

# FCL*Capital*

May | 2014

## Margins, cycles and the multiples' illusion

Eugene Fama, the recent Nobel laureate who personified the “market efficiency” concept, said himself once that “markets are almost certainly not perfectly efficient”. A small number of spectacular investors would certainly reinforce Fama’s observation. That being said, markets are hard to beat because they are also not terribly inefficient. There are inefficiencies and therefore opportunities for profit, for certain, but they are not that extreme and any investor trying to get advantage of them will face periods of underperformance.

In active investing, you run into a conundrum: the only way to outperform is making bold and concentrated bets, but by doing so you will inevitably make mistakes in the long run and lose to the market for extended periods of time. Also, if you try to time the market you may lose the best rallies. And so on. It is all part of the game.

So far, only three anomalies seem to have been confirmed by academic evidence as market beaters – with real investors able to systematically profit by taking advantage of them. Depending on where you stand in the debate of market efficiency, they are either a compensation for additional risk or a strategy used to remain ahead of the pack. We could call them a general guidebook to beat the market if you will:

1) Cheap stocks will outperform in the long run.

A vast amount of academic evidence and control groups has shown that over the long term cheaper stocks (i.e. the ones with lower multiples) tend to outperform. . it seems that investors are really good at spotting which companies will show higher future growth, they just get excited and pay too much for it.

2) Small caps tend to outperform.

Evidence has shown that over the long term small caps outperform. It may happen because they receive less coverage and have less liquidity - therefore showing greater price inefficiency and a compensation for the lack of liquidity – or have a higher future growth due to their smaller size.

3) Momentum will outperform in the short run (6-18 months).

It is the least rational and maybe most strange of the 3 proved ways to beat the market: in the short term (the 6-18 months range), stocks that are outperforming and therefore getting more expensive tend to keep doing so. Many academics have been trying to explain why momentum persists.

Probably because investors tend to chase short-term performance and therefore allocate more money with the managers that have been outperforming in the recent past. These managers will probably keep buying their favorite stocks (the ones responsible for the outperformance). Momentum tends to keep going until

suddenly the value effect kicks in and it stops working. No one yet has been able to efficiently combine these two phenomena.

The focus of this letter will be on the first anomaly: cheapness. More precisely about a mistake we judge many investors are currently making when analyzing the Brazilian stock market. It is our opinion that many positions in the Bovespa stock exchange, particularly in companies we call cyclicals are significantly cheaper than most people realize, for reasons we will explain further.

## The multiples' illusion

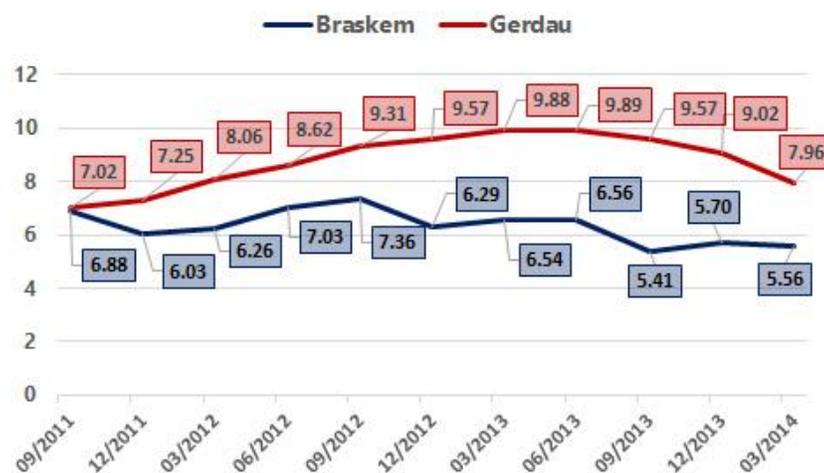
One sad trend the financial industry has been showing in the past few years around the world, but particularly in Brazil, is a silly attachment to multiples without further interpretation of what they might mean.

Obviously we utilize multiples frequently in our analysis and think that they are a useful way of assessing things. But, any multiple has its limitations. EV/EBITDA for example, probably the most used multiple by the Brazilian financial industry, has many advantages such as cutting the noise out of the price-earnings ratio and going straight to what matters. Also, it is capital structure agnostic, treating debt and equity the same way.

On the other hand, it has its flaws like not looking at the actual free cash flows that can be modified by things like the company's CAPEX or changes in working capital. But, that's not what bothers us the most. We do think that many investors are doing a poor job analyzing cyclical companies using the EV/EBITDA multiple and therefore many cyclicals in Brazil are significantly cheaper than many realize.

Let us look at EV/EBITDA multiples for two cyclical companies we hold in our portfolio, Braskem and Gerdau:

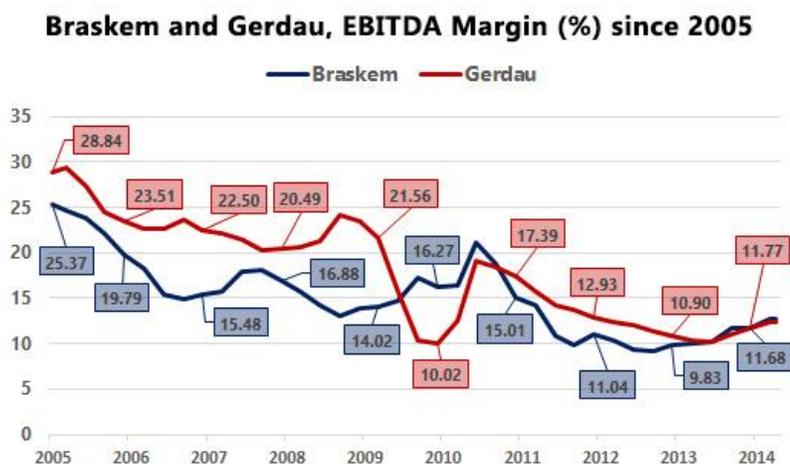
**Braskem and Gerdau, Trailing EV/EBITDA in the last 3 years**



If judging solely by the graph above, you would assume that the two companies got a little cheaper in the past few years, which could maybe even make sense since cyclicals suffer in periods of slow economic growth. However, as we said in our past month's letter:

*"For financial theory to make any sense, a somewhat cyclical company like BTG should trade at lower multiples at the peak of stock market activity - adjusting for the fact that the good times will not last forever and therefore the exceptional results shouldn't be seen as eternal. On the other hand, during times of slow activity the company's price to book value and P/E ratio should be higher (to reflect the fact that earnings are below their potential). Still, the contrary seems to be happening."*

Let us now re-access these two companies' "cheapness" taking the cycle in context:



As we can see, they are both well below what any reasonable investor could call their "average performance". On the other hand, instead of giving higher multiples at the bottom of the cycle and lower ones at the top, investors did the opposite. This could only have two possible explanations:

- 1) The world has changed forever for these two companies. They will never have what once was their "average" performance again. Or;
- 2) When the cycle normalizes (since we are currently facing below average growth), their multiples will go from "cheap" to "ridiculous" and they will have a massive price increase in the stock exchange.

Which of these possibilities is correct? To help us reach the answer, we could look at comparable companies in different markets. Overall, as our readers would probably expect, the Brazilian companies' multiples are showing huge discounts to their developed world counterparts.

Quoting our February 2014 monthly letter:

*“We really believe investors are putting an unjustified discount and therefore we are more optimistic about the Brazilian stock market than we’ve been for many years. Stories change to justify the current phase of euphoria or fear. In 2007, we deserved high multiples because we would grow more than developed markets, which turned out to be true, but interestingly, it stopped mattering. Now we deserve lower multiples because we have a bad economic policy (which was already true back then). Investors have always created a frame of rationalization to justify their emotions<sup>2</sup>.*

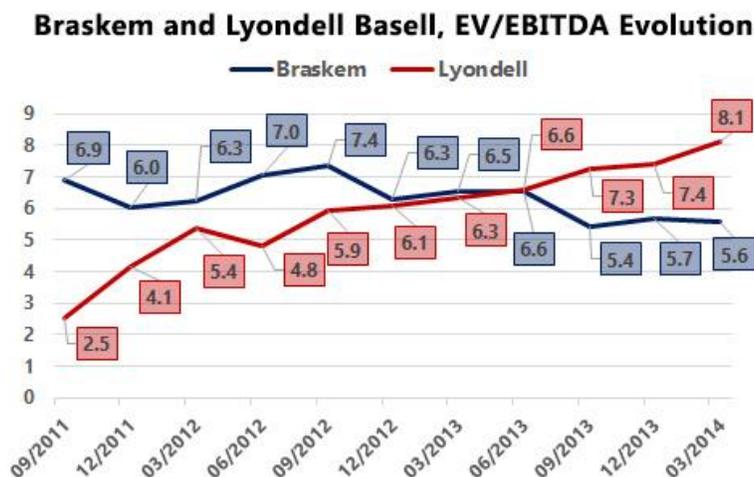
*We are not saying that we believe Brazil’s economy will grow rapidly in the future. What we say is that this is not a necessary condition, since there is no relationship between growth and market returns. Truth be told, actually there seems to be, according to the most recent academic evidence<sup>3</sup> a relationship, albeit a negative one, probably because investors give a higher multiple to high growth countries - once again the matter of starting points.*

*We believe however, that over the long term emerging markets offer the best investment opportunities for a very different reason: they are less efficient markets than its developed peers are.”*

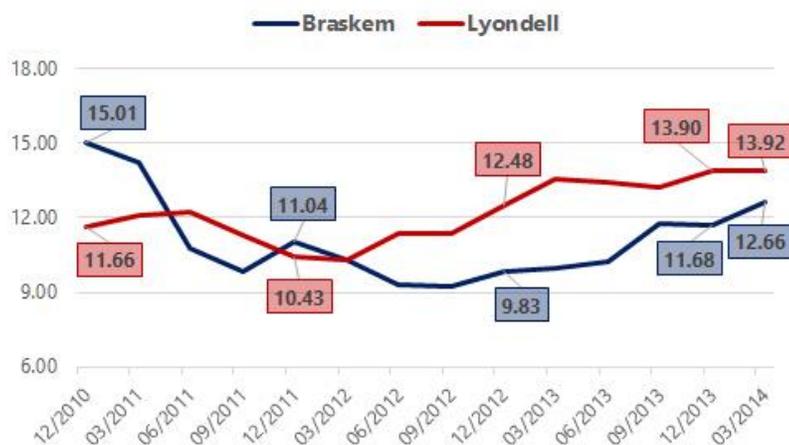
## Braskem and Lyondell

With this framework in mind, let us compare Braskem with Lyondell Basell, also a basic chemicals maker.

Many aspects would lead the average investor to conclude that Braskem should deserve significant multiple advantage to its competitor: it is in a higher growth market and it is closer to the bottom of its past 10-year’s average margins. It also has an important project in Mexico that will start operating next year, something that most investors seem to be overlooking.



**Braskem and Lyondell Basell, EBITDA Margin (%) Evolution**



Braskem though, counterintuitively, suffers an important discount. We cannot think of any rational reason as for why Braskem should show a discount to Lyondell. Being conservative, we assumed that Lyondell will keep its current trailing EV/EBITDA multiple and Braskem will keep showing a roughly 20% discount, having a 6.5 EV/EBITDA normalized multiple. In addition, we used Bloomberg's 2015 consensus, which we think does not take into account Mexico's project.

Therefore, our upside:

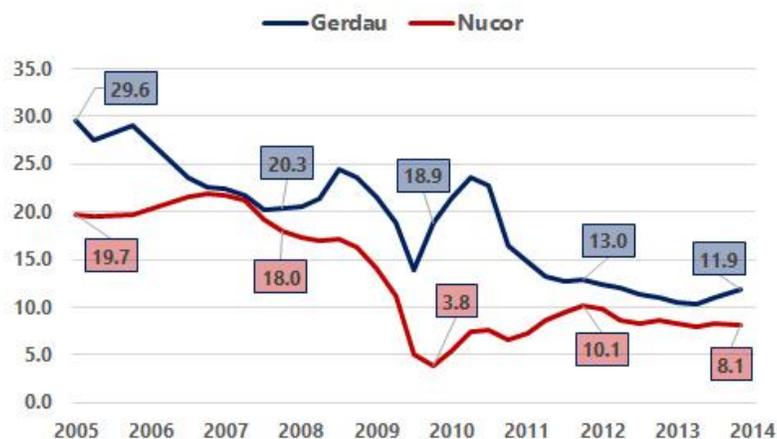
Braskem – BRKM5	
Current Enterprise Value(*)	29,8 R\$ bilhões
Current Net Debt	2,5x EBITDA
Target EV(*), December/2015	6,5x EBITDA
Upside Potential	+144%

(\*)- Market Capitalization + Net Debt. Source: Bloomberg.

## Gerdau and Nucor

Another cyclical company in our portfolio, Gerdau shows an even more puzzling discount. Starting by comparing Gerdau to Nucor, a U.S. long steel company:

### Gerdaud and Nucor, EBITDA Margin (%) Evolution

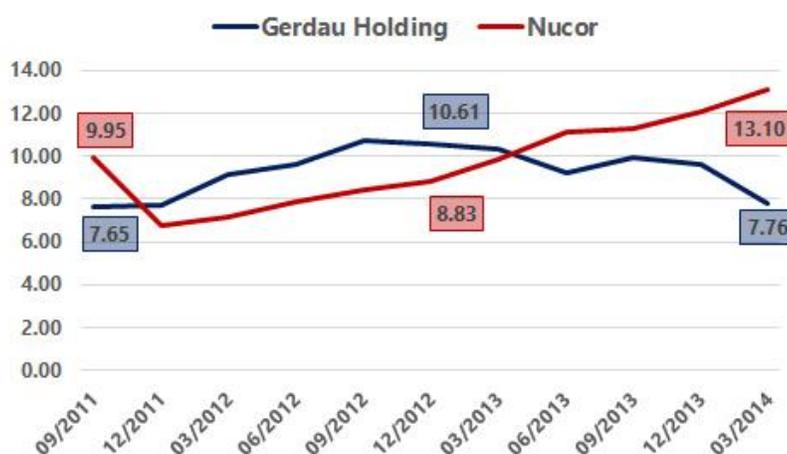


Not only Gerdaud shows much higher margins, it is also a much better company across the board. Its margins are higher mainly because it also operates in Brazil, which is its main source of cash generation despite being a similar sized operation to the U.S. division. Moreover, it has a special steels division and now also an iron ore operation.

The level of competition and predictability for the long steel and iron ore operations in Brazil are completely different than for the long steel market in the US. Also, Gerdaud's margins are probably at a bottom of the cycle while Nucor's are closer to their average.

The final proof should come in the fact that if we decompose Gerdaud's margins, we will find that in the US they still have significantly lower margins than Nucor (their only market), which most often than not has not been the case. Therefore, Gerdaud should have higher multiples, right?

### Gerdaud and Nucor, EV/EBITDA Evolution



Turns out that the market does not think so. Let's not be greedy and assume that Gerdau will keep facing a 20% discount to Nucor despite being a better company, with higher growth, much higher margins, iron ore operations that are still in its infancy and without having its US margins back to normal levels.

Metalúrgica Gerdau – GOAU4	
Forward EV/EBITDA	7
Target EV/EBITDA, Dec/2015	7
Target Net Debt, Dec/2015	2,5x EBITDA
Target EBITDA Margin(*), Dec/2015	15.0%
Upside Potential	+46%

(\*)- Including US & Ore operations. Source: Bloomberg.

So our final question has to be: why are Brazilian cyclicals facing such a heavy discount? Once again, it depends on the viewer and his assessment of the current scenario, but probably the reason is a mix of the following theories:

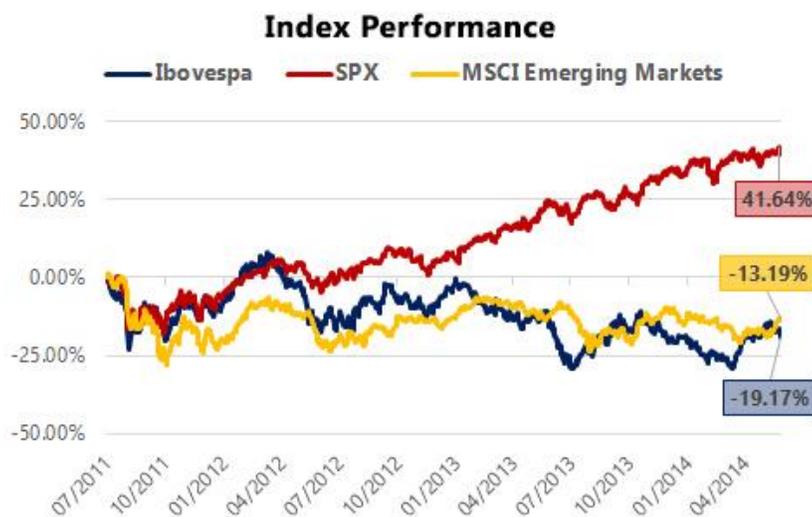
- 1) Bad economic projections combined with bad math: analysts are not normalizing the cycle and therefore reaching “fair” multiples when Brazilian cyclical companies are currently facing below average margins (our thesis);
- 2) Psychological momentum: analysts make optimistic projections when times are good and particularly pessimistic projections when things are already bad (the “delayed advice” thesis);
- 3) Cloudy scenario: low economic growth combined with low political visibility due to the elections is making investors anxious and therefore they are discounting heavily Brazilian equities that cannot be treated as a bond (i.e. low dividends and cyclical earnings).

Although many investors seem to be facing a particularly acute “Brazil syndrome” due to the still recent financial crisis as the country is undoubtedly going out of fashion, we do think investors are exaggerating. The quality bubble - which means a high premium for any stock that offers yield and low earnings volatility - was particularly severe in Brazil.

With this in mind, the huge outperformance of the S&P500 vs the Ibovespa in the past few years is understandable: American companies are spending more capital than ever buying back stock. In fact, in 44 of the past 46 quarters the U.S.’

market has experienced “de-equitization”<sup>1</sup> (more buybacks than emissions of new shares), pushing its earnings per share up. Also, the companies have been spending more buying back stock than with CAPEX, even after the fact that probably a good part of the S&P500’s CAPEX is invested into emerging markets.

Emerging market companies, on the other hand, logically spend a lot more on CAPEX than buying back stock or paying dividends - they are located in markets with higher growth opportunities after all. Over the longer term, they will probably be rewarded for it, but, over the short term, it is no wonder the S&P500 has been outperforming: its companies are giving investors exactly what they want.



<sup>1</sup> <http://www.ft.com/intl/cms/s/0/4fe85458-e35c-11e3-b1c4-00144feabdc0.html#axzz32xKq9Gpj>