

# FCL*Capital*

May | 2015

One of our ethos as value investors in FCL Capital is sticking to the games we think we have a great chance to win. This means mostly selecting stocks that we think will outperform the market, of course. However, this begins with choosing markets where we see the game rigged in our favor.

As our investors know, this house has focused, over the years, a lot more on the micro than in the macro. It is easy to understand why: when we take a stock, say, like Minerva or Log-In, we are talking about specific companies in Brazil (a not so covered market in the first place) and added to that, companies that don't have that much following, with few analysts and investors covering it.

This does not mean per se that these and other little-covered companies will be superior investments. What this definitely means is that it's easier, everything else constant, to find asymmetric and unique investment opportunities in companies like these, rather than, say, when investing in currencies or commodities, where all the world has access to practically the same level of insights and information.

Over the years, our effort has mostly gone to overlooked corners of the stock market and this will continue to be the case. The theme of this letter will be our investment in a company that is probably the exactly opposite of what we are talking about - Apple Inc.

Apple is one of the best known and most beloved (by clients and investors) companies ever created by mankind. The bad news is that this necessarily means that investing in Apple, as we did, shows an incredible lack of humility: how can we, a small equity house from Rio, have found something unique, that the rest of the world has not found?

Wouldn't our time be better spent looking for small-undervalued companies in the Brazilian stock market, that don't have reports in English, that are not known by the rest of the world, and therefore, that are incredibly more likely to hold a secret we could plausibly

have found before our competition? These are all valid question and we will try to address them in this letter.

When we talk about Apple, probably the place to start the analysis is the iPhone. Over the past six months, sales of the iPhone were responsible for over two thirds of the company's revenue.

This can of course be seen either as a bad thing, if you are scared by the lack of diversification and risk of overdependence in just one product, or a good thing, if you think iPhone sales will continue to boom across the world.

Clearly, iPhone's sales have been helped by the advent of the new iPhone 6 model, which has a larger screen and thus was able to take advantage of customers' recent preference for the so-called "phablets" (a mix of tablet and smartphone) devices.

China deserves mention - unlike companies like Google or Facebook, which are banned in the mainland, Apple made history in the current quarter when sales in the Middle Kingdom surpassed those in America for the first time. Year over year iPhone sales in China grew over 70%, helped by the iPhone 6.

<b>Apple – Net Sale by Segment (US\$ Millions)</b>			
	<b>6M 2015</b>	<b>6M 2014</b>	<b>Change</b>
<b>Americas</b>	51.882	42.771	21%
<b>Europe</b>	29.418	25.276	16%
<b>Greater China</b>	32.967	19.331	71%
<b>Japan</b>	8.905	9.092	(2%)
<b>Asia Pacific</b>	9.437	6.770	39%
<b>Total Net Sales</b>	132.609	103.240	28%

Apple – Net Sale by Product (Thousands)			
	6M 2015	6M 2014	Change
<b>iPhone</b>	91.464	58.562	56%
<b>iPad</b>	14.413	19.078	(24%)
<b>Mac</b>	12.559	11.914	5%
<b>Services</b>	9.795	8.970	9%
<b>Other Products</b>	4.378	4.716	(7%)
<b>Total Net Sales</b>	132.609	103.240	28%

Source: [Apple Shareholder Letter](#), pg. 25

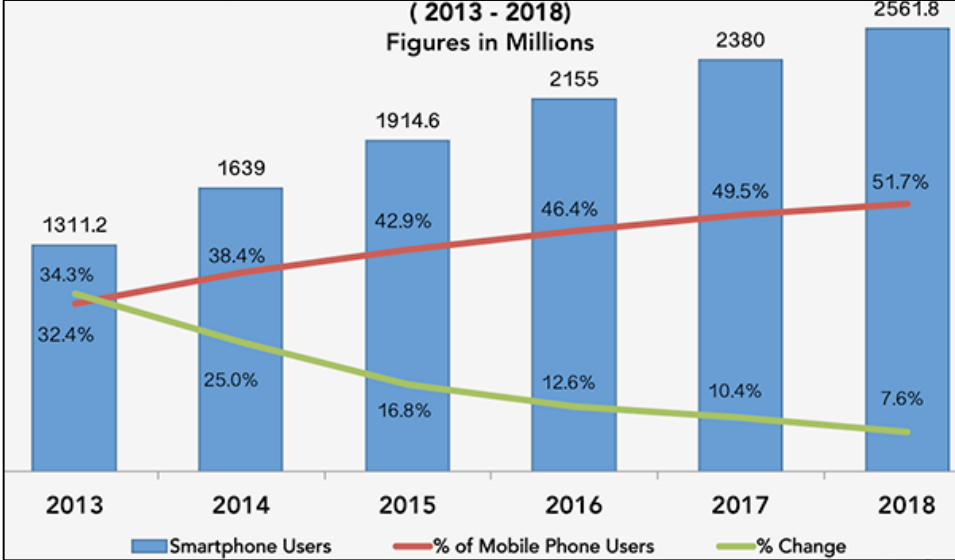
The good news is that as we said above, we think the company's overdependence on the iPhone is indeed a good thing. Overall, we think Apple has three huge avenues of growth ahead:

- 1) Smartphones are still a vastly underpenetrated but rapidly growing market across the world;**
- 2) Apple's share in the smartphone market;**
- 3) New products pipeline.**

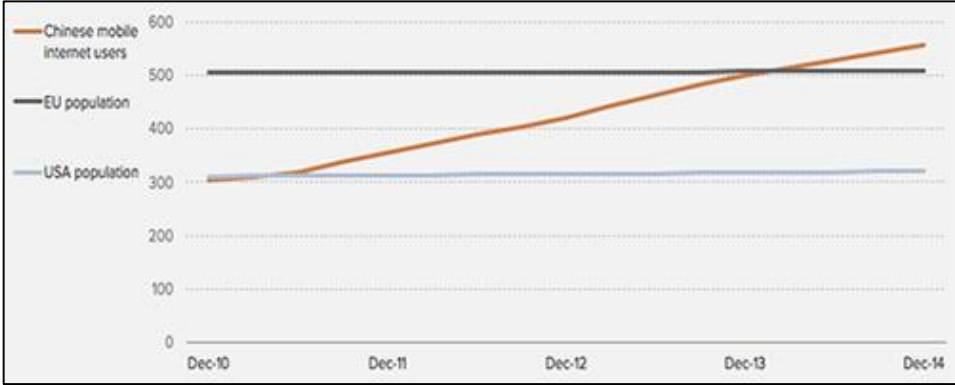
Starting by the smartphone's market. When King Gillette founded his company back in the 19th century, he famously said, after travelling the world, that in every culture the use of razor blades to shave was possibly the only common habit.

If King Gillette was alive, today he could as well note that one of the few global consensus, one of the things that unite Chinese, American, Brazilian and European customers, is the love for the smartphone.

In fact, it is frequently noted that very possibly, hundreds of millions of African consumers will learn how to navigate the internet without ever using desktop computers: the internet for them started and will always be about smartphones.



The possibilities and the potential market size is almost infinite. There are still billions of consumers yet to buy their first smartphone, and there is more to the story: obviously, due to lack of resources as well as for the natural learning curve, millions of customers were happy to buy the smartphone they could buy, instead of the best one.



Over the past few years, smartphones using the Android Operational system surged ahead in sales volume, especially Samsung and to a lesser extent the Xiaomi models.

One interesting addendum: although iPhone sales (and therefore the IOS operational system) is in the minority when it comes to sales volume, the specialized press often speculates, with good reason,

that Apple's iPhone margins are so high that the company makes more money from its smartphone than all other smartphones companies in the world combined, despite its smaller sales)

Due to its brand loyalty and devotion of its customers, the iPhone can be considered the most desired smartphone in the world. Then, a multibillion or possibly trillion dollar question emerges: how will smartphones market share evolve?

<b>Smartphone Sales by Vendor in 2014 (Thousands)</b>		
<b>Company</b>	<b>2014 Units</b>	<b>2014 Market Share (%)</b>
Samsung	307,597	24.7
Apple	191,426	15.4
Lenovo/Motorola	81,416	6.5
Huawei	68,081	5.5
LG Electronics	57,661	4.6
Others	538,710	43.3
<b>Total</b>	<b>1,244,890</b>	<b>100.0</b>

*Source: Gartner*

We will not make huge bets about this. Obviously, we have just the same level of insight and information about the smartphone market as anyone else. However, we do think that the recent iPhone 6 launch proved that Apple has a unique situation: a company fully positioned in a global, rapidly growing market (smartphones) and on top of that, very well placed to gain further market share, while generating absurd amounts of cash.

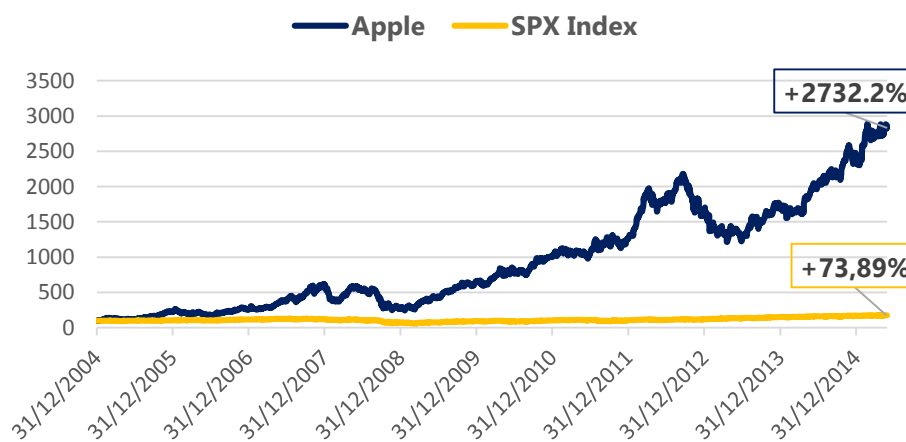
In a funny way, the most valuable public company on the planet could even be considered a china play: it seems clear to us that the future growth lies in emerging markets in general and China in particular, although the 20% year over year sales growth in the Americas was very respectable to say the least.

Bottom line: billions of consumers either will buy their first smartphone in the next few years or will upgrade from an Android or Xiaomi device to an iPhone.

So if you have possibly the best company on the planet, that has sky high margins, generates incredible amounts of free cash flow, and is loved across the world, the obvious thing would be a very expensive valuation, right?

Wrong, actually. Apple's cheap price over the past few years, combined with high growth and high margins is one of the most puzzling mysteries of finance.

### Apple vs SPX Index - Performance 2005-2015



Apple – Tabela de Múltiplos	
Preço / Lucro	<b>14.03</b>
EV / EBITDA	<b>7.38</b>
EV / Cash Flow	<b>7.67</b>
Preço / FCF	<b>11.39</b>
Margem EBITDA %	<b>34.4</b>

Why is such an amazing company that grows so fast, so cheap? No one really knows. Carl Icahn, one of Wall Street's most famous investors, and who has a huge stake in the company, insists that the market does not "understand" Apple.

We came with all possible explanations we could and there are three possible ones that seem convincing to us regarding the Apple discount:

- 1) The law of big numbers;**
- 2) Reversion to the mean;**
- 3) Exposition and concentration limitation.**

Let us talk about each one of them:

The first possible reason for this puzzling anomaly - why the world's fastest growing company trades at cheap multiples - has to do with the law of big numbers.

Smaller companies on average grow faster than big ones and it is not hard to understand why. If you are a billion dollar company, you can double in size adding another billion. If you are Apple, you can only double in size if you add another Bovespa - with Ambev, Vale, Petrobras, and everything else, to your market cap.

Putting in other terms, sometimes Apple's problems are not related to the attractiveness of its brand, the desirability of its products, but also to the physical limits of its growth. Sometimes its suppliers, particularly Foxconn from Taiwan, still the most crucial one, simply can't supply components at the immense speed and quantities that Apple needs. Eventually, Apple could almost affect the whole market of some commodities that it demands as iPhone's components.

One way or another, it seems almost certain that, due to its enormous size, the company won't grow as fast as it has been growing.

On the other hand, Apple is, to put it mildly, an anomaly. It is very uncommon for a very large company to grow fast. Obviously, on average, the larger you are, the slower you are likely to grow. Apple on the other hand, is by very far the world's most valuable public company and it still grows much faster than the S&P 500.



## 2) Reversion to the mean

Jeremy Grantham, founder of GMO and the intellectual author of “reversion to the mean” thesis, thinks that over time, almost inevitably, all companies that are surpassing their competitors will eventually fall back and leave the leadership to others until these new leaders will eventually do the same and the cycle will go on forever.

Why is that so? Because “capitalism works” as Graham puts it.

Apple has the most desired electronic gadget ever made. It is the world’s most valuable brand. Its growth defies forecasts and it revolutionized several different industries in the past 15 years. If there is one company that would suffer if it would “revert to the mean” this is the one.

According to this line of thought, therefore, Apple should trade at low multiples, as it is currently doing, because it is unlikely that it will remain so much ahead of its competition.

There is a lot of reason with this line of thought. We are believers in the “reversion to the mean” theory ourselves and did many investments in the past that had this argument as at least a small part of our thesis<sup>1</sup>. That being said, “reversion to the mean” is not an all-consuming permanent force.

There are many cases when one player literally got far away ahead of the rest of the pack. The US GDP, for example, reached close to 50% of the entire planet’s GDP during the late 1960s. The wealth of the American businessmen John Rockefeller, which reached 1% of the country’s GDP at the turn of the 20th century. Indeed, another example at least in our minds, would be Apple’s past decade.

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<sup>1</sup> As our bets in illiquid cyclicals during the financial crisis , for example.

### 3) Limits of concentration and exposition

Having exhausted the physical and competitive reasons, let us now turn our attention to a possible financial anomaly that may have been keeping Apple's share price this low.

Apple has double the market capitalization of the world's second largest public company<sup>2</sup>. Its market capitalization is so enormous that we think it is possible a bizarre market anomaly has been occurring: what if, every fund manager that wants to hold Apple shares always does so?

Obviously managers must be held responsible for the institutional and prudential limits of their firms and investment products. Limits of concentrations and so forth. What if Apple has dwarfed the market?

Everyone knows that the company is cheap and of amazing quality but every manager that potentially could already holds its shares to the limit that it judges prudent. Some funds will only allow their manager to hold its top position as 2% or 3% of the fund.

So it is not a matter of price discovery anymore, but of a single company being so big that there are is not so much money outside of Apple to make its share price continue to appreciate.

It is an intriguing concept for sure but if we look across history, often the world's most valuable company was traded at cheap multiples. Microsoft at the height of the tech bubble is an obvious exception and maybe exactly because it was the most valuable company because of expectations, not because of its short term cash flow.

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<sup>2</sup> We always insert the expression "public", because it is quite possible, although no one knows for sure, that Saudi Arabia's oil company may be even more valuable than Apple.

In short, we would like to propose the theory that Apple's giant market cap is in itself one of the reasons the company has low multiples: the market participants have only so much firepower to put the company to higher multiples. What about the future?

One of the most brilliant moves in corporate history occurred when Steve Jobs noted that phones that could carry thousands of MP3 files would someday disrupt the iPod. Instead of waiting for the inevitable decline, Jobs decided to disrupt the phone market himself, unleashing the era of the iPhone.

Today we all live in the age of the smartphone and Apple has a very cheap option if its recently launched watch disrupts, at least in part, the smartphone market with a new category of products.

In addition, it is frequently reported by the media that until the end of this decade, Apple may enter two new huge product categories: a brand new revolutionary TV set, which would complete its stronghold inside the consumer's home and finally, what a top Apple executive recently called the "ultimate device", the car.

This could happen either through acquisition of a company like Tesla or independently, since Apple has U\$ 150 billion in net cash and therefore more than enough resources for any project.

Carl Icahn has frequently argued that Apple is not a smartphone company at all, but that the market misunderstands a simple truth: the more we buy Apple devices, the more dependent we become of more Apple devices. We can synchronize across devices, we can share, we can buy, and therefore this company's amazing products become each time more entangled in our lives.

We partially agree with him. We also make the point that even if we consider Apple solely a smartphone company, it would seem a very cheap one. Not to mention the fact we would take so much - the incredible brand, some of the world's most talented people, the

incredibly cheap options like the Apple Watch and possibly the Apple TV and Apple Car in the future, for virtually free.

It is a very immodest thing to do to invest in Apple, particularly for managers of an emerging market like this house. Nevertheless, it is a bet that at this time we are more than willing to make.