	ABEV3 BZ	AVBPF	0.5	-0.6	-3%	-6%
Gruma	MX	Food Producers	GRUMAB MM	GPAGF	0.5	1.7	1%	1%
Grupo BMV	MX	Other Financials	BOLSAA MM	BOMXF	0.5	NA	9%	3%
Sanepar	BZ	Water Utilities	SAPR11 BZ	XJALF	0.5	1.6	-10%	-10%
Banco de Chile	CL	Banks-Retail	CHILE CI	XHNDF	0.5	NA	13%	7%
Liverpool Puerto	MX	Retailing-Broadline/Department Stores	LIVEPOLC MM	ELPQF	0.5	0.9	12%	9%
Arca	MX	Soft Drinks	AC* MM	EMBVF	0.6	0.6	3%	2%
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. 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 29: 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%	-4%
Cemex	MX	Building Materials	CX US	CX	2.0	2.2	4%	-1%
Banco inter	BZ	Banks-Retail	INTR US	INTR	1.9	NA	9%	-2%
Televisa	MX	Cable TV	TLEVICO MM	GRPFF	1.6	2.8	11%	-9%
B3 SA	BZ	Financial Services-Consumer/Commercial	B3SA3 BZ	XIMAF	1.6	NA	-9%	-13%
Banco Pan	BZ	Banks-Retail	BPAN4 BZ	XQSFF	1.6	NA	11%	2%
Ecorodovias	BZ	Toll Road Operators	ECOR3 BZ	XVEDF	1.6	3.7	4%	-3%
Estacio	BZ	Education & Training Services	YDUQ3 BZ	ECPCF	1.5	2.4	-10%	-17%
CSN	BZ	Steels	CSNA3 BZ	SIDHF	1.5	3.2	8%	-6%
GFinbursa	MX	Banks-Retail	GFINBURO MM	GPFOF	1.4	NA	23%	17%
Cosan	BZ	Energy Commodities	CSAN3 BZ	CSAIF	1.4	3.2	1%	-4%
BTG Pactual	BZ	Banks-Retail	BPAC11 BZ	XNXCF	1.4	NA	-3%	-2%
DASA	BZ	Healthcare Technology & Distribution	DASA3 BZ	DIAOF	1.3	5.0	-16%	-24%
Brasil Foods	BZ	Food Processors	BRFS3 BZ	BRFFF	1.3	5.4	9%	3%
Embraer	BZ	Aerospace	ERJ US	ERJ	1.3	2.3	5%	-1%
Localiza	BZ	Car Rental	RENT3 BZ	LZRFF	1.3	3.6	-14%	-18%
Credicorp	PE	Banks-Retail	BAP US	BAP	1.2	NA	12%	12%
Dexco	BZ	Forest Products	DXCO3 BZ	DURXF	1.2	4.7	-5%	-9%
BanColombia	CO	Banks-Multinational/Universal	PFBCOLO CB	XAFFF	1.2	NA	1%	3%
Aliansce	BZ	Real Estate/Property	ALOS3 BZ	XADSF	1.1	4.0	-6%	-11%
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. 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 30: List of stocks within our coverage most discounted to historicals

Many retailers and financials in this screen.

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)
Eneva	BZ	Electric Utilities	ENEV3 BZ	XZUMF	-79%	9.6	46.1	4.9	-4%	-11%
Televisa	MX	Cable TV	TLEVICO MM	GRPFF	-77%	2.3	10.1	2.8	11%	-8%
Rumo Logistica	BZ	Rail Transport/Railroads	RAIL3 BZ	RUMOF	-72%	20.5	72.5	2.3	5%	4%
Embraer	BZ	Aerospace	ERJ US	ERJ	-63%	9.9	26.8	2.3	5%	-1%
Magazine Luiza	BZ	Retailing-Hardlines	MGLU3 BZ	MGZZF	-54%	0.5	1.2	3.0	-5%	-4%
Bradesco	BZ	Banks-Retail	BBDC4 BZ	BRDPF	-51%	0.9	1.8	NA	-15%	-21%
BanColombia	CO	Banks-Multinational/Universal	PFBCOLO CB	XAFFF	-51%	0.8	1.6	NA	1%	4%
Ecorodovias	BZ	Toll Road Operators	ECOR3 BZ	XVEDF	-48%	7.7	14.8	3.7	4%	-3%
Cielo	BZ	Financial Services-Consumer/Commercial	CIEL3 BZ	CIOXF	-46%	7.1	13.0	NA	14%	12%
Gentera	MX	Banks-Retail	ENTERA* MM	CMPRF	-41%	1.5	2.6	NA	9%	3%
Cemex	MX	Building Materials	CX US	CX	-40%	4.9	8.1	2.2	4%	-1%
BB Seguridade	BZ	Insurance - Multi-line	BBSE3 BZ	XBDPF	-39%	7.9	12.9	NA	-1%	-2%
Banrisul	BZ	Banks-Retail	BRSR6 BZ	XGRBF	-39%	0.6	1.0	NA	11%	12%
Alpek	MX	Chemicals-Major	ALPEKA MM	ALPKF	-35%	4.2	6.4	2.7	-8%	-14%
Flcury	BZ	Healthcare Technology & Distribution	FLRY3 BZ	XPOXF	-34%	12.6	19.1	2.1	-7%	-12%
DASA	BZ	Healthcare Technology & Distribution	DASA3 BZ	DIAOF	-34%	5.6	8.4	5.0	-16%	-24%
BTG Pactual	BZ	Banks-Retail	BPAC11 BZ	XNXCF	-33%	14.2	21.2	NA	-3%	-2%
CMPC	CL	Paper Products	CMPC CI	XEMCF	-32%	5.7	8.3	4.2	-3%	-7%
GFinbursa	MX	Banks-Retail	GFINBURO MM	GPFOF	-30%	9.9	14.1	NA	22%	16%
CCR	BZ	Toll Road Operators	CCRO3 BZ	CDCRF	-30%	12.5	17.9	3.0	1%	-4%
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.



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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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