

Latam Equity Quant

Feeling the pain from US rates selloff

Investment Strategy

Key takeaways

- LatAm equities continue to react to rates selloff. Correlation of BZ and US rates significantly above historical avg.
- Ibov ex-commodities at deepest discount since March. MX most discounted since 2020.
- Foreign flows into B3 are flat this week, but in Sep we saw R\$8bn inflows (mostly futures).

Last week in numbers

LatAm underperformed Global markets this week. Brazil Ibovespa is down -6%, Mexbol -7.4%, LatAm -6.4%, SPX -0.7%, EM -2.4% in USD terms, total return. Rate-sensitive names were pressured by US rates selloff, commodity names were pressured by lower commodity prices (this week Brent oil -11.8%, iron ore -3.2%). BRL -2.4%.

US long term rates selloff continues. Since end-August, US 10y nominal rates up to 4.7% (vs 4.1% in end-August), 10y real rates are up to 2.4% (vs 1.9% before). Brazil 10y nominal rates at 11.9% (vs 11.2% before), Brazil 10y real rates at 5.8% (vs 5.4% before).

BZ equities are more reactive to BZ real rates than US real rates (Exhibit 2, Exhibit 3). US rates are more likely to hit USD returns rather than BRL returns.

... but correlation between BZ and US real rates significantly above historical avg (Exhibit 4).

BofA US rates team view: Current levels do not exhaust fully some of the drivers for the recent selloff, according to our US rates team (see [Are 10YT cheap?](#)). Term premium may reprice further to the pre-GFC regime, pushing 10YT yields into c.4.85-4.95%

LatAm shows discounted valuations in BR and MX: Ibov ex-commodities trades at around 18% disc. to hist. (highest discount since April-23) (Exhibit 6). Mexbol is currently trading at 24% disc. to hist. (this is the highest discount since 2020, Exhibit 7).

BZ equity funds had -R\$0.4bn outflows last week, compared to an average of -R\$1bn/week outflows YTD (Exhibit 12). Local hedge funds had R\$3.8bn outflows last week (Exhibit 12), compared to an average of -R\$1.6bn/week outflows YTD.

Global EM equity funds had flat flows this week (Exhibit 15). YTD, global EM equity funds had US\$95bn inflows. See latest [Flows to Know](#) for details.

Foreign flows into Brazil exchange are flat this week. Last month, we saw R\$8bn foreign inflows to B3, mostly into futures (Exhibit 14). Flows into BZ exchange are positive in 2023: +R\$14bn inflows (cash + futures + IPO/follow-ons).

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Refer to important disclosures on page 15 to 17.

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Exhibit 1: LatAm Earnings Revision Ratio

Earnings Revision Ratio = #Up Revisions / #Down Revisions. Brazil ERR at 0.8. Sector details in Exhibit 25.

LatAm countries	Aug-23	Sep-23
Argentina	3.6	2.6
Brazil	0.8	0.8
Chile	0.8	0.8
Colombia	0.6	0.6
Mexico	0.8	0.8
Peru	0.7	0.9
LatAm	0.8	0.8

Source: BofA Global Research, Factset, Bloomberg

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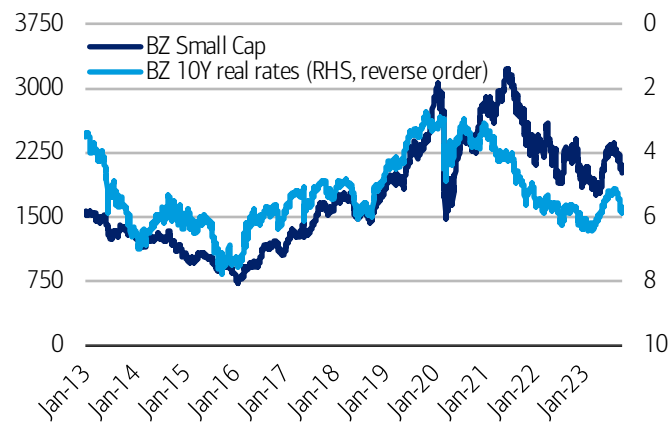
BZ = Brazil

EM = Emergent Markets

ERR = Earnings Revision Ratio

Exhibit 2: BZ 10y real rates (%) vs BZ small cap index (BRL returns)

BZ equities are more reactive to BZ real rates than US real rates

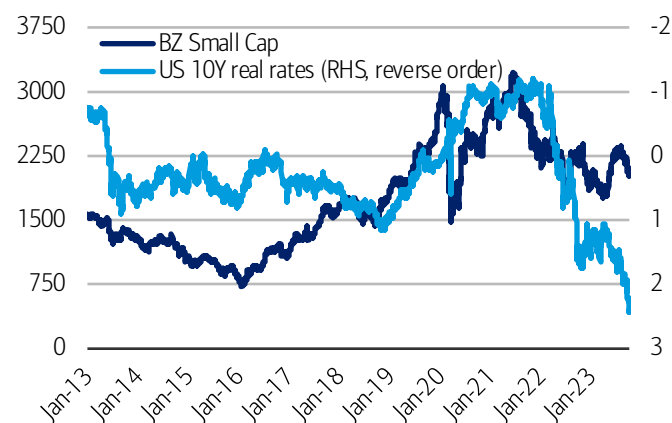


Source: Bloomberg

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Exhibit 3: US 10y real rates (%) vs BZ small cap index (BRL returns)

BZ equities are more reactive to BZ real rates than US real rates. US rates are more likely to hit USD returns rather than BRL returns.

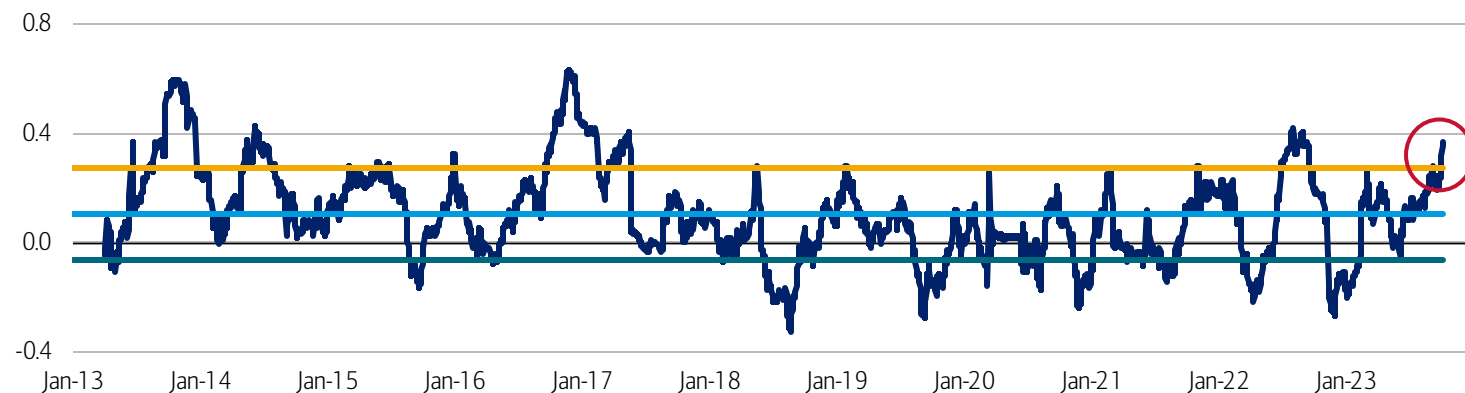


Source: Bloomberg

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Exhibit 4: Correlation between 10y Brazil real rates and 10y US real rates (3M correlation of daily changes)

Correlation between BZ and US real rates significantly above historical average.



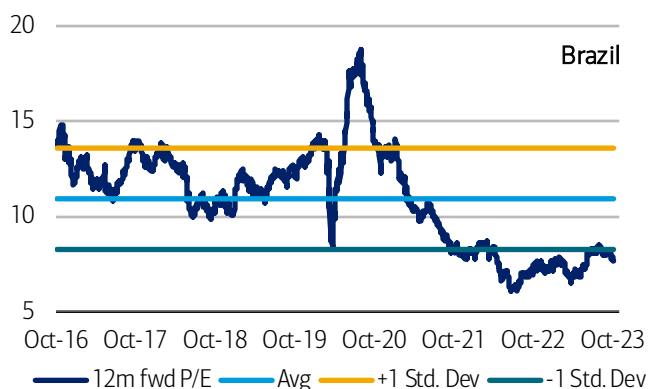
Source: Bloomberg

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LatAm valuation

Exhibit 5: Ibovespa P/E ratio (12m fwd)

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

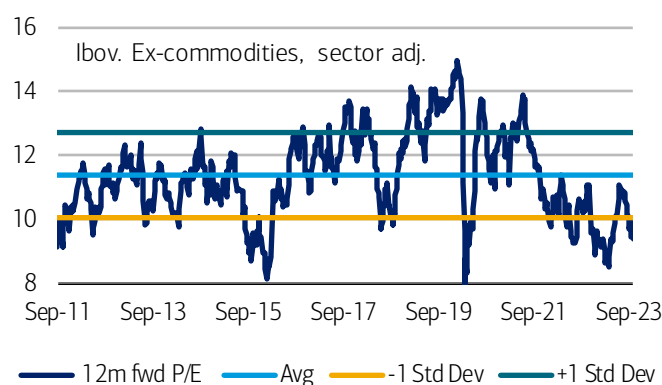


Source: BofA Global Research, Bloomberg

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Exhibit 6: Ibovespa P/E ratio (12m fwd, sector adjusted ex. commodities)

Ibov ex-commodities at 18% discount vs hist.



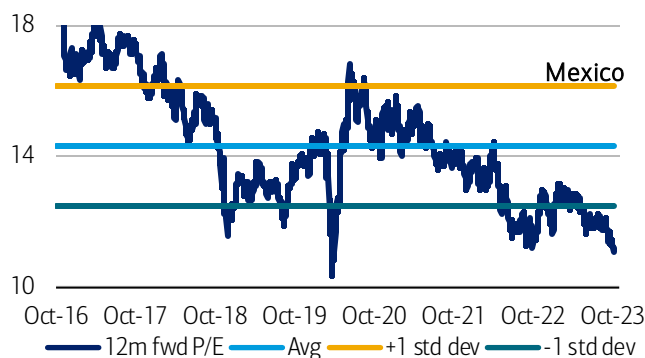
Note: Sector weights were adjusted and kept constant through time.

Source: BofA Global Research, Bloomberg

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Exhibit 7: Mexbol P/E ratio, Oct-16 to Oct-23

Trading at more than 1 Std Dev below historical average.

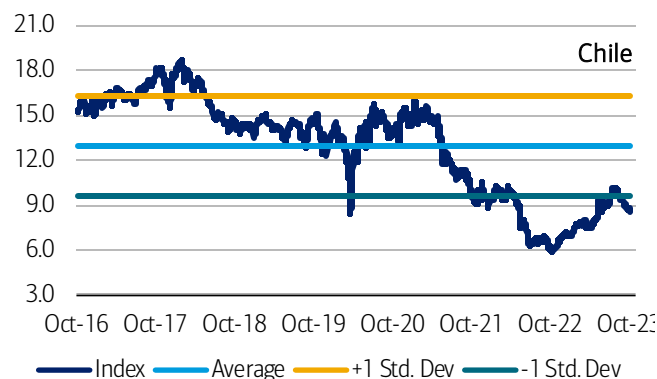


Source: BofA Global Research, Bloomberg

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Exhibit 8: IPSA P/E ratio, Oct-16 to Oct-23

Trading at more than 1 Std Dev below historical average.

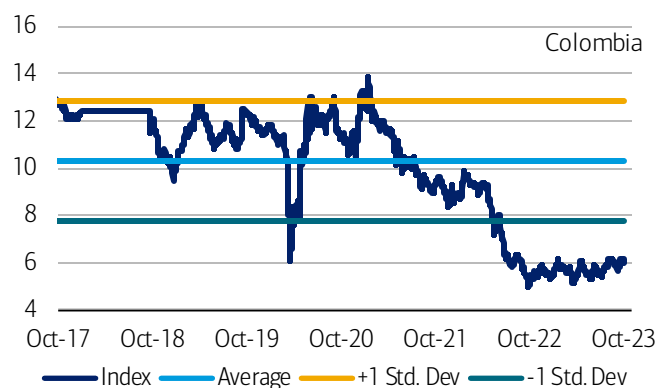


Source: BofA Global Research, Bloomberg

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Exhibit 9: Colcap P/E ratio, Oct-17 to Oct-23

Trading more than 1 Std Dev below historical average.



Source: BofA Global Research, Bloomberg

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Exhibit 10: Valuation summary

Brazil 30% discounted vs hist.

Country	Index	Current	Average	Std. Dev.	Prem. to Hist.	Prem. to EM*
Brazil	Ibov	7.7	10.9	2.7	-30%	-35%
BZ Ex-commod.		9.4	11.4	1.3	-18%	-17%
Mexico	Mexbol	10.9	14.3	1.8	-24%	-3%
Chile	Ipsa	8.4	12.9	3.4	-35%	-28%
Peru	SPBLPGPT	8.7	12.2	2.6	-29%	-19%
Colombia	Colcap	6.0	10.3	2.5	-42%	-59%
Argentina	Merval	12.9	10.2	2.9	26%	-52%
EM	MXEF	11.3	12.2	1.2	-7%	-

Source: BofA Global Research, Bloomberg

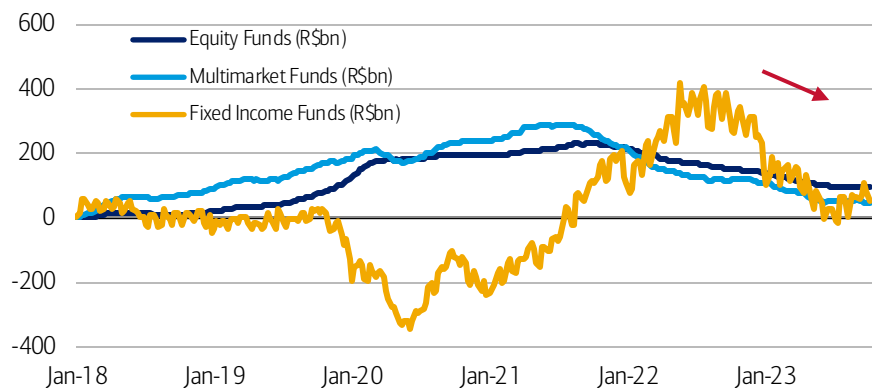
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Flows & Positioning

Brazil flows

Exhibit 11: 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, Economatica

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Exhibit 12: Equity and Multimarket funds weekly flows (R\$mn) (Brazil local funds)

Flow picture is improving in 2023

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

Fund type (R\$ mn)	AUM	4-Aug	11-Aug	18-Aug	25-Aug	1-Sep	8-Sep	15-Sep	22-Sep	29-Sep	6-Oct*	2023	2022
Equity Funds	231,224	198	97	-470	-214	153	-399	661	-500	-379	-303	-30,579	-42,836
Foreign Investments	105,864	-111	-165	-32	-92	-1,022	-176	-62	-144	-136	-81	-4,998	-18,740
Ibovespa Active	38,175	-194	-277	-163	-142	-46	-71	-85	-57	-23	-101	-7,460	-16,714
Sector	9,761	2	-9	-11	-20	-11	10	49	13	50	-6	265	-1,860
Value / Growth	16,956	-67	-6	-10	-62	-221	8	-71	12	-157	-9	-4,018	-6,745
Dividends	11,917	4	44	4	80	92	92	128	32	67	-5	-1,364	-434
Ibovespa Passive	10,891	123	205	-116	61	131	6	28	45	-9	-27	-413	-2,932
Small Caps	5,443	24	5	-10	72	49	26	24	46	56	5	-429	-2,243
Single Stocks	9,574	-40	-22	-13	-20	-11	-31	-22	-19	-3	6	-728	-2,225
ESG	240	0	0	0	-1	0	0	-1	0	-1	0	-24	-366
Equity Funds (Total)	440,044	-60	-130	-822	-336	-887	-535	650	-572	-535	-521	-49,747	-95,096
Equity Funds (Total ex. Foreign Invest.)	334,180	50	35	-790	-244	135	-359	712	-428	-399	-441	-44,749	-76,355
Multimarket	850,059	-644	2,215	2,944	2,958	2,740	-681	-427	-1,637	-2,096	-435	-21,592	-69,300
Foreign Investments	848,864	-181	213	693	1,641	3,887	19	-241	-384	1,810	125	-18,690	-22,102
Macro	251,391	-584	-718	-778	-700	-1,022	-974	-475	-2,920	-1,344	-628	-38,289	-14,754
Dynamic Multimarket	50,194	30	74	95	-187	-126	138	-273	-248	-253	-102	-3,776	-16,130
Specific Strategy	67,362	-240	178	153	68	2	-119	181	52	-58	44	2,152	-2,279
Long/Short Directional	7,819	0	-11	-6	-28	-33	-258	-123	-44	-15	-16	-2,047	-3,384
Balanced	12,029	-9	14	-26	-1	-42	15	8	-9	-59	13	-609	-54
Trading	3,761	3	-1	-6	-16	-4	-6	-13	-21	-5	-6	-491	-1,154
Long/Short Neutral	2,402	-7	-3	-15	-23	11	-10	6	-16	-3	-2	-341	-527
Protected Capital	755	-1	-2	13	5	0	0	-1	0	-1	-1	85	-196
Multimarket Funds (Total)	2,094,638	-1,634	1,960	3,067	3,715	5,412	-1,877	-1,358	-5,228	-2,023	-1,007	-83,598	-129,878
Multimarket Funds (Total ex. Foreign Invest.)	1,245,774	-1,453	1,747	2,373	2,075	1,525	-1,895	-1,117	-4,843	-3,833	-1,132	-64,908	-107,777

(*) Preliminary data, up to Wednesday.

Source: Economatica

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Exhibit 13: 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	8-Sep	15-Sep	22-Sep	29-Sep	6-Oct*	YTD
FI Short Duration - Invest. Grade	945	-8.0	4.1	-2.5	5.2	0.6	-89.3
FI Short Duration Govt	857	23.0	14.9	-24.1	-22.5	-5.2	21.2
FI All Duration Credit	313	1.2	3.6	3.0	1.7	1.6	24.0
FI All Duration - Invest. Grade	743	-5.6	4.8	6.4	-5.9	0.1	-19.4
FI All Duration Govt	236	0.6	2.7	0.1	-4.1	-2.2	3.6
FI (Broad)	370	2.9	6.4	-6.4	-8.9	0.2	6.3
Other	505	1.8	1.0	-0.4	-1.3	-0.2	-4.0
Fixed Income (Total) Ex. Foreign Invest.	3,964	16	38	-24	-36	-5	-57

(*) Preliminary data, up to Wednesday.

Source: Economática

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Exhibit 14: Foreign flow to B3 (R\$bn), Nov-22 to Oct-23

Flows are positive YTD

Month	Futures	Cash	IPO/follow-on	TOTAL
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	10	-2	0	8
Oct-23	0	-1	0	-1
12M Cumulative	-3	25	11	33
2023 YTD	-5	9	10	14
2022	-2	101	17	116
2021	27	-7	44	64

Source: B3, Bloomberg

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Global flows**Exhibit 15: 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 16: Weekly flows to LatAm and EM funds (US\$mn)

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

Region	Week	% Current Assets	4 Weeks	% Current Assets	YTD	% Current Assets
LatAm	(15)	-0.2%	23	0.3%	743	8.3%
Brazil	(37)	-0.3%	(45)	-0.3%	(198)	-1.3%
Mexico	(34)	-0.4%	(72)	-0.8%	211	2.4%
Andean	(11)	-0.4%	(5)	-0.2%	(34)	-1.2%
LatAmTotal	(97)	-0.3%	(100)	-0.3%	748	2.1%
China	1,728	0.1%	5,997	0.4%	74,742	5.2%
EM Total	192	0.0%	1,557	0.1%	95,461	6.6%

Source: EPFR

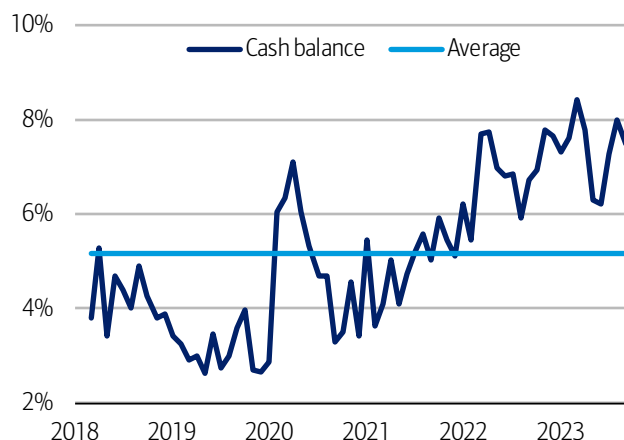
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LatAm positioning

Exhibit 17: Average cash position (2018-2023)

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

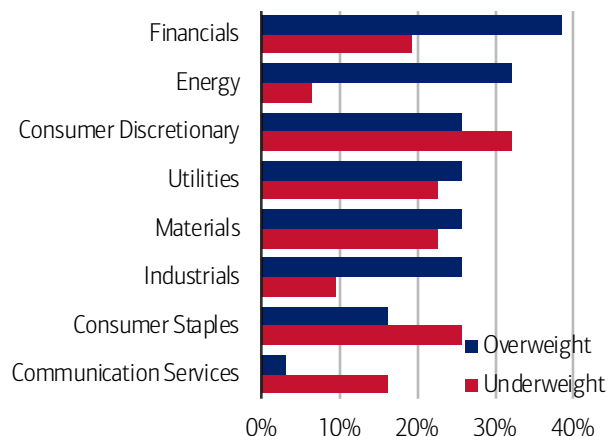


Source: LatAm Fund Manager Survey

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Exhibit 18: Which sectors among equities are you most underweight?

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



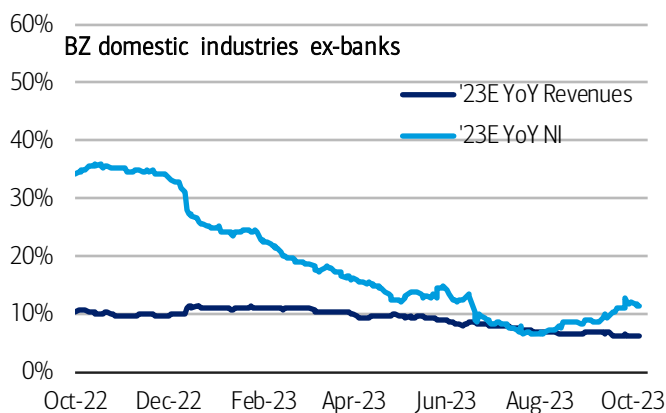
Source: LatAm Fund Manager Survey

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Consensus Earnings Revisions for Brazil

Exhibit 19: Brazil domestic industries: consensus revised NI downwards but still expected at 12% YoY growth

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



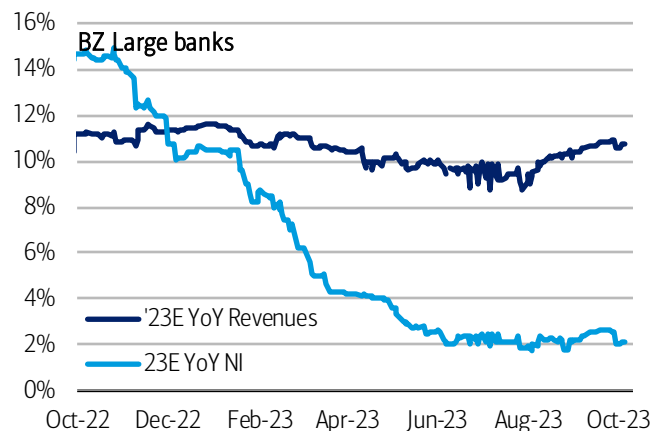
Consensus estimates.

Source: Bloomberg, BofA Global Research

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Exhibit 20: 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 21: LatAm 3-month ERR – country details

Brazil 3-month ERR at 0.4 in Sep-23.

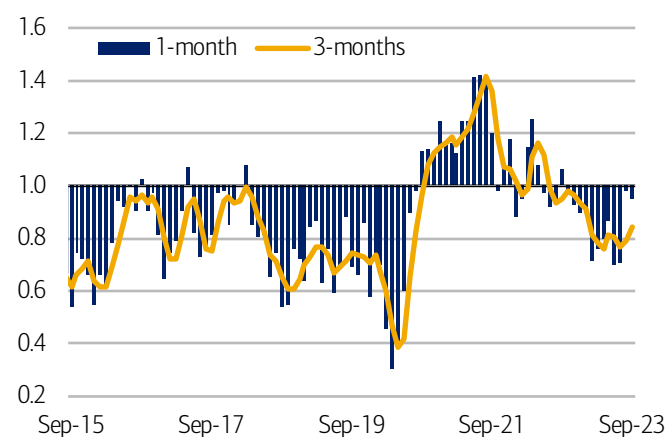
LatAm countries	12m Avg	Jul-23	Aug-23	Sep-23	1M Chg in 3M ERR
Argentina	2.5	4.5	3.6	2.6	-1.07
Brazil	0.7	0.7	0.8	0.8	0.04
Chile	0.8	0.9	0.8	0.8	0.00
Colombia	0.7	0.6	0.6	0.6	0.05
Mexico	1.0	0.8	0.8	0.8	0.05
Peru	0.8	0.6	0.7	0.9	0.20
LatAm	0.8	0.8	0.8	0.8	0.05

Source: BofA Global Research, Factset, Bloomberg

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Exhibit 22: LatAm Earnings Revision Ratio (Sep 15-Sep 23)

3-month ERR at 0.8 in Sep-23.

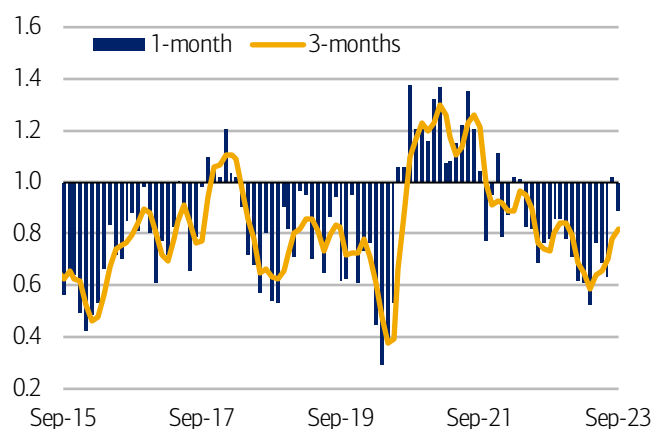


Source: BofA Global Research, Factset, Bloomberg

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Exhibit 24: Brazil Earnings Revision Ratio (Sep 15-Sep 23)

Communication and Financials show highest ERR in August.



Source: BofA Global Research, Factset, Bloomberg

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Exhibit 23: LatAm 3-month ERR – sector details

Financials and HC show the highest ERR (1.6 and 1.5 respectively).

LatAm sectors	12m Avg	Jul-23	Aug-23	Sep-23	1M Chg in 3M ERR
C. Discretionary	0.8	0.8	1.0	1.0	-0.04
C. Staples	0.8	0.7	0.7	0.6	-0.09
Energy	0.8	0.8	0.8	0.9	0.17
Financials	1.5	1.3	1.6	1.6	0.01
Health Care	0.6	0.7	1.3	1.5	0.21
Industrials	0.9	0.7	0.7	0.7	0.01
IT	1.3	1.8	1.1	1.0	-0.16
Materials	0.7	0.5	0.5	0.5	0.07
Real Estate	1.0	0.9	0.9	1.1	0.19
Communication	0.7	0.6	0.8	1.0	0.20
Utilities	1.1	1.1	1.0	1.2	0.25
LatAm	0.8	0.8	0.8	0.8	0.05

Source: BofA Global Research, Factset, Bloomberg

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Exhibit 25: Brazil 3-month ERR – sector details

Communication and Financials show highest ERR in August.

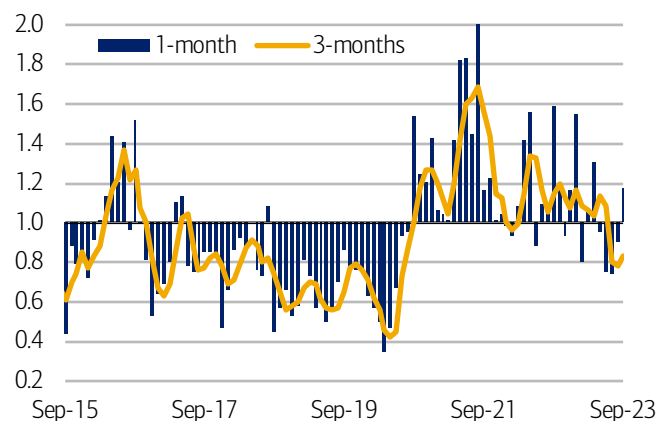
Brazil sectors	12m Avg	Jul-23	Aug-23	Sep-23	1M Chg in 3M ERR
C. Discretionary	0.6	0.6	0.8	0.9	0.07
C. Staples	0.6	0.7	0.8	0.6	-0.15
Energy	0.8	0.7	0.8	1.0	0.13
Financials	1.2	1.4	1.9	1.8	-0.01
Health Care	0.5	0.5	1.2	1.4	0.26
Industrials	0.8	0.8	0.9	0.8	-0.11
IT	1.3	2.1	1.2	1.0	-0.14
Materials	0.6	0.3	0.3	0.4	0.07
Real Estate	1.3	1.1	0.9	1.6	0.69
Communication	1.7	1.6	3.0	6.0	3.00
Utilities	0.9	0.7	0.8	1.0	0.26
Brazil	0.7	0.7	0.8	0.8	0.04

Source: BofA Global Research, Factset, Bloomberg

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Exhibit 26: Mexico Earnings Revision Ratio (Sep 15-Sep 23)

Financials has the highest ERR in Mexico (2 in September).



Source: BofA Global Research, Factset, Bloomberg

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Exhibit 27: Mexico 3-month ERR – sector details

Financials has the highest ERR in Mexico (2 in September).

Mexico sectors	12m Avg	Jul-23	Aug-23	Sep-23	1M Chg in 3M ERR
C. Discretionary	1.2	1.0	1.0	0.8	-0.21
C. Staples	1.3	0.7	0.8	0.7	-0.05
Energy	NA	NA	NA	NA	NA
Financials	3.3	1.8	1.7	2.0	0.36
Health Care	NA	NA	NA	NA	NA
Industrials	1.2	0.5	0.5	0.6	0.12
IT	NA	NA	NA	NA	NA
Materials	0.8	0.7	0.6	0.7	0.05
Real Estate	0.9	0.7	0.8	0.8	-0.02
Communication	0.5	0.4	0.6	1.0	0.44
Utilities	NA	NA	NA	NA	NA
Mexico	1.0	0.8	0.8	0.8	0.05

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 28: 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)
Pampa energia	AR	Electric Utilities	PAM US	PAM	0.6	0.5	1.6	-17%	14%
Petrobras PN	BZ	Oils	PETRA4 BZ	PTBFB	3.6	4.1	0.7	-2%	33%
Petro-Rio	BZ	Oil & Gas Producers	PRI03 BZ	HRTPF	6.6	4.8	1.5	-8%	18%
Metalurgica Gerdau	BZ	Steels	GOAU4 BZ	MZGPF	3.7	4.9	0.4	-10%	-18%
Copa	CO	Airlines	CPA US	CPA	5.6	5.4	0.7	-16%	2%
COPASA	BZ	Water Utilities	CSMG3 BZ	CSAOF	5.6	5.5	1.4	-7%	8%
Ecopetrol	CO	Oil & Gas Producers	ECOPETL CB	XESSF	5.5	5.7	1.5	-4%	-4%
SQM	CL	Fertilizers	SQM US	SQM	5.5	5.8	0.2	-13%	-31%
Cemig	BZ	Electric Utilities	CMIG4 BZ	CEMCF	6.4	6.0	1.2	0%	10%
Vale ON	BZ	Non-Ferrous-Mining	VALE3 BZ	VALEF	6.5	6.1	0.5	-5%	-26%
Ternium	MX	Steels	TX US	TX	4.9	6.3	-0.8	-12%	22%
Liverpool Puerto	MX	Retailing-Broadline/Department Stores	LIVEPOLC MM	ELPQF	7.0	6.5	0.8	-9%	-21%
Sanepar	BZ	Water Utilities	SAPR11 BZ	XJALF	6.2	6.6	1.7	-3%	23%
Gerdau	BZ	Steels	GGBR4 BZ	GGBUF	4.5	6.6	0.5	-11%	-18%
Cyrela	BZ	Homebuilders	CYRE3 BZ	XCBMF	8.8	7.4	0.5	-10%	51%
GMexico	MX	Non-Ferrous-Mining	GMEXICOB MM	GMBXF	11.0	7.8	0.4	-2%	17%
CPFL Energia	BZ	Electric Utilities	CPFE3 BZ	XPFGF	8.0	8.4	1.6	-4%	1%
Danhos	MX	REITs	DANHOS13 MM	GRFFF	8.9	8.5	1.9	-7%	-17%
Sao Martinho	BZ	Food-Commodities	SMT03 BZ	SRTOF	11.1	8.7	1.8	-2%	42%
Prom y Oper Infra	MX	Toll Road Operators	PINFRA* MM	PYOIF	11.0	9.2	-0.8	-4%	-3%
Median								-7%	5%

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 29: 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	MGZFF	63.0	0%	-30%	-31%
Brasil Foods	BZ	Food Processors	BRFS3 BZ	BRFFF	47.9	0%	11%	26%
Mercado Libre	BZ	Internet/e-Commerce	MELI US	MELI	42.7	0%	-14%	46%
Omega Geração	BZ	Renewable Energy	MEGA3 BZ	XZQAF	33.4	0%	-8%	-5%
Raia Drogasil	BZ	Drug Store Chains	RADL3 BZ	RAIAF	29.5	1%	1%	21%
WEG	BZ	Industrials/Multi-Industry	WEGE3 BZ	WGSEF	26.5	2%	-2%	-9%
Rumo Logística	BZ	Rail Transport/Railroads	RAIL3 BZ	RUMOF	21.2	0%	-2%	17%
Falabella	CL	Retailing-Broadline/Department Stores	FALAB CI	XDIYF	20.9	1%	-7%	16%
Natura	BZ	Cosmetics/Personal Care	NTCO3 BZ	XZVAF	20.2	0%	-3%	27%
TOTVS	BZ	Server & Enterprise Software	TOTS3 BZ	XBEGF	20.2	1%	-3%	-3%
DASA	BZ	Healthcare Technology & Distribution	DASA3 BZ	DIAOF	19.9	0%	14%	-10%
Vesta	MX	Real Estate/Property	VESTA* MM	VESTF	17.8	2%	-10%	22%
Alsea	MX	Restaurants	ALSEA* MM	ALSSF	17.7	0%	6%	74%
Bimbo	MX	Bakers	BIMBOA MM	GRBMF	17.3	1%	-3%	-1%
FEMSA	MX	Brewers	FEMSAUBD MM	FMXUF	17.2	2%	3%	29%
Alpargatas	BZ	Footwear	ALPA4 BZ	SRDDF	15.9	0%	-9%	-46%
Energisa	BZ	Utilities-Other	ENGI11 BZ	XLXGF	15.8	3%	-3%	2%
Ultrapar	BZ	Oil Refining & Marketing	UGPA3 BZ	XLRUF	15.2	3%	1%	46%
Localiza	BZ	Car Rental	RENT3 BZ	LZRFF	15.2	2%	-11%	5%
AES Brasil	BZ	Electric Utilities	AESB3 BZ	XDFDF	15.1	2%	-6%	10%
Median							-3%	13%

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 30: 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	PETRA BZ	PTBFB	22.0	-2%	33%
Ecopetrol	CO	Oil & Gas Producers	ECOPETL CB	XESSF	19.2	-4%	-4%
Danahos	MX	REITs	DANHOS13 MM	GRFFF	12.3	-7%	-17%
CSN	BZ	Steels	CSNA3 BZ	SIDHF	12.2	-7%	-21%
BanColombia	CO	Banks-Multinational/Universal	PFBCOLO CB	XAFFB	12.2	2%	-21%
Auren Energia	BZ	Electric Utilities	AURE3 BZ	XZMXF	11.1	-1%	-8%
Sanepar	BZ	Water Utilities	SAPR11 BZ	XJALF	11.0	-3%	23%
Banco do Brasil	BZ	Banks-Retail	BBAS3 BZ	XBBAF	10.2	-1%	35%
BB Seguridade	BZ	Insurance - Multi-line	BBSE3 BZ	XBDPF	10.1	3%	-4%
Gerdau	BZ	Steels	GGBR4 BZ	GGBUF	10.0	-11%	-18%
CPFL Energia	BZ	Electric Utilities	CPFE3 BZ	XPFGF	9.2	-4%	1%
Usiminas	BZ	Steels	USIM5 BZ	USSPF	9.2	-7%	-10%
Banco de Chile	CL	Banks-Retail	CHILE CI	XHNDF	9.1	1%	3%
TAESA	BZ	Electric Utilities	TAE11 BZ	XTAEF	9.1	0%	-1%
Banorte	MX	Banks-Retail	GFNORTEO MM	GBOOF	9.1	-1%	3%
Alpek	MX	Chemicals-Major	ALPEKA MM	ALPKF	9.1	-14%	-49%
SQM	CL	Fertilizers	SQM US	SQM	8.9	-13%	-31%
Fibra Uno	MX	REITs	FUNO11 MM	FBASF	8.1	13%	21%
Engie	BZ	Electric Utilities	EGIE3 BZ	XZDDF	8.1	-2%	8%
Cielo	BZ	Financial Services-Consumer/Commercial	CIEL3 BZ	CIOXF	7.8	-9%	-35%
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. 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 31: 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	1.5	4%	-4%
Copa	CO	Airlines	CPA US	CPA	0.3	0.7	-16%	2%
Vivo	BZ	Telecom Equipment-Wireless/Cellular	VIVT3 BZ	XCPTF	0.4	0.7	7%	15%
Chedraui	MX	Supermarkets/Food Retailers	CHDRAUIB MM	GCHEF	0.4	1.9	-3%	23%
Liverpool Puerto	MX	Retailing-Broadline/Department Stores	LIVEPOLC MM	ELPQF	0.4	0.8	-9%	-21%
Engie	BZ	Electric Utilities	EGIE3 BZ	XZDDF	0.4	1.8	-2%	8%
Auren Energia	BZ	Electric Utilities	AURE3 BZ	XZMXF	0.4	0.2	-1%	-8%
AmBev	BZ	Brewers	ABEV3 BZ	AVBPF	0.4	-0.4	-6%	-9%
BB Seguridade	BZ	Insurance - Multi-line	BBSE3 BZ	XBDPF	0.4	NA	3%	-4%
Qualitas	MX	Insurance - Non-Life	Q* MM	QUCOF	0.4	NA	0%	58%
Arca	MX	Soft Drinks	AC* MM	EMBVF	0.5	0.6	-3%	0%
Danahos	MX	REITs	DANHOS13 MM	GRFFF	0.5	1.9	-7%	-17%
Coca-Cola FEMSA	MX	Soft Drinks	KOFUBL MM	COCSF	0.5	0.9	-6%	4%
TIM	BZ	Telecom Services-Wireless/Cellular	TIMS3 BZ	XZUAF	0.5	1.3	4%	20%
Gruma	MX	Food Producers	GRUMAB MM	GPAGF	0.5	2.0	1%	10%
Grupo BMV	MX	Other Financials	BOLSAA MM	BOMXF	0.5	NA	-3%	-11%
Sanepar	BZ	Water Utilities	SAPR11 BZ	XJALF	0.5	1.7	-3%	23%
CPFL Energia	BZ	Electric Utilities	CPFE3 BZ	XPFGF	0.6	1.6	-4%	1%
Gentera	MX	Banks-Retail	GENTERA* MM	CMPRF	0.6	NA	-1%	-8%
Pampa energia	AR	Electric Utilities	PAM US	PAM	0.6	1.6	-17%	14%
Median							-3%	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. 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 32: 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%	-31%
Banco inter	BZ	Banks-Retail	INTR US	INTR	1.9	NA	-7%	59%
Cemex	MX	Building Materials	CX US	CX	1.9	3.4	-19%	54%
Estacio	BZ	Education & Training Services	YDUQ3 BZ	ECPCF	1.6	2.7	5%	106%
B3 SA	BZ	Financial Services-Consumer/Commercial	B3SA3 BZ	XIMAF	1.6	NA	-7%	-10%
BTG Pactual	BZ	Banks-Retail	BPAC11 BZ	XNXCF	1.5	NA	-2%	29%
Televisa	MX	Cable TV	TLEVICO MM	GRPFF	1.5	2.7	-26%	-41%
Cosan	BZ	Energy Commodities	CSAN3 BZ	CSAIF	1.4	3.7	-8%	-5%
GFINbursa	MX	Banks-Retail	GFINBURO MM	GPFOF	1.4	NA	-7%	3%
CSN	BZ	Steels	CSNA3 BZ	SIDHF	1.3	3.7	-7%	-21%
Natura	BZ	Cosmetics/Personal Care	NTCO3 BZ	XZVAF	1.3	4.2	-3%	27%
Localiza	BZ	Car Rental	RENT3 BZ	LZRFF	1.3	4.1	-11%	5%
DASA	BZ	Healthcare Technology & Distribution	DASA3 BZ	DIAOF	1.3	4.9	14%	-10%
BanColombia	CO	Banks-Multinational/Universal	PFBCOLO CB	XAFFF	1.3	NA	2%	-21%
Aliansce	BZ	Real Estate/Property	ALSO3 BZ	XCCGF	1.3	4.7	-3%	30%
Credicorp	PE	Banks-Retail	BAP US	BAP	1.2	NA	-11%	-9%
Dexco	BZ	Forest Products	DXCO3 BZ	DURXF	1.2	4.0	-3%	11%
Alpargatas	BZ	Footwear	ALPA4 BZ	SRDDF	1.2	28.9	-9%	-46%
Banco do Brasil	BZ	Banks-Retail	BBAS3 BZ	XBBAF	1.2	NA	-1%	35%
Banorte	MX	Banks-Retail	GFNORTEO MM	GBOOF	1.2	NA	-1%	3%
Median							-7%	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 33: 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)
Eneva	BZ	Electric Utilities	ENEV3 BZ	XZUMF	-79%	10.0	47.4	5.4	-3%	-5%
Televisa	MX	Cable TV	TLEVICO MM	GRPFF	-75%	2.5	10.3	2.7	-26%	-41%
Rumo Logistica	BZ	Rail Transport/Railroads	RAIL3 BZ	RUMOF	-72%	21.2	74.9	2.4	-2%	17%
Embraer	BZ	Aerospace	ERJ US	ERJ	-69%	8.2	26.7	2.6	-17%	19%
Omega Geração	BZ	Renewable Energy	MEGA3 BZ	XZQAF	-69%	33.4	108.4	7.9	-8%	-5%
Cielo	BZ	Financial Services-Consumer/Commercial	CIEL3 BZ	CIOXF	-66%	4.5	13.1	NA	-9%	-35%
Magazine Luiza	BZ	Retailing-Hardlines	MGLU3 BZ	MGZZF	-58%	0.5	1.2	4.0	-30%	-31%
BanColombia	CO	Banks-Multinational/Universal	PFBCOLO CB	XAFFF	-58%	0.7	1.7	NA	2%	-21%
Natura	BZ	Cosmetics/Personal Care	NTCO3 BZ	XZVAF	-55%	1.0	2.1	4.2	-3%	27%
Cementos Argo	CO	Building Materials	CEMARGOS CB	XGSAF	-50%	5.9	11.8	3.2	65%	38%
Gentera	MX	Banks-Retail	GENERAT* MM	CMPRF	-49%	1.3	2.6	NA	-1%	-8%
Bradesco	BZ	Banks-Retail	BBDC4 BZ	BRDPF	-48%	1.0	1.9	NA	-1%	-5%
GFINbursa	MX	Banks-Retail	GFINBURO MM	GPFOF	-48%	7.5	14.4	NA	-7%	3%
Credicorp	PE	Banks-Retail	BAP US	BAP	-41%	6.7	11.4	NA	-11%	-9%
Eletrobras	BZ	Electric Utilities	ELET3 BZ	CAIFF	-39%	7.1	11.7	2.8	1%	-16%
BB Seguridade	BZ	Insurance - Multi-line	BBSE3 BZ	XBDPF	-37%	8.2	13.1	NA	3%	-4%
Adcoagro	AR	Food-Commodities	AGRO US	AGRO	-36%	3.8	6.0	2.7	-5%	32%
Arcos Dorados	BZ	Restaurants	ARCO US	ARCO	-36%	5.0	7.7	3.4	-9%	6%
Alfa	MX	Industrials/Multi-Industry	ALFAA MM	ALFFF	-35%	6.7	10.3	3.2	-5%	-9%
Cencosud	CL	Retailing-Broadline/General Merchandisers	CENCOSUD CI	XCSCF	-34%	6.3	9.6	3.3	-10%	18%
Median									-5%	-5%

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 34: Top out of consensus stocks

Buy-rated stocks with a positive out of consensus ranking. Three 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 CmcY	2023 EPS		2024 EPS	
							Buy	Hold	Sell		BofA	Cons.	BofA	Cons.
				USDmn										
Coca-Cola Femsa	KOFUBL MM	COCSE	C. Staples	15,924	10.0	BUY	43%	57%	0%	MXN	9.8	9.3	11.9	10.5
Arca	AC* MM	EMBV	C. Staples	15,039	9.6	BUY	72%	22%	6%	MXN	11.0	9.9	13.3	11.2
Vitru Limited	VTRU US	VTRU	C. Discretionary	564	9.5	BUY	100%	0%	0%	BRL	8.3	7.8	13.0	11.1
TOTVS	TOTS3 BZ	XBEGF	IT	3,198	9.3	BUY	77%	23%	0%	BRL	0.9	1.0	1.3	1.3
Bajio	BBAJIO MM	BBAJF	Financials	3,493	9.1	BUY	31%	56%	13%	MXN	9.5	9.1	8.8	8.2
Parque Arauco	PARAU CO	XNNJF	Real Estate	1,201	8.4	BUY	70%	30%	0%	CLP	136.9	89.4	155.8	102.3
Vibra Energia SA	VBBR3 BZ	XUBRF	C. Discretionary	4,287	8.3	BUY	88%	13%	0%	BRL	1.6	1.3	1.6	1.9
Petro Rio	PRI03 BZ	HRTPF	Energy	7,531	8.2	BUY	83%	11%	6%	USD	1.6	1.3	3.0	1.8
Cuervo	CUERVO* MM	BCCLF	C. Staples	8,120	8.0	BUY	69%	23%	8%	MXN	1.8	1.7	2.6	2.1
Natura &Co	NTCO3 BZ	XZVAF	C. Staples	3,945	7.9	BUY	46%	54%	0%	BRL	-0.3	-0.4	0.1	0.7
YDUQS	YDUQ3 BZ	ECPCF	C. Discretionary	1,251	7.7	BUY	73%	27%	0%	BRL	1.2	1.2	1.7	1.9
VTEX	VTEX US	VTEX	Telecom	984	7.6	BUY	67%	33%	0%	USD	0.0	-0.1	0.1	0.0
Afya Limited	AFYA US	AFYA	C. Discretionary	1,411	7.4	BUY	80%	20%	0%	BRL	7.0	5.8	8.2	7.7
Hapvida	HAPV3 BZ	XDUFF	Health Care	6,371	7.3	BUY	92%	8%	0%	BRL	0.1	0.0	0.2	0.2
XP Inc	XP US	XP	Financials	12,119	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 35: Bottom out of consensus stocks

Neutral/Underperform-rated stocks with a negative out of consensus ranking. Nine 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 CmcY	2023 EPS		2024 EPS	
							Buy	Hold	Sell		BofA	Cons.	BofA	Cons.
Liverpool	LIVEPOLC MM	ELPQF	C. Discretionary	USDmn 7,317	-10.0	UND	50%	31%	19%	MXN	11.9	12.9	13.0	14.0
Cencosud	CENCOSUD CI	XCSCF	C. Staples	5,077	-9.9	NEU	71%	21%	7%	CLP	153.2	166.6	189.1	196.2
Even	EVEN3 BZ	EVCNF	C. Discretionary	236	-9.7	UND	44%	44%	11%	BRL	0.8	0.8	0.7	1.1
Alsea	ALSEA* MM	ALSSF	C. Discretionary	2,878	-9.6	UND	61%	28%	11%	MXN	1.8	2.5	2.3	3.6
M. Dias Branco	MDIA3 BZ	XDMIF	C. Staples	2,477	-9.5	NEU	60%	40%	0%	BRL	2.7	2.5	3.7	3.7
CBD	PCAR3 BZ	GPSAF	C. Staples	177	-8.9	UND	15%	77%	8%	BRL	-3.2	-3.1	-1.5	-1.1
Cyrela Brazil	CYRE3 BZ	XCBMF	C. Discretionary	1,522	-8.8	UND	80%	13%	7%	BRL	2.0	2.2	2.0	2.7
CCR	CCRO3 BZ	CDCRF	Industrials	4,777	-8.6	UND	75%	8%	17%	BRL	0.7	0.7	0.9	0.8
CVC	CVCB3 BZ	CVCBF	C. Discretionary	221	-7.8	UND	0%	71%	29%	BRL	-1.3	-1.0	-0.5	-0.2
Adecoagro	AGRO US	AGRO	C. Staples	1,181	-7.5	NEU	43%	57%	0%	USD	1.6	1.7	2.1	1.7
Itau Unibanco	ITUB4 BZ	ITUBF	Financials	47,575	-7.4	NEU	83%	17%	0%	BRL	3.6	3.6	4.0	4.0
Petz	PETZ3 BZ	XUXUF	C. Discretionary	385	-7.3	NEU	58%	42%	0%	BRL	0.2	0.1	0.3	0.3
CTEEP	TRPL4 BZ	XOOTF	Utilities	3,267	-7.1	UND	19%	69%	13%	BRL	2.1	2.1	2.3	2.8
Randon	RAPT4 BZ	RPRTF	Industrials	672	-6.8	NEU	64%	36%	0%	BRL	1.5	1.4	1.4	1.6
Lojas Renner SA	LREN3 BZ	LORPF	C. Discretionary	2,408	-6.6	UND	75%	19%	6%	BRL	1.1	1.1	1.2	1.3

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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