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BRAZILIAN EQUITY OPPORTUNITIES

ISSUE III

This report examines the Brazilian equity markets, their structure, constituents and metrics over time. In continuation to our earlier reports on Brazilian Equity Opportunities, we show that the Brazilian equity markets now offer a compelling investment opportunity. There are 337 actively traded companies in Brazil¹, offering a sizeable group of businesses for superior stock selection.

Brazil has a deeply rooted equity culture and B3 - BRASIL BOLSA BALCÃO, founded in 1890, has had a long history of services provided to the stock market and the Brazilian economy. In 2000, BOVESPA led a program of integration with the eight other Brazilian exchanges to concentrate all equity trading in a single environment. B3 - BRASIL BOLSA BALCÃO was founded in May 2008 with the integration between BM&F, Brazil's main derivatives exchange, and BOVESPA, the stock exchange. B3 - BRASIL BOLSA BALCÃO was created with the merger of BM&FBOVESPA with CITEP in 2017 and is the sole exchange, despite the market being open for a competitor since 2007. Stocks are exclusively traded through an exchange (Dark pools, MTFs and internalization prohibited). It is also the provider of central counterparty and securities custody services. In addition, B3 - BRASIL BOLSA BALCÃO ranks among the world's leading exchanges by market capitalization and the largest in the Americas (outside of the US).

HORIZON PROCESS

Idea generation is a rigorous and often contrarian process and adherence to fundamental discipline in volatile markets is tantamount to success. At the core of our process is identification of securities and sectors for investment along with an on-going maintenance of the valuation and event universe to provide advanced insights to unfolding investment landscapes. Some of the characteristics we look for:

- ☐ Discount to Private Trade Sale Valuations
- ☐ A margin of safety during periods of uncertainty is essential
- ☐ Attractive risk adjusted returns
- ☐ Low PEG ratio
- ☐ Strong corporate governance
- ☐ Oriented for the growth of the Brazilian economic area
- ☐ Meaningful free cashflow

The Brazilian equity market has certain attributes that allow us to believe that there are opportunities to earn risk-adjusted returns through superior stock selection using the Gabelli process. We believe that it is possible to identify pockets of value/price

¹ Data source Bloomberg (as of June 10, 2022)

misalignment especially within domestic demand led industries. Key drivers of opportunities in the Brazilian equities markets are²:

- **Portfolio diversification:** Diversification of institutional investors portfolios with a higher participation of equities
- **Retail investors:** Increasing participation of retail investors and growth of the middle class
- **Listed companies:** A low number of listed companies leading to important sectors not adequately represented on the exchange

Key drivers of opportunities in the Brazilian derivative markets are:

- **Growth of credit and fixed-rate government debt:** higher demand for hedging from financial institutions and institutional investors
- **Growth of foreign trade:** higher demand for hedging through FX contracts
- **Equities market development:** growth in demand for index-based contracts
- **OTC derivatives:** capital requirements (Basel) should benefit OTC transactions through a CCP

With secular trends led by increasing GDP, growing population and increasing disposable income among other long-term trends there are ample opportunities to invest in companies that will benefit.

² Refer to our Brazil Equity Opportunities Report 2016

BRAZIL EQUITY MARKET ANALYSIS

Trading and participation

The annual value traded on the B3 - BRASIL BOLSA BALCÃO in 2021 was USD 1,565 billion and the ratio of value traded to market capitalisation was 192% (Table 1a), which is below the value traded to market capitalisation ratios of NASDAQ of 298%. Both the annual value of share trading as a percentage of GDP and as a percentage of market capitalisation for Brazil have increased significantly since our previous report.

Table 1a: Annual value of share trading between 2012-2021 (USD Billion)

Bourse	(USD billion)				Annual value of share trading				As a % of Mcap			
	2012	2015	2019	2021	As a % of GDP				2012	2015	2019	2021
NASDAQ	24,479	32,984	39,683	73,281	146	184	186	319	534	453	305	298
NYSE	14,747	19,991	33,079	29,266	88	111	155	127	105	112	157	106
NSE + BSE (India) [#]	638	809	1,210	2,300	35	39	43	72	51	54	56	65
B3 - Brasil Bolsa Balcão	875	498	1,066	1,565	36	28	57	97	71	101	90	192
Shenzen + Shanghai [#]	4,989	41,833	18,276	40,479	59	385	127	232	135	920	536	496

[#] For Mcap, Only NSE and Shanghai

Source: Horizon Research, WFE, World Bank, IMF

Brazilian Equities have a P/E ratio average discount versus US equities and over the course of the past three years the average discount to the MSCI has narrowed (Table 1b).

Table 1b: Brazil Equities' P/E ratio as a percentage of comparative markets

		Discount to USA			Discount to MSCI		
		2019 [^]	2020	2021	2019 [^]	2020	2021
Brazil	P/E (TTM)	19.42	32.51	14.52	-7%	-9%	-45%
	Forward P/E	12.95	12.55	10.94			
China	P/E (TTM)	14.55	16.39	16.39	-30%	-54%	-38%
	Forward P/E	10.92	13.26	13.26			
India	P/E (TTM)	28.30	38.45	24.11	36%	8%	-9%
	Forward P/E	18.81	23.90	23.32			
USA	P/E (TTM)	20.84	35.59	26.43			
	Forward P/E	15.38	22.40	21.30			
MSCI EM	P/E (TTM)	15.02	21.26	14.02	-28%	-40%	-47%
	Forward P/E	12.58	15.11	12.04			

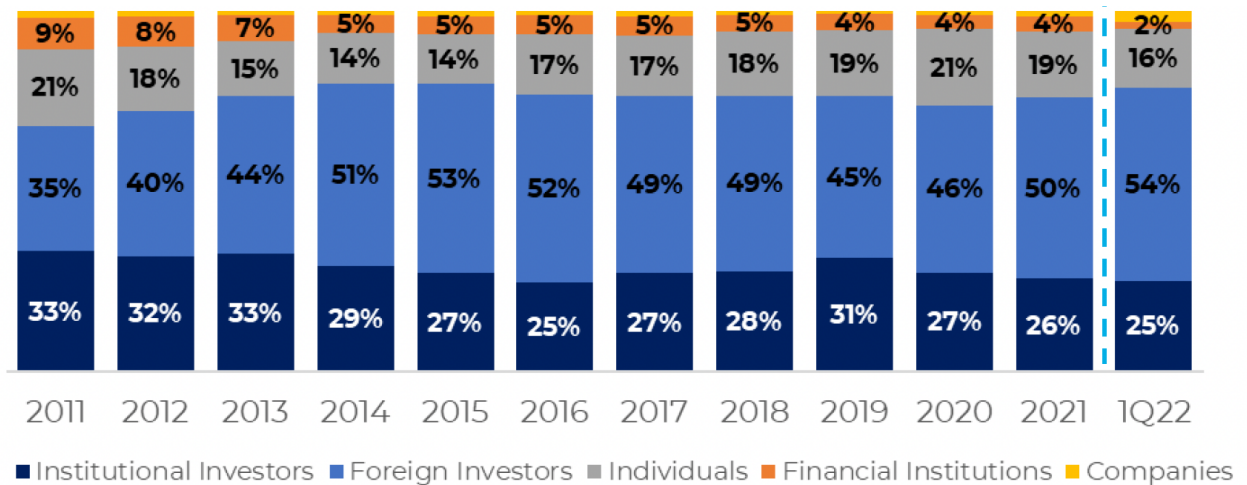
[^] 3/31/2020 for USA

Source: Horizon Research, Bloomberg, FactSet, www.siblisresearch.com <https://siblisresearch.com/data/emerging-markets-valuations/>

An analysis of trading per market participant reveals that retail investors were once more numerous on the B3 - BRASIL BOLSA BALCÃO, accounting for as much as 31.4 per cent of market participation in January of 2010, a boom year. However, their participation has steadily declined with the stagnation of the economy and accounted for only 14.4 per cent of volumes towards the end of 2014. Foreign investors, by

contrast, accounted for 52.2 per cent of Brazilian trade towards the end of 2014³. Retail participation has increased since 2014 and was currently at 19% in 2021 (Figure 1).

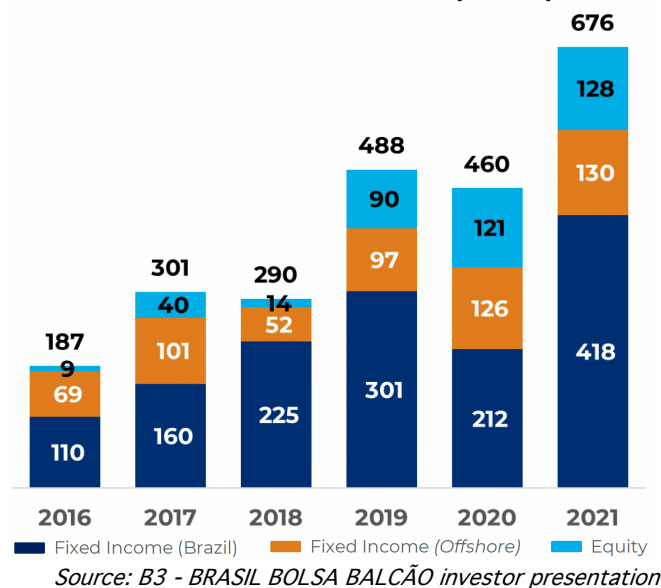
Figure 1: Investor Participation in volumes



Source: B3 - BRASIL BOLSA BALCÃO investor presentation

Equity capital raised in the Brazilian market has increased significantly from R\$9bn (US\$ 1.7bn) in 2016 to R\$128bn (US\$ 24bn) in 2021 (Figure 2).

Figure 2: Capital raised in the Brazilian market (R\$ bn)

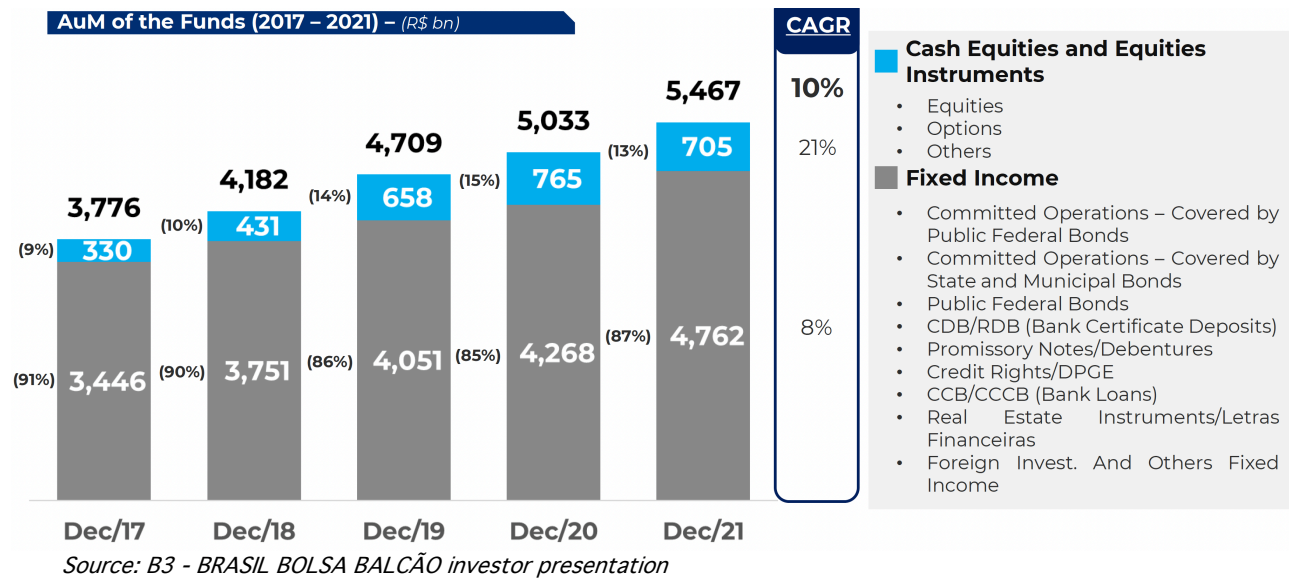


Investor's exposure to equity is low and their portfolios are heavily concentrated in fixed income. This could be attributed to historically high interest rates, a low level of sophistication of pension funds and asset managers and a lack of knowledge about the equity market, combined with retail investors' fixed-income mindset⁴. Whereas the global average of AUM invested in Equities by investment funds is 40% it is considerably lower in Brazil (Figure 3).

³ Leahy, J. (2014). *Brazil's markets track election polls*. Retrieved from <http://www.ft.com/intl/cms/s/0/86f6cd10-582f-11e4-b331-00144feab7de.html#axzz3YxEz8tyy>

⁴ Refer to our Brazil Equity Opportunities Report 2016

Figure 3: Funds AUM evolution (in R\$ bn)



The Indices

The IBOVESPA Index was established in 1968 to serve as an average indicator of the stock market's behavior and has been calculated uninterruptedly ever since, without any methodological changes.

Ibovespa is reassessed every four months and results from a theoretical portfolio of stocks. It is comprised of stocks and units of companies listed on B3 - BRASIL BOLSA BALCÃO that meet the criteria described in its methodology, accounting for about 80% of the number of trades and the financial volume of our capital markets⁵.

The Ibovespa Index is used as a proxy to track the 337 listed companies and currently constitutes 89 companies (May 2022) in the broad B3 - BRASIL BOLSA BALCÃO stock market. In order for a company to be included in the index, it has to be amongst the eligible stocks that account for 85% in descending order by individual tradability ratio (IN); Traded in 95% of the trading sessions; 0,1% of the value traded on the cash equity market (round lots); and not be a penny stock. The filter is adjusted three times per year, based on the latest 12 months indicators.

The Ibovespa index with a 22.4% CAGR between 2015 and 2020 has outperformed the MSCI EM Index, S&P BSE Sensex, Shanghai Composite and S&P 500. In the current year to date period, the Ibovespa index with a 7.4% CAGR has outperformed the MSCI EM Index with a -15.8% CAGR (Table 2).

Table 2: Performance of Brazilian Vs. International Indices (2005-2021)

Index	Index level						CAGR					
	2005	2010	2015	2020	2021	CYtD	2005-10	2010-15	2015-20	2005-20	2005-21	CYtD
S&P 500	1,248	1,258	2,044	3,756	4,766	3,901	0.1%	10.2%	12.9%	7.6%	8.7%	-18.2%
S&P BSE Sensex	9,398	20,509	26,118	47,751	58,254	54,303	16.9%	5.0%	12.8%	11.4%	12.1%	-6.8%
Shanghai Composite	1,161	2,808	3,539	3,473	3,640	3,285	19.3%	4.7%	-0.4%	7.6%	7.4%	-9.8%
IBOVESPA Index	33,456	69,305	43,350	119,306	104,822	105,481	15.7%	-9.0%	22.4%	8.8%	7.4%	0.6%
iShares MSCI Emerging Markets	88	48	32	52	49	41	-11.6%	-7.5%	9.9%	-3.5%	-3.6%	-15.8%

Source: Horizon Research, Yahoo Finance (Index level taken at the last trading day of December)

There is a heavy concentration of market capitalization represented through the primary indices. The stocks that participate in the Ibovespa Index represent over 90.1% (USD 990 billion) of the annual value traded on the exchange and 83% of the sum of all Ibovespa company's market capitalization. The annual value traded on the Ibovespa Index increased by 225% from USD 488 billion in 2015⁶ to USD 1,099 billion in 2022 (Table 3a).

The balance of shares not captured by the indices equates to approximately 252 companies, and result in opportunities for superior stock selection. Our efforts emphasize valuations with catalysts, and believe that a significant portion of small and mid-caps present opportunities for investment.

The Brazilian equity market quantity of traded companies offers investment diversification opportunities within the Brazilian market itself. The Ibovespa Index also offers diversity of the market, with the Ibovespa Index comprising companies across each of the 10 broad industry segments.

⁵ b3.com.br. *Bovespa Index*. Retrieved from https://www.b3.com.br/en_us/market-data-and-indices/indices/broad-indices/ibovespa.htm

⁶ All references to 2015 are to the release of our previous report

Concentration offers opportunities

A closer look at the market focusing on company size helps identify divergences amongst the listed companies. The largest 100 companies by market capitalisation continue to dominate but their representation of the broad market capitalization has decreased from 95.5% (2016 (Table 3b)) to 91% in 2021. An analysis of value traded as a percentage of total traded volume reveals that in 2021 nearly 86.6%, compared to 97.6% in 2016, of the total traded volume is restricted to the largest 100 companies by market capitalisation. On an aggregate basis, these companies offer attractive values (Table 3a).

The Top 100 companies continue to outperform the other remaining companies on several metrics. Leverage, measured in terms of net debt to enterprise value, declined from 51% in 2015 to 47% (current) for the Top 100 companies but it was 64% for the bottom 113 companies.

The Top 100 companies have a ROE of 30.6%, FCF yield of 12.4% and dividend yield of 6.1%. In contrast, the bottom 113 companies have an ROE of 1.9%, FCF yield of -4.6% and dividend yield of 5.1%.

The Top 100 companies trade at a lower P/E and EV/ EBITDA multiple compared to the mid 112 and bottom 113 companies. As investors, we find opportunities masked in the aggregates and underscore that these broad differences provide opportunities in individual stock selection.

Table 3a: Analysis of performance highlights by market capitalization - 2021

BY MARKET CAPITALISATION	Number of Co's	Market Cap (USD MN)	Mcap as a % of All Stocks	Enterprise Value (USD MN)	Net Debt (USD MN)	Net Debt/ EV	ROE: 2021	FCF Yld: 2021	Dvd Yld: 2021	P/E: 2021	EV/ EBITDA: 2021	P/BV: 2021	PEG Ratio	Total Return: Y-5 (I)	Total Return: Y-1 (I)	EPS T12M	Annual Value Traded (USD MN)	Value Traded as % of All Stocks	Annual Value Traded to Market Cap
Ibovespa	85	696,072	83%	1,322,145	626,073	47%	32.3%	14.2%	6.4%	14.5	7.0	2.4	0.5	195%	-4.8%	1.3	990,158	90.1%	142.2%
All Brazil traded equities, Cap Wgt.	337	840,803	100%	1,565,215	724,412	46%	28.6%	11.2%	6.0%	15.2	7.6	2.6	0.5	188%	-5.6%	1.1	1,098,616	100.0%	130.7%
Top 10 Companies	10	385,667	46%	851,738	466,070	55%	29.5%	16.9%	7.6%	8.6	5.1	2.1	0.6	208%	1.6%	1.7	435,945	39.7%	113.0%
Top 25 Companies	25	543,787	65%	1,084,933	541,147	50%	35.2%	14.3%	6.7%	11.0	6.0	2.4	0.6	186%	-0.8%	1.5	589,953	53.7%	108.5%
Top 50 Companies	50	665,080	79%	1,263,920	598,841	47%	32.8%	13.8%	6.3%	14.3	6.8	2.6	0.6	199%	-2.6%	1.3	774,564	70.5%	116.5%
Top 100 Companies	100	767,210	91%	1,424,860	657,649	46%	30.6%	12.4%	6.1%	14.3	7.2	2.6	0.5	198%	-4.1%	1.2	951,159	86.6%	124.0%
Top 200 Companies	200	829,633	99%	1,541,108	711,475	46%	28.9%	11.4%	6.0%	15.1	7.5	2.6	0.5	189%	-5.2%	1.1	1,067,097	97.1%	128.6%
Top 112	112	779,850	93%	1,448,138	668,288	46%	30.3%	12.2%	6.0%	14.4	7.3	2.6	0.5	196%	-4.2%	1.2	967,752	88.1%	124.1%
Mid 112	112	54,633	6%	99,389	44,757	45%	6.5%	-0.9%	6.6%	27.4	11.4	2.0	0.1	89%	-22.0%	0.3	114,847	10.5%	210.2%
Bottom 113	113	6,320	1%	17,688	11,368	64%	1.9%	-4.6%	5.1%	13.6	12.7	1.9	-	77%	-34.9%	0.3	16,018	1.5%	253.4%

Source: Horizon Research, Bloomberg

Table 3b: Analysis of performance highlights by market capitalization - 2015

BY MARKET CAPITALISATION	Number of Co's	Market Cap (USD MN)	Enterprise Value (USD MN)	Net Debt (USD MN)	ROE: 2015	FCF Yld: 2015	Dvd Yld: 2015	P/E: 2015	EV/ EBITDA: 2015	P/BV: 2015	PEG Ratio	Total Return: Y-5 (I)	Total Return: Y-1 (I)	EPS T12M	Annual Value Traded (USD MN)	Value Traded as % of All Stocks	Annual Value Traded to Market Cap
Ibovespa	55	700,822	1,478,199	777,376	15.9%	13.3%	5.5%	16.6	4.8	2.8	1.4	97.3%	47.1%	0.3	443,468	90.9%	63.3%
All Brazil traded equities, Cap Wgt.	321	828,039	1,737,154	909,115	14.9%	11.8%	5.1%	15.8	4.3	4.3	1.3	91.5%	47.3%	0.3	487,969	100.0%	58.9%
Top 10 Companies by M Cap	10	454,515	1,127,020	672,504	14.4%	13.3%	6.4%	9.1	5.2	2.4	1.5	81.1%	55.1%	0.2	225,106	46.1%	49.5%
Top 25 Companies by M Cap	25	606,316	1,337,099	730,783	16.3%	12.4%	5.6%	11.6	5.0	2.8	1.5	100.9%	51.1%	0.3	316,129	64.8%	52.1%
Top 50 Companies by M Cap	50	710,745	1,494,719	783,974	15.5%	11.8%	5.4%	16.4	4.7	2.7	1.4	100.2%	48.6%	0.3	417,063	85.5%	58.7%
Top 100 Companies by M Cap	100	790,747	1,614,044	823,297	15.5%	12.4%	5.2%	16.1	4.5	4.4	1.3	95.5%	47.8%	0.3	476,022	97.6%	60.2%
Top 200 Companies by M Cap	200	825,848	1,706,555	880,706	15.0%	11.8%	5.1%	15.9	4.3	4.3	1.3	91.9%	47.4%	0.3	487,086	99.8%	59.0%
Top 105	105	795,106	1,634,294	839,188	15.5%	11.9%	5.2%	16.0	4.5	4.4	1.3	95.0%	47.8%	0.3	477,915	97.9%	60.1%
Mid 105	105	31,394	75,045	43,651	2.5%	9.4%	3.1%	11.2	0.7	1.3	0.3	8.2%	35.6%	0.1	9,230	1.9%	29.4%
Bottom 221	221	37,292	123,110	85,818	2.0%	-1.4%	2.9%	10.3	1.6	1.2	0.3	6.9%	37.1%	(0.2)	11,947	2.4%	32.0%
Bottom 115	115	1,788	28,789	27,001	-8.7%	7.5%	1.6%	3.3	-	0.4	-	-32.7%	27.9%	(3.4)	831	0.2%	46.5%

Source: Horizon Research, Bloomberg

iBovespa securities

There is an increasing dominance of iBovespa securities, which are relatively larger in terms of their size and trading volume, in most of the industries (Table 4a and 4b). For instance, 14 iBovespa securities accounted for 64% (compared to 55% in 2015) of the total market capitalisation of USD 42 billion of 72 companies in consumer discretionary industry. A similar trend is seen in basic materials, energy, financials and industrials.

In addition, we observe that the market capitalisation of a small number of companies within each industry sector constitute a majority of that industry sectors broad market capitalisation. For example, in the broad market there are 12 energy companies of which 5 companies constitutes 88% of the market capitalisation. This trend is repeated in the Healthcare industry where 5 companies out of 17 healthcare companies in the broad market constitute 78% of the market capitalization (Table 4a).

Table 4a: Concentration of market capitalisation by industry - 2021

BY SECTOR	BROAD MARKET		iBOVESPA Index		Market Cap of iBOVESPA securities as a % of the broad market
	Number of securities	Cap in USD MN	Number of securities	Market Cap in USD MN	
Materials	29	147,889	10	136,549	92%
Consumer Staples	26	98,823	11	88,394	89%
Consumer Discretionary	72	42,338	14	27,062	64%
Financials	39	199,633	11	184,306	92%
Health Care	17	34,713	5	27,231	78%
Industrials	54	65,891	9	47,224	72%
Energy	12	111,084	5	97,457	88%
Information Technology	14	10,703	4	6,302	59%
Communication Services	13	24,247	3	21,703	90%
Real Estate	22	9,804	3	4,878	50%
Utilities	39	95,676	10	54,964	57%

Source: Horizon Research, Bloomberg

Table 4b: Concentration of market capitalisation by industry - 2016

BY INDUSTRY	BROAD MARKET		iBOVESPA Index		MarketCap of iBOVESPA securities as a % of the broad market
	Number of securities	MarketCap in USD MN	Number of securities	MarketCap in USD MN	
Basic Materials	28	60,198	8	58,587	97%
Consumer Discretionary	64	48,518	5	26,766	55%
Consumer Staples	22	156,073	8	145,878	93%
Energy	11	84,512	2	81,837	97%
Financials	76	299,044	15	274,857	92%
Health Care	10	7,941	0	0	0%
Industrials	55	45,879	7	35,629	78%
Technology	5	1,719	0	0	0%
Telecommunications	6	30,731	2	28,768	94%
Utilities	44	93,425	8	48,500	52%

Source: Horizon Research, Bloomberg

Industry sectors oriented for growth

The financials, consumer staples, utilities and energy industries are amongst the largest industry sectors by market capitalisation in the Brazilian equity market with respective

participation of 36.1%, 18.8%, 11.3% and 10.2%. We observed a marginal decline in the domination of financials and consumer industry as they accounted for 37.0% and 20.7% of the total market capitalization of Brazilian equity market in 2015.

Each sector of the Brazilian market has its particular economics, and it would not always be accurate to compare two industries using the same financial indicator. However, certain trends are discernible when we analyze performance highlights by industry grouping (Table 5a & 5b).

Table 5a: Analysis of performance highlights by industry - 2021

BY INDUSTRY	Number of Co's	Market Cap (USD MN)	Mcap as a % of All Stocks	Enterprise Value (USD MN)	Net Debt (USD MN)	Nett Debt/ EV	ROE: 2021	FCF Yld: 2021	Dvd Yld: 2021	P/E: 2021	EV/ EBITDA: 2021	P/BV: 2021	Total Return: Y-5 (I)	Total Return: Y-1 (I)	EPS T12M	Annual Value Traded (USD MN)	Value Traded as % of All Stocks	Annual Value Traded to MCap
Materials	29	147,889	18%	183,726	35,836	20%	76%	26%	11%	4	3	2.5	313%	-7%	3.4	273,250	24.9%	184.8%
Consumer Staples	26	98,823	12%	134,396	35,573	26%	25%	7%	4%	18	9	3.1	87%	-14%	0.5	91,925	8.4%	93.0%
Consumer Discretionary	72	42,338	5%	64,607	22,269	34%	7%	-1%	2%	27	18	2.9	52%	-44%	0.2	123,961	11.3%	292.8%
Financials	39	199,633	24%	646,177	446,544	69%	19%	2%	5%	11	4	1.8	129%	-14%	0.5	173,956	15.8%	87.1%
Health Care	17	34,713	4%	48,501	13,788	28%	12%	1%	2%	44	18	4.4	7%	-39%	0.1	24,991	2.3%	72.0%
Industrials	54	65,891	8%	105,222	39,331	37%	19%	-9%	1%	46	17	5.3	201%	-18%	0.3	107,543	9.8%	163.2%
Energy	12	111,084	13%	166,777	55,692	33%	25%	35%	8%	6	4	1.5	369%	42%	1.7	186,549	17.0%	167.9%
Information Technology	14	10,703	1%	11,667	964	8%	12%	1%	2%	22	23	2.9	60%	-20%	0.1	21,784	2.0%	203.5%
Communication Services	13	24,247	3%	34,001	9,754	29%	4%	7%	3%	19	5	1.2	70%	6%	0.5	24,780	2.3%	102.2%
Real Estate	22	9,804	1%	14,676	4,872	33%	7%	3%	20%	31	15	1.2	60%	-22%	0.2	16,358	1.5%	166.8%
Utilities	39	95,676	11%	155,465	59,789	38%	14%	11%	8%	9	8	2.7	189%	5%	0.6	53,521	4.9%	55.9%

Source: Horizon Research, Bloomberg

Table 5b: Analysis of performance highlights by industry - 2016

BY INDUSTRY	Number of Co's	Market Cap (USD MN)	Enterprise Value (USD MN)	Net Debt (USD MN)	ROE: 2015	FCF Yld: 2015	Dvd Yld: 2015	P/E: 2015	EV/ EBITDA: 2015	P/BV: 2015	PEG Ratio	Total Return: Y-5 (I)	Total Return: Y-1 (I)	EPS T12M	Annual Value Traded (USD MN)	Value Traded as Percentage of All Stocks	Annual Value Traded to Market Cap
Basic Materials	28	60,198	123,917	63,719	-9.0%	16.2%	5.8%	6.5	4.4	1.4	1.2	1.8%	28.8%	(0.9)	117,352	24.0%	194.9%
Consumer Discretionary	64	48,518	59,908	11,391	24.8%	7.7%	3.1%	24.5	NA	5.3	1.2	199.4%	49.7%	0.3	28,494	5.8%	58.7%
Consumer Staples	22	156,073	186,210	30,138	23.0%	8.0%	2.8%	21.8	9.8	4.7	2.4	125.2%	10.1%	0.3	54,168	11.1%	34.7%
Energy	11	84,512	197,981	113,469	-10.7%	17.4%	0.4%	1.1	5.5	0.4	0.1	13.1%	114.5%	(0.9)	42,111	8.6%	49.8%
Financials	76	299,044	884,144	585,099	24.7%	14.8%	9.0%	17.1	1.4	2.2	1.5	104.1%	56.3%	0.8	159,756	32.7%	53.4%
Health Care	10	7,941	8,723	782	10.3%	6.6%	1.7%	48.7	2.6	3.4	1.0	66.2%	75.1%	0.3	2,245	0.5%	28.3%
Industrials	55	45,879	78,434	32,556	8.4%	2.6%	1.9%	21.7	7.7	3.5	0.8	85.2%	16.8%	(0.0)	25,265	5.2%	55.1%
Technology	5	1,719	1,931	212	14.7%	7.4%	2.3%	23.7	0.0	3.8	-	13.6%	-0.1%	0.3	1,868	0.4%	108.7%
Telecommunications	6	30,731	47,651	16,920	6.5%	-4.2%	0.6%	14.0	4.1	1.0	0.6	19.0%	22.0%	0.5	6,691	1.4%	21.8%
Utilities	44	93,425	148,254	54,829	9.9%	13.1%	4.6%	11.4	2.3	16.4	0.4	98.1%	52.4%	0.4	50,018	10.3%	53.5%

Source: Horizon Research, Bloomberg

The basic materials industry, which includes chemicals, metals and mining, construction material, etc., represents 18% of all market capitalization and 24.9% of value traded which is the highest amongst all industry groups. In contrast, the basic materials industry represented 7.3% of all market capitalization and 24.0% of value traded in 2015. The sector's net debt to enterprise value has decreased from 51.0% in 2015 to 20%. The 2015 ROE of the sector was -9.0%, FCF yield was 16.2% and the dividend yield was 5.8%. The sector traded at 2015 P/E of 6.5x and 4.4x 2015 EV/EBITDA. The 2021 ROE of the sector was 76%, FCF yield was 26% and the dividend yield was 11%. The sector traded at a P/E of 4x and 3x 2021 EV/EBITDA.

The consumer staples industry represents 12% of market capitalization and 8.4% of traded volume. In contrast, the consumer staples industry represented 18.8% of market capitalization and 11.1% of traded volume in 2015. The FCF yield and dividend yield of the sector is currently 7% and 4% as compared to 8.0%, and 2.8% in 2015. The sector traded at a 2015 P/E ratio of 21.8x and 9.8x EV/EBITDA, higher than the Index. In comparison, the consumer staples industry currently trades at a 2021 P/E ratio of 18x and 9x EV/EBITDA. These disconnects in financial ratios versus the index respond to secular trends in the sector (e.g. increasing disposable income leading to higher demand).

The consumer discretionary industry represents 5% of all market capitalization and 11.3% of value traded. In contrast, the consumer discretionary industry represented 5.9% of all market capitalisation and 5.8% of value traded in 2015. The leverage of the industry remained stable as indicated by the change in net debt to enterprise value from 19% in 2015 to 20% currently. The consumer discretionary industry had a 2015 ROE of 24.8%, with FCF yield of 7.7% and dividend yield of 3.1%. In comparison, it has a 2021 ROE of 7%, with FCF yield of -1% and dividend yield of 2%. The consumer discretionary industry has seen an expansion in valuation multiples with P/E increasing from 24.5x in 2015 to 27x in 2021.

The financials industry, which includes banks, asset management, mortgage finance and thrifts represents 24% of all market capitalization and 15.8% of value traded. The ROE of the sector decreased from 24.7% in 2015 to 19% in 2021 and the dividend yields decreased from 9.0% to 5% during the same period. The sector P/E decreased to 11x in 2021 from 17.1x in 2015, and the P/B ratio decreased from 2.2x in 2015 to 1.8x in 2021.

The healthcare industry represents 4% of the total market capitalization and 2.3% of total value traded. In comparison, it represented 1% of the total market capitalization and 0.5% of total value traded in 2015. The ROE and dividend yield increased from 10.3% and 1.7% in 2015 to 12% and 2% in 2021, FCF yield decreased from 6.6% in 2015 to 1% in 2021. The sector traded at 2021 P/E of 44x (48.7x in 2015) and 2021 EV/EBITDA of 18x (2.6x in 2015).

The Industrials industry represents 8% of market capitalization and 9.8% of traded volume. In contrast, Industrials represented 5.5% of all Brazilian market capitalization and 5.2% of all value traded in 2015. The sector has a net debt to enterprise value of 37%, compared to 41.5% in 2015. ROE and dividend yield of the sector moved from 8.4% and 1.9% in 2015 to 19% and 1% in 2021. Industrials traded at 2021 P/E of 46x (21.7x in 2015) and 17x 2021 EV/EBITDA (7.7x in 2015).

The Energy industry, which includes oil, gas and coal exploratory companies and allied services, represents 13% of all market capitalization and 17% of value traded. In contrast, it represented 10.2% of all market capitalization and 8.6% of value traded in 2015. The energy industry has a 33% net debt to enterprise value ratio. The energy industry has a 2021 ROE of 25%, with FCF yield of 35% and dividend yield of 8% and in comparison, had a 2015 ROE of -10.7%, with FCF yield of 17.4% and dividend yield of 0.04% (lowest amongst all industry groups). The energy industry is trading at 6x 2021 P/E (1.1x in 2015) and 5.5x 2021 EV/EBITDA (4x in 2015).

The Technology industry represents 1% of all market capitalization and 2% of value traded. In contrast, it represented 0.2% of all market capitalization and 0.4% of value traded in 2015. The sector has net debt to enterprise value of 8.0%, which decreased from 11% in 2015. The 2021 ROE of the sector is 12% (14.7% in 2015), 2021 FCF yield is 1% (7.4% in 2015) and 2021 dividend yield is 1% (2.3% in 2015). The technology industry traded at a 2021 P/E of 22x (2015 P/E was 23.7x).

The Telecommunication industry represents 3% of all Brazilian market capitalization and 2.3% of all value traded. In contrast in 2015, it represented 3.7% of all Brazilian market capitalization and 1.4% of all value traded. The sector has a net debt to enterprise value of 29%, which decreased from 35.5% in 2015. The ROE of the sector decreased from 10.1% in 2015 to 4% in 2021. The 2021 FCF yield of the sector is 7% (-4.2% in 2015) and the 2021 dividend yield is 3% (0.6% in 2015). The Telecommunication industry has seen an expansion in valuation multiples with P/E and EV/EBITDA increasing from 14.0x and 4.1x in 2015 to 19x and 5x in 2021.

The Real Estate industry represents 1% of all market capitalization and 1.5% of value traded. The sector's net debt to enterprise value was 33%. The 2021 ROE of the sector was -7%, FCF yield was 3% and the dividend yield was 20%. The sector traded at 2021 P/E of 31x and 15x 2021 EV/EBITDA.

The utilities industry, which includes independent power producers & energy traders, electric, water and gas utilities represents 11% of all market capitalization and 4.9% of value traded. In contrast in 2015, it represented 11.3% of all market capitalization and 10.3% of value traded. The sector has net debt to enterprise value of 38.0%, marginally increasing from 37% in 2015. The ROE of the sector increased from 9.9% in 2015 to 14% in 2021, FCF yield, and dividend yield increased from 11% and 8% in 2014 to 0.8% and 3% in 2015. The sector traded at 2021 P/E of 9x (11.4x in 2015) and 8x 2021 EV/EBITDA (2.3x in 2015).

THE BRAZILIAN ECONOMY

While Brazilian GDP (at current USD) has increased from USD 892 billion in 2005 to USD 1,802 billion in 2015 it has declined to USD 1,440 billion in 2020. The total market capitalisation to GDP ratio is below global levels leading to lower valuations in the Brazilian equity markets. Brazilian broad market capitalisation of USD 815 billion in 2021 represents 51% of Brazilian GDP. This is below the long-term average trend and is lower than the recent peak 2010 of 70%. In comparison, the ratio of US, China and India market capitalisation to GDP in 2021 are 227%, 47% and 112% (Table 6).

We believe Brazilian GDP will continue to grow at it's an average of 3-4% in the long term, which will provide an added impetus to companies across capitalisation and industry sectors. Brazil was the tenth largest economy in the world with an estimated GDP in 2021 of USD 1,608 billion in current dollars⁷.

Net FDI has increased in most years but reduced due to COVID 19 and ongoing political issues, stood at USD 38 billion in 2020 (Table 6). Portfolio inflows in 2020 were a negative USD 5 billion, these were lower than Portfolio inflows all of their per group.

⁷ Source IMF

Table 6: Comparative: Economic indicators for the past 10 years

	2005	2010	2015	2020	2021 [^]	2005-2015	CAGR 2015-20	2015-2021
GDP (current US\$)								
Brazil	892	2,209	1,802	1,445	1,608	7%	-4%	-2%
China	2,286	6,087	11,062	14,723	17,458	17%	6%	8%
India	820	1,676	2,104	2,660	3,172	10%	5%	7%
European Union	11,911	14,558	13,552	15,292	NA	1%	2%	NA
United States	13,037	14,992	18,238	20,953	22,998	3%	3%	4%
GDP growth (annual %)								
Brazil	3.2%	7.5%	-3.5%	-4.1%				
China	11.4%	10.6%	7.0%	2.3%				
India	7.9%	8.5%	8.0%	-7.3%				
European Union	1.9%	2.2%	2.3%	-6.0%				
United States	3.5%	2.6%	3.1%	-3.4%				
GDP per capita (current US\$)								
Brazil	4,790	11,286	8,814	6,797				
China	1,753	4,550	8,016	10,435				
India	715	1,358	1,606	1,928				
European Union	27,345	32,971	30,485	34,173				
United States	44,115	48,467	56,863	63,207				
Foreign direct investment, net inflows (BoP, current US\$)								
Brazil	15	82	65	38		15%	-10%	
China	104	244	242	212		9%	-3%	
India	7	27	44	64		20%	8%	
European Union	731	539	773	296		1%	-17%	
United States	142	264	511	211		14%	-16%	
Inflation, consumer prices (annual %)								
Brazil	6.9%	5.0%	9.0%	3.2%				
China	1.8%	3.2%	1.4%	2.4%				
India	4.2%	12.0%	4.9%	6.6%				
European Union	2.5%	1.5%	-0.1%	0.5%				
United States	3.4%	1.6%	0.1%	1.2%				
Market capitalization of listed domestic companies (% of GDP)								
Brazil	53%	70%	27%	68%	51%			
China	18%	66%	74%	83%	47%			
India	76%	105%	83%	98%	112%			
European Union	58%	51%	62%	NA				
United States	130%	115%	137%	194%	227%			
Market capitalization of listed domestic companies (current US\$)								
Brazil	475	1,546	491	988	815	0%	15%	9%
China	402	4,028	8,188	12,214	8,155	35%	8%	0%
India	625	1,762	1,745	2,595	3,548	11%	8%	13%
European Union	6,313	6,705	6,313	NA	NA	0%	NA	NA
United States	17,001	17,283	25,068	40,720	52,244	4%	10%	13%
Portfolio equity, net inflows (BoP, current US\$)								
Brazil	6	38	10	(5)		4%	-188%	
China	21	31	15	64		-3%	34%	
India	12	30	2	25		-17%	67%	
European Union	568	400	728	388		3%	-12%	
United States	89	179	(187)	648		NA	-228%	

Source: Horizon Research, The World Bank, IMF, WFE

[^] IMF estimates

Brazilian exports are diversified, though in general food and manufactures exports are the largest export items in most years. With Merchandise trade/GDP ratio stabilizing, Brazil is becoming more integrated with and sensitive to global economic conditions. The degree of openness to trade represented by the Merchandise trade/GDP ratio has increased to 26% in 2020, as compared to 32% for China and 24% for India (Table 7).

Table 7: Comparative Trade indicators

	2005	2010	2015	2020	CAGR	
					2005-2015	2015-20
Merchandise exports by the reporting economy (current US\$)						
Brazil	118	202	191	211	5%	2%
China	762	1,578	2,281	2,598	12%	3%
India	98	223	266	276	11%	1%
European Union	904	1,277	1,505	1,432	5%	-1%
United States	3,688	4,768	4,929	5,463	3%	2%
Merchandise trade (% of GDP)						
Brazil	22.0%	17.8%	20.5%	26.0%		
China	62.2%	48.9%	35.7%	31.6%		
India	29.6%	34.4%	31.5%	24.4%		
European Union	20.2%	21.7%	20.9%	18.3%		
United States	61.6%	65.3%	70.4%	69.3%		
Agricultural raw materials exports (% of merchandise exports)						
Brazil	3.9%	3.9%	4.8%	5.7%		
China	0.5%	0.5%	0.4%	0.3%		
India	1.3%	2.2%	1.8%	1.3%		
European Union	2.6%	2.6%	2.3%	2.1%		
United States	1.5%	1.5%	1.5%	1.4%		
Food exports (% of merchandise exports)						
Brazil	26%	30%	38%	39%		
China	3%	3%	3%	3%		
India	9%	8%	11%	13%		
European Union	7%	10%	10%	11%		
United States	8%	9%	10%	11%		
Manufactures exports (% of merchandise exports)						
Brazil	52.2%	35.0%	34.9%	25.0%		
China	91.9%	93.6%	94.3%	93.5%		
India	70.6%	62.6%	68.8%	71.0%		
European Union	73.2%	65.4%	63.7%	60.2%		
United States	79.3%	76.2%	77.5%	78.7%		
Ores and metals exports (% of merchandise exports)						
Brazil	10%	18%	12%	16%		
China	2%	1%	1%	1%		
India	8%	8%	3%	5%		
European Union	3%	4%	3%	3%		
United States	2%	3%	3%	3%		

Source: Horizon Research, The World Bank, IMF

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Important Disclosures

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