Brazil

Analysis and synthesis

November 5, 2019
The Brazilian market represents less than 1% of the worldwide market capitalization with 94 companies being followed by theScreener.

The index, BOVESPA, is currently trading at its 52 week high and 28% above its 52 low (bi-weekly closing).

Performance since November 6, 2018: 22.6% vs. 11.5% for the DJ Stoxx 600 and 11.6% for the SP500.

The current % of stocks over their Medium Term technical trend (MTT) is 58.7%.

### Performance over 5 years

On a 5 year moving average, the performance of the index BOVESPA is 104.3%, vs. 20.6% for the DJ Stoxx 600 and 51.3% for the SP500. During this period, the high of 108,719.0 was reached on November 2019 and the low of 37,497.5 in the month of January 2016. It is interesting to point out that since 5 years ago the EUR vs. the BRL rose significantly by 39%. The returned performance in BRL is 104.3%, vs. 68.0% for the DJ Stoxx 600 and 106.4% for the SP500.

### Price evaluation rating

In order to assess whether an index is correctly valued, we focus on Peter Lynch’s broadly accepted methodology of comparing the projected earnings growth and dividend with the estimated PE ratio. Based on this approach, we feel this index is currently strongly undervalued.

A “Forecasted Growth + Estimated Dividend Yield/ Estimated Price Earnings” ratio higher than 0.9 indicates that the index’s price includes a discount to growth >40% in this case.

### Earnings revision trend

Compared to seven weeks ago, the analysts have not significantly revised their earnings estimates (changes between +1% and -1% are considered neutral). But the underlying trend has been negative since September 24, 2019 at a price of 103,875.6.

### "Price to Estimated Earnings" (PE) - Evolution over five years

The estimated PE is calculated on the basis of the underlying stocks. While the PE of the index BOVESPA is 11.5, the PE of the DJ Stoxx 600 is markedly higher (13.4); this indicates that the Brazilian market is trading lower than the index DJ Stoxx 600.

On the other hand, historically speaking, this index is currently trading above its median value of 9.8.

### Technical trend

The 40-day Medium Term Technical Trend has been positive since October 22, 2019. The confirmed Technical Reverse point (Tech Reverse - 1.75%) is currently 6% lower.

This positive technical trend is confirmed by the fact that 58.7% percent of stocks are trading above their average. This would indicate that a significant number of stocks are part of the current rise in the market.

### Comparison

**November 6, 2018 - November 5, 2019**

**Index**

<table>
<thead>
<tr>
<th>Index</th>
<th>Market Value</th>
<th>YTD</th>
<th>Nb of Stocks</th>
<th>Mkt Cap in $bn</th>
<th>Stars</th>
<th>Sensitivity</th>
<th>G/PE Ratio</th>
<th>LT P/E</th>
<th>LT Growth</th>
<th>4wk Perf</th>
<th>% of Stocks in Uptrend</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOVESPA (BR)</td>
<td>108,719.00</td>
<td>23.7%</td>
<td>63</td>
<td>933.25</td>
<td>✭✭✭✭</td>
<td></td>
<td>1.57</td>
<td>11.5</td>
<td>14.8%</td>
<td>6.0%</td>
<td>58.7%</td>
</tr>
<tr>
<td>DJ Stoxx 600 (E)</td>
<td>404.23</td>
<td>19.7%</td>
<td>596</td>
<td>13,109.69</td>
<td>✭✭✭✭</td>
<td></td>
<td>1.10</td>
<td>13.4</td>
<td>11.1%</td>
<td>6.3%</td>
<td>66.6%</td>
</tr>
<tr>
<td>SP500 (US)</td>
<td>3,074.62</td>
<td>22.6%</td>
<td>497</td>
<td>26,899.28</td>
<td>✭✭✭✭</td>
<td></td>
<td>0.99</td>
<td>16.0</td>
<td>13.8%</td>
<td>4.2%</td>
<td>58.6%</td>
</tr>
</tbody>
</table>

**Price evaluation rating**

In order to assess whether an index is correctly valued, we focus on Peter Lynch's broadly accepted methodology of comparing the projected earnings growth and dividend with the estimated PE ratio. Based on this approach, we feel this index is currently strongly undervalued.

A “Forecasted Growth + Estimated Dividend Yield/ Estimated Price Earnings” ratio higher than 0.9 indicates that the index’s price includes a discount to growth >40% in this case.

**Earnings revision trend**

Compared to seven weeks ago, the analysts have not significantly revised their earnings estimates (changes between +1% and -1% are considered neutral). But the underlying trend has been negative since September 24, 2019 at a price of 103,875.6.
Volatility is also used as a sensitivity factor. It measures the magnitude of upward and downward movements of a stock or index. The higher the volatility, the more an index is considered as sensitive. As of the last update, the monthly volatility of (13.8%) is lower than the last few years' average of (21.2%). The low magnitude of short term price fluctuations indicates a lull in the market. On the other hand, long term volatility 19.0% of the index is clearly higher than that of the index DJ Stoxx 600 (11.7%), reflecting much higher price variations at the level of this market than the level of the market European.

The sensitivity factor in declining markets
The "Bear Market Factor" measures the behavior of an index in declining markets. In this context, the index BOVESPA has a tendency to minimize the drops of the index TSC_World. This would indicate a low sensitive behaviour of the index during market corrections. The index BOVESPA has a tendency to minimize drops in the index TSC_World by -0.11%.

The sensitivity factor in rising markets
The "Bad News Factor" measures the index's corrections during rising international markets. In this configuration, the market normally sanctions the index BOVESPA when there is specific pressure in this particular economic activity. When the index declines in a rising world market its average deviation is -1.75%.

Sensitivity analysis summary
Generally speaking, the BOVESPA index shows an average sensitive behaviour, in line with other equity indices because of a medium Bad News Factor.

Checklist (BOVESPA)

<table>
<thead>
<tr>
<th>Stars</th>
<th>Earnings Rev Trend</th>
<th>Valuation Rating</th>
<th>MT Tech Trend</th>
<th>4wk Perf</th>
<th>Sensitivity</th>
<th>Bear Mkt Factor</th>
<th>Bad News Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong interest since October 22, 2019.</td>
<td>★Analysts neutral but previously negative (since September 24, 2019)</td>
<td>★Strongly undervalued</td>
<td>Market positive since October 22, 2019</td>
<td>6.0%</td>
<td>★4 weeks price performance</td>
<td>Below average sensitivity to market corrections</td>
<td>Fair market sanction in case of specific pressure</td>
</tr>
</tbody>
</table>

Groups by market capitalization Brazilian

The largest group in terms of market capitalization, Banks, represents 26.1% of the Brazilian market. In order of size, follow Basic Resources with 14.9% Oil & Gas with 11.3%. The group, Media, is absent from the market Brazilian.

2019 performance of the groups of the Brazilian market

Since the beginning of the year, the index BOVESPA recorded a variation of 23.7%. The market is made up of 17 groups, in which the extreme variations were from -37.5% to 77.6%.
2019 performance of the 20 largest stocks

Since the beginning of the year, the performance of the index was 23.7%; as for the three best stocks, QUALICORP CNSLIA.E (QUAL3), JBS SA (JBSS3) and TOTVS SA (TOTS3)), their performance was 170.5%, 142.2% and 120.6% respectively.

Flop Stocks 2019

The three worst performances in 12 months were recorded by BRASKEM SA (BRKM5), CIELO SA (CIEL3) and USINAS SIDGS.DE MGSUSIM. (USIM5) with -44.2%, -42.6% and -23.6%. As for the group, it recorded a variation of 22.6%.

The 12 month performance of the 20 largest stocks

Since 12 months ago, the performance of the index has been 22.6%; the three best stocks, JBS SA (JBSS3), QUALICORP CNSLIA.E (QUAL3) and TOTVS SA (TOTS3)) recorded a performances of 173.1%, 139.0% and 133.0% respectively.

Flop Stocks 12 months

The analysis and details of the above stock can be found on page 6

Top Stocks 2019

Top Stocks 12 months

AUT: Automobiles & Parts
BAN: Banks
BAS: Basic Resources
CHE: Chemicals
CON: Construction & Materials
ENE: Energy
FDS: Food & Beverage
FSV: Financial Services
HEA: Health Care
INS: Insurance
INO: Industrial Goods & Services
INS: Insurance
MA: Media
MED: Media
MGC: MGTSUSIM. (USIM5)
TEL: Telecommunications
TEL: Travel & Leisure
UTI: Utilities

Since the beginning of the year, the performance of the index was 23.7%; as for the three best stocks, QUALICORP CNSLIA.E (QUAL3), JBS SA (JBSS3) and TOTVS SA (TOTS3)), their performance was 170.5%, 142.2% and 120.6% respectively.

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Calculating the correlation coefficient allows to identify the stocks whose dependence on the market is the weakest. If this value is very low, less than 0.5, it means that less than 50% of the stock movements are explained by market movements. On the contrary, a number close to 1 indicates that the value is very close to the evolutions of the market. In order to present the best selection, only companies with a market capitalization greater than $1bn and showing good earnings growth valuations are listed. Furthermore, the eligible stocks must have a minimum rating of two stars; a neutral to positive valuation; a low to moderate sensitivity; and a minimum correlation of 0.66. In the case of a tie in the ranking, the stock's "behaviour in declining markets" (Bear Market Factor) acts as the deciding classification element.

**The best defensive stocks**

<table>
<thead>
<tr>
<th>Symbol Market</th>
<th>Name Sector</th>
<th>Price Ccy</th>
<th>Mkt Cap in $bn</th>
<th>Bear Mkt Factor</th>
<th>Stars</th>
<th>Sensitivity</th>
<th>Global Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SULA11</td>
<td>SUL AMERICA SA</td>
<td>48.22  BRL</td>
<td>4.75</td>
<td>-162</td>
<td>5/7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JBSS3</td>
<td>JBS SA</td>
<td>28.07  BRL</td>
<td>19.15</td>
<td>-155</td>
<td>5/7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CESP6</td>
<td>CESP CMPH.ENGT.DE SAOP.</td>
<td>29.98  BRL</td>
<td>2.39</td>
<td>-139</td>
<td>5/7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RADL3</td>
<td>RAIA DROGASIL SA</td>
<td>111.89  BRL</td>
<td>9.24</td>
<td>-105</td>
<td>5/7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIGT3</td>
<td>LIGHT SA</td>
<td>20.03  BRL</td>
<td>1.52</td>
<td>-99</td>
<td>5/7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The sensitivity assessment is based on essentially two criteria: the stock’s “behaviour in declining markets” (Bear Market Factor), and the stock’s “sensitivity to bad news” (Bad News Factor). By positioning a stock according to the world averages, three sensitivity levels can be attributed (low, moderate, high). Combining these elements makes it possible to create a final ranking of stocks in the market. To present the most useful selection, only companies with a market capitalization greater than $1bn and showing good earnings growth valuations are listed. Furthermore, the eligible stocks must have a minimum rating of two stars; a neutral to positive valuation; a low to moderate sensitivity; and a minimum correlation of 0.66. In the case of a tie in the ranking, the stock’s “behaviour in declining markets” (Bear Market Factor) acts as the deciding classification element.

**The stocks with the lowest correlations**

<table>
<thead>
<tr>
<th>Symbol Market</th>
<th>Name Sector</th>
<th>Price Ccy</th>
<th>Mkt Cap Correlation</th>
<th>Stars</th>
<th>Sensitivity</th>
<th>Global Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRFS3</td>
<td>BRF SA</td>
<td>36.57  BRL</td>
<td>7.43</td>
<td>0.15</td>
<td>5/7</td>
<td></td>
</tr>
<tr>
<td>SULA11</td>
<td>SUL AMERICA SA</td>
<td>48.22  BRL</td>
<td>4.75</td>
<td>0.18</td>
<td>5/7</td>
<td></td>
</tr>
<tr>
<td>CESP6</td>
<td>CESP CMPH.ENGT.DE SAOP.</td>
<td>29.98  BRL</td>
<td>2.39</td>
<td>0.29</td>
<td>5/7</td>
<td></td>
</tr>
<tr>
<td>JBSS3</td>
<td>JBS SA</td>
<td>28.07  BRL</td>
<td>19.15</td>
<td>0.30</td>
<td>5/7</td>
<td></td>
</tr>
<tr>
<td>PSSA3</td>
<td>PORTO SEGURO SA</td>
<td>56.00  BRL</td>
<td>4.53</td>
<td>0.30</td>
<td>5/7</td>
<td></td>
</tr>
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</table>

The correlation coefficient allows to identify the stocks whose dependence on the market is the weakest. If this value is very low, less than 0.5, it means that less than 50% of the stock movements are explained by market movements. On the contrary, a number close to 1 indicates that the value is very close to the evolutions of the market. In order to present the best selection, only companies with a market capitalization greater than $1bn and showing good earnings growth valuations are listed. Furthermore, the eligible stocks must have a minimum rating of two stars; a neutral to positive valuation; a low to moderate sensitivity; and a minimum correlation of 0.66. In the case of a tie in the ranking, the stock’s “behaviour in declining markets” (Bear Market Factor) acts as the deciding classification element.
The 20 top stocks classified by market capitalization

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BRR6</td>
<td>BNC.ESDO.DO RIOGR.SUL SA Money Center Banks</td>
<td>22.20 BRL</td>
<td>7.5%</td>
<td>102.11</td>
<td>0.88</td>
<td>10.2</td>
<td>6.4%</td>
<td>5.8%</td>
<td>2.6%</td>
<td>23.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BBA3</td>
<td>BANO DO BRASIL SA Money Center Banks</td>
<td>47.99 BRL</td>
<td>6.2%</td>
<td>34.38</td>
<td>5.3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPLE3</td>
<td>CMMP.PARN.S.DENGA. Conventional Electricity</td>
<td>54.85 BRL</td>
<td>7.2%</td>
<td>3.72</td>
<td>7.6%</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIGT3</td>
<td>LIGH SA Conventional Electricity</td>
<td>20.03 BRL</td>
<td>8.6%</td>
<td>1.52</td>
<td>7.6%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JBSS3</td>
<td>JBS SA Food Products</td>
<td>28.07 BRL</td>
<td>6.4%</td>
<td>19.15</td>
<td>8.6%</td>
<td></td>
<td></td>
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</tbody>
</table>

The price to earnings ratio (PE) helps to find undervalued stocks. It is commonly accepted that if the PE of a stock is lower than the PE of its reference market, the stock has upside price potential. In order to present the best selection, only companies with a market capitalization greater than $1bn and showing good earnings growth valuations are listed. Furthermore, the eligible stocks must have: a minimum rating of two stars, a neutral to positive valuation, a low to moderate sensitivity.

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**Glossary - Equities**

**Number of Stocks**
The number of stocks in the index that can be analyzed.

**Mkt Cap in $bn**
This number represents the Market Capitalization in USD bn. It is calculated by multiplying a firm’s share price by the number of outstanding shares. For reasons of comparison, all results are in USD.

**Valuation Rating**
Our Valuation Rating indicates if a stock is "expensive" or "cheap" relative to its growth potential. This is used to determine whether or not the investor is paying a premium for anticipated growth.

To estimate a stock’s value relative to its current price, our Valuation Rating combines:
- stock price
- projected earnings
- projected earnings growth
- dividends

We establish our rating by combining these elements.

There are five ratings, ranging from strongly undervalued to strongly overvalued.

**Stars**
theScreener.com's star rating system is designed to help you identify high-quality stocks quickly and easily.

In this easy-to-use rating system, stars are earned for each element specified below:
- Earnings Rev Trend
- Valuation Rating
- MT Tech Trend
- 4 week Relative Performance

Therefore, a stock can earn a maximum of four stars. The lowest rating a stock can have is no stars.

Once a stock has earned a star, it will keep it until:
- Earnings Rev Trend becomes negative
- Valuation Rating becomes negative
- MT Tech Trend becomes negative
- 4 week Relative Performance drops below -1% (<-1%)

**Div**
This is the dividend in % for the next 12 months.

Even if the same number is shown, the dividend value can appear in one of four colors, depending on the earnings coverage:
- 0%, no dividend
- 4%, the dividends are covered (between 0% and 40% of earnings)
- 40%, the dividends represent between 40% and 70% of earnings
- 70%, the dividends are covered (between 0% and 70% of earnings)

**Earnings Rev. Trend**
The symbol 
shows that compared with their earnings revisions of seven weeks ago, the analysts have now raised their estimates (7wk EPS Rev. > 1%); the symbol 
indicates that compared with their earnings revisions of seven weeks ago, the analysts have now lowered their estimates (7wk EPS Rev < -1%).

When the earnings revisions (7wk EPS Rev) fall between +1% and -1%, the trend is considered to be neutral.

The symbol 
indicates that the last significant revisions have been trending positive.

The symbol 
indicates that the last significant revisions have been negative.

**7wk EPS Rev**
This is an abbreviation for 7 week Earnings Per Share Revision. This column indicates the value of these revised earnings. A figure of 2.8 signifies that compared with seven weeks ago, the analysts have now revised and raised their estimates by 2.8%. On the contrary, a negative number means that the earnings would have been revised lower.

**G/PE Ratio**
In order to establish our Valuation Rating, we calculate the estimated growth of future earnings (LT Growth) plus dividend in %, divided by the estimated future PE ratio (Long Term P/E).

**LT PE**
This is the relationship between the price (P) and the estimated long-term future earnings.

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Earnings forecasts provided by REFINITIV.