3Q 2021

Searching for Supernovas

In 2009, during a sold-out concert in London's historic Royal Albert Hall, Brandon Flowers, front man of the American rock band "The Killers" gave an impressive testimony.

Eight years earlier, Flowers was trying to make ends meet by working as a bellman in the Gold Coast Hotel and Casino in Las Vegas, while contemplating about when to finally give up on his dreams of becoming a rock star and making something out of his life.

While flipping through the pages of the Las Vegas Weekly, a free distribution magazine very popular in the area where one can find all kinds of local job openings, secondhand items, dating options and more, he saw an ad placed by a local guitarist called Dave Keuning looking for musicians to start a rock band.

After flipping through several job advertisements and this ad in particular, Flowers finally decided to give an introductory call and then visit Keuning. The two immediately hit it off, they seemed to like the same bands and had the same musical influences. At the end of their meeting, Keuning gave Flowers a tape with some of his songs for him to see if he liked it¹.

Flowers got the tape, but it would probably be forgotten and get dust forever until by chance he saw it again somewhere in his home sometime later, and, since he was about to drive somewhere, he put it in the stereo of his car.

Then, he laid back his head, and the song that started playing, Flowers told the audience, "Is the song you are about to hear now".



You can click on the image to access the YouTube video

¹ https://www.yahoo.com/entertainment/flashback-killers-original-apos-mr-224800435.html

Immediately, the audience in cosmopolitan London, more than five thousand miles away from Las Vegas, started jumping in joy, just like audiences around the world surely did countless times, after recognizing the first chords of "Mr. Brightside", probably one of the most famous rock songs written in this century.

The amazing thing to consider, we think, is how close global stardom sometimes is to total zero. How a combination of small events and tiny coincidences leads, in some few precious times, to exponential outcomes.

Usually nothing. Then, bang! A supernova. A Google happens, a star is born, the world changes.

Many of our investors have over the years asked us how the process of our search for investment ideas works. Investment ideas are, after all, the ingredient for an investor. As our readers know, this house's flagship fund is called FCL Opportunities. We decided to dedicate this letter to explain and explore our investment philosophy and what kind of investment opportunities we search for.

In other words, what recipe we follow, how do we conduct our search process. We will dissect and discuss our process of looking for the characteristics, the coincidences and the DNA we look for when investing in a company. The way we look for hidden optionalities when screening and analyzing companies from around the world in our databases and lists, which are, metaphorically speaking, our version of the Las Vegas Weekly Magazine.

The search for unique ideas, or, to use this house's terminology, the search for Opportunities, is at the core of what we do. Our quest is to find the rare sparkle, to search for the hidden gems, to find the unexpected before it becomes common knowledge.

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As anything in finance, when it comes to discovering new companies and searching for new investment ideas, there is a science part and an art part.

We could spend this whole letter discussing only the science part. Obviously, like most stock pickers we have several proprietary filters and screenings in databases and terminals like Bloomberg.

We specialize in a specific company size range (from US\$100 million market cap to US\$25 billion), with a minimum liquidity of one million dollars per day. Important to note, this market cap ceiling is not really written in stone: from time to time we come across a specific company or idea where we judge perceptions are so distorted that we choose to act even though ultra large caps are not what we primarily look for. Two important examples in recent years where Vale and Apple, both of them having their thesis featured in past letters from this house.

Why the market cap ceiling? Because of the law of large numbers. We look for growth and it is generally hard to keep growing significantly when you are already valued in the

hundreds of billions of dollars (although tech platform companies have recently showed that even at an immense size, it is possible to keep growing with vigor and scale).

Furthermore, we like to focus on the overlooked corners of finance, for the simple reason that as more people follow a market, its companies and ideas tend to be better analyzed, and, as a consequence, have more efficient valuations. The exact opposite is true for overlooked markets where valuations tend to be much more distorted and inefficient.

As for geography, although we can theoretically invest anywhere, we focus mostly on companies that can benefit from globalization and long-term events like the economic ascent of the BRIC countries, either through native companies of those nations or American and European companies that can be winners in this process.

We then run lots of quality filters: company ROICs, sales growth, margins progress and a lot more. And all that is even before progressing to the qualitative (as opposed to quantitative) analysis.

But this process only goes so far. When the going gets tough, it helps to believe in something. What is it really we are searching for? So, for this reason, the theme of this letter will focus more on the art part than the science part. What would our hypothetical dream company look like? How does the company we relentlessly search for look like?

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As our longtime investors know, FCL has three main pillars that constitute our framework:

First, we have a global mindset. Our search for ideas, tendencies and profitable opportunities can lead us anywhere. In fact, that's the precise reason we have our current structure. Our goal was to be able to be more flexible than rival funds, to be able to play free while they have one of their hands tied to their backs. We like to be able to look anywhere around the globe, but the places we look most are the overlooked corners of finance, especially smaller companies located or dealing with emerging markets. The combination of having a smaller market cap and being located in a developing market brings in our eyes a double inefficiency.

Second, we hold a deep belief in change, we look for the major tendencies capable of changing the world and bringing with it a huge group of opportunities. The first major tendency we explored back when we built our fund in January 2017 was the technological revolution (hence our most discussed investment so far, in the global dating leader Match Group). The second major change catalyst we believe will be a fertile field for opportunities is China's ascendancy to become the planet's largest economy. A few additional major trends, like the changing of the global energy matrix² that will gradually happen over the next few decades and the Crypto revolution are both being internally analyzed and discussed³.

³ See section 3 for information on our updated FCL opportunities portfolio.

² See our thesis on Ambipar in our previous FCL Letter for more on that.

Finally, this house likes to hold a contrarian, daring and concentrated portfolio because we believe this is the only way to stand out and beat the market.

Sometimes people ask us why we named our fund FCL Opportunities. The reason is that we believe the name perfectly captures the essence of what this house tries to do: our mission is to look for asymmetric investment opportunities in the planet wherever they may be.

We saw no reason to run a Brazil-focused investment vehicle since it is obvious that the vast majority of opportunities lie outside of that country. At the same time, unlike most Brazil-based funds that focus internationally, we decided that we would not exclude Brazilian investments from our screenings. Again, a search for opportunities, wherever that lead us.

Admittedly, while we don't regret this arrangement and think its flexibility was one of the main reasons for our performance so far, it certainly made things harder on a fundraising perspective. That's why we decided early on to focus almost solely on performance (especially compounded annual performance) as our internal metric of success.

Although FCL Opportunities is an equity fund, the only reason this house opted for this structure is because this house strongly believes that it is in global equities that most of the promising international investment opportunities will be found. But in reality, we see ourselves less as an equity investing firm and more as an exploration firm. Global equities are one terrain where we look for and explore investment ideas. As for future terrains, see this letter's thesis in Section 2.

How does an amazing opportunity look like? Does it present itself?

As we mentioned before in this space, we like studying psychology and human biases. Sometimes in our search for ideas and during our job as observers of financial markets, we clearly witness what we think are bizarre circumstances.

A few years ago, this manager was invited to participate in a bet pool that was being organized by a group of friends for the occasion of the FIFA World Cup. As anyone knows, Brazilians are obsessed about soccer and are certainly among the most knowledgeable fans in the world when it comes to the sport. At the same time, however, Brazilians are emotional beings. And after a quick calculation of the odds and rewards being paid, I was astonished to notice that before the World Cup even began, Brazil was being given a 50% chance of winning the tournament. In other worlds, among the 32 teams that were going to compete, that particular betting pool was giving 50% chance to Brazil and 50% to the other 31 teams combined.

Unlike most Brazilians, this manager doesn't really follow soccer. But sheer common sense and the possibility of stepping back and trying to look at things from a sober, outsider perspective, almost made me bet in the other 31 teams (with the benefit of

hindsight I regret I didn't). My reasoning was that even though Brazil was the best team, life is too unpredictable, circumstances change too fast, and surprises come from the most unexpected places. Maybe not really caring about soccer, was in this specific circumstance an advantage as I could see things from an objective and dispassionate perspective.

A great parallel to the World Cup bet anomaly can be currently seen in the so called FAANG stocks in the S&P500.

There is no denying that the FAANGs (Facebook, Amazon, Apple, Netflix, Google) are probably the most amazing group of companies ever created by mankind. They changed the world and proved the skeptics wrong numerous times. That being said, these five companies currently comprise around 20% of the S&P500 total market cap.

But here is the catch: since the FAANGs have much higher multiples than the S&P as a whole and since a company's market cap is based on the market's projection of its future profits, for the FAANGs to justify their higher valuations, in a 10-year timeframe they would have to represent more than 50% of all the profit of the S&P companies.

Just like the World Cup bet anomaly, this becomes a matter of how many horses to have in the dispute. Clearly, the best horses are the FAANGs. But if you have to guess which group will be more profitable in ten years, would you, dear investor, rather have the FAANGs or would you prefer having all the other 495 companies in the S&P500 combined? Who do you think would win?

This house always likes to study financial history to observe patters that have happened before, and, as it turns out, a recent analysis showed that "invincible champions" tend to come and go with remarkable frequency in capitalism⁴ (from the so called Nifty Fifty in the 1970s to oil giants to Japanese tech companies). Therefore, our bet would be that the FAANGs will still be around in 2030 and quite probably will still be amazing companies, but by then, there will be many other new ideas, entrepreneurs and projects we really cannot anticipate. Humans are a clever species, new ideas are born every day. Our faith in capitalism makes us reasonably confident that in ten years' time, all other companies combined will be more profitable than the FAANGs.

Our common sense tells us that by 2030 we will be talking about new ideas, new concerns will be awakening investors in their sleep and monopolizing their minds. We will hear about new and exciting promises for the future and no single group of five companies, no matter how amazing they are, will be able to catch half of all that profit pool.

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Another fundamental element in our search process: unlike most stock pickers, we are top-down oriented and not the other way around.

 $^{^{4} \}underline{\text{https://www.barrons.com/articles/the-faang-stocks-could-fall-if-the-history-of-the-nifty-fifty-is-any-guide-51619004600}$

It is almost an article of faith for value investors to profess themselves as "bottom up" and we are aware of that. But this house's thought process works in the opposite way. We try to understand the world, its flows, its changes, its biases, its processes and from there search for ideas.

No single amazing idea happens in a void, unrelated to any context. There are no U\$100-billion-dollar companies in, say, Jamaica. Any significant opportunity, this house thinks, happens in a context. As Malcom Gladwell has shown in his amazing book "Outliers", exponential results are almost always a product of a chain of specific circumstances.

Additionally, one of our articles of faith is to look for the hidden optionalities when analyzing an investment. Many of the most amazing investment results were actually byproducts of different efforts that happened by accident. They were not what people were originally aiming for.

Bitcoin was born in a whitepaper that proposed a new peer to peer money network. It failed miserably as a means of exchange, but it inadvertently gave rise to the Crypto revolution and its current value today is a result not of its function as a money system but because it gradually came to be seen as a "digital gold" or, in other words, a store of value.

Likewise, we scrutinize many companies that have amazing hidden optionalities inside of them. Be they real estate, brands, underutilized technologies, and a lot more.

For example, this house has always wondered how Marvel Comics, the owner of some of the world best known brands like The Spider Man, X-Men, Silver Surfer and so much more, could be on the brink of bankrupt two decades ago. Fortunately its recent owners realized the company's huge potential with its series of blockbuster movies until Disney bought it some years ago for over US\$4 billion. In other words, Marvel's intellectual property was being underutilized, as it happens surprisingly frequently in global markets.

There are many more companies with powerful brands or assets inside of them that are in need of a rebirth. Like Playboy enterprises, which to this day possesses what may be the world's most well-known adult entertainment brand but is in need of a reinvention for digital times.

Or Brazil's Yduqs, which is the owner of highly valued courses and educational brands that could be spun off from the main company resulting in an amazing unlocking of value for shareholders. The sum of Yduqs' parts, according to our calculations, would be at least a third higher than the holding company currently trades for, possibly a lot more than that.

Arguably the most amazing corporate turnaround the planet has ever witnessed, the rebirth of Apple led by Steve Jobs was also a product of realizing hidden potential: a powerful and beloved brand, a devoted group of customers and the closed architecture Apple had always adopted that went from being a liability to being an asset.

Finally, a feature our long-time investors and readers know: this house likes to zoom out and adopt not only a long-term perspective but a geography neutral framework.

What are our thoughts on where most opportunities could lie in the next decade? A few insights:

1) Emerging markets as a whole had a terrible decade;

- 2) Companies that are on top usually don't stay on top forever as stated before, no matter how amazing any group of companies currently is, in ten years' time, there will be new companies and sectors for investors to be obsessed about;
- 3) There are two avenues for return: growth in profits or a rise in valuations. Most of the best stock returns in the past decade occurred in American companies. So this house decided to do a scientific study: we picked every one of the 567 companies (located anywhere in the world) that returned more than 25% yearly in US dollar terms to its investors⁵. Interestingly, some findings tend to corroborate with our reasoning:
 - There are 61 Chinese companies in the list (excluding Hong Kong). The median Chinese company traded at a price-to-sales ratio of 4,97 ten years ago and trades at a price to sales ratio of 7,69 now, an increase of around 50%. This suggests that most of the gains in the Chinese stock market winners came from increase in those companies' sales in the past ten years.
 - There are seventeen Hong Kong Companies in the list, they went from a median price-to-sales ratio of just 1,15 to a ratio of 2,83, less than doubling their valuation according to this metric. Still, most of the gains certainly came from increases in sales⁶.
 - There are 177 American companies in the list, more than any other country. The US market clearly had the largest amount of winners in the past decade. The median US company in the list was trading at a price-to-sales ratio of 1,57 ten years ago and trades at an astonishing ratio of 5,74 now, a more than 400% increase. This suggests that unlike other countries most of the incredible stock prices gains American companies experienced came not from sales increase but due to increases in valuation.
 - This leads us to think that most of the winners in the next decade will probably come from emerging markets, due to a combination of faster sales growth and reversion to the mean when it comes to valuations;

⁵ With minimum requirements of liquidity and only companies valued at more than US\$100 million

⁶ Different markets have very different price to sales ratio because their winners tend to come from different sectors and are valued in different ways (technology, real estate, etc.)

A brief summary on the main topics from our investment philosophy, as discussed above.

Framework		
Global mindset	Belief in change	Contrarianism
Tools to Search for Companies		
Look beyond investors' biases	Top-down approach when looking	
Look beyond investors biases	for companies	
Look for hidden optionalities	Zoom out to longer times frames	
Look for flidden optionalities	and neutral geography	

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A final word of caution: the game of investing is certainly not easy. As Charlie Munger once said, "if you think it is easy, you are stupid".

One interesting experiment: academic theory has shown⁷ that the more players there are in any competitive endeavor, be it sport, investing, or anything else, the smaller the difference between the best player and its top competitors will be.

This makes intuitive sense: best practices are copied and humanity marches forward, creating convergence. When a sport, like tennis, was in its infancy, the best player could be completely dominant. But since we live in a world where information travels each time faster, opponents will adjust to catch up.

Clear examples are the famous "US Basketball Dream Team" in the 1992 Olympic Games and Royce Gracie winning the first Ultimate Fighting Championship and cementing the legacy of the Gracie family in martial arts in 1993.

In both cases opponents were quick to realize new life changing information was available and decided to learn new techniques and up their game. The result is that both sports are a lot more competitive nowadays.

In investing, likewise, every participant knows that it is not as easy to stay ahead as it was for value investors back in the 1950s. The game marches forward and with it should we.

One way around this problem: just like in sports, when it comes to investing, every new asset class at first enjoys a period of exceptional returns before opponents realize there is new information. This makes sense: as we said before, at first there are fewer players, and they are not as experienced. Over time, as always, the game becomes more efficient and competitive. The skill difference between the participants becomes smaller.

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 $^{^{7} \}underline{https://www.scielo.br/j/rpc/a/WgSRF4kfdWVCyzSPVnTBhBR/?lang=en}$

Stock investing, private equity, venture capital and way more recently, cryptocurrencies all had periods of unbelievable returns when they were at their infancy before getting to a trajectory of more competitive, normal returns. So investors should keep their eyes open because inefficiencies tend to fade fast.

So the above lines would be a summary of how our process of idea-searching works. Granted, there will always be an imponderable aspect to it. A mix that is more art than science. But over the years this house has never ceased to be amazed by the amazing ingenuity and human potential we encounter, sometimes in places we expect the least. Coming through an amazing and exciting new idea, although hard to do, when it happens is certainly one of the most rewarding aspects of our work.

It is probably the same wonder a child would have when gazing at the starts and looking through a telescope. There's so much out there. That is still how we feel when going through our spreadsheets. Still a lot to see. Still only scratching the surface. Incredible opportunities will emerge in this decade, in sectors as varied as cryptocurrencies, environmental solutions, commodities, healthcare and a lot more and in places as varied as Turkey, Brazil or Germany.

We hope to catch some of them in this journey to explore more, to know more, in this eternal quest to spot, before anyone else, the supernovas.

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Thesis: Ethereum

In October 2017 this house released a letter called "Digital Alchemy" where we enunciated that the so called "Cryptocurrencies" and the financial revolution they could unleash might be one of the most important events of this century, on par with the advent of the internet.

We also stated that, since we consider ourselves a firm with a culture of deep study and careful analysis, we would be dedicating many hours and significant resources to understanding and mapping this new ecosystem with the idea of possibly someday releasing a separate investment vehicle dedicated exclusively to Cryptoassets.

It is in fact one of the letters we are most proud of and, years later, we feel that its text, assumptions and insights still hold on pretty well for such a new ecosystem.

The thesis we bring in this letter is about one of the main Cryptoassets, one our FCL Opportunities indirectly holds in its portfolio: Ethereum.

For our investors that might not be that versed in cryptocurrencies, on the date we write this letter, Ethereum is the second most important Cryptoasset, behind Bitcoin.

 $^{{}^{8}\}text{https://dfadd525-2053-48ac-bbf9-6aa66145e272.filesusr.com/ugd/84471c_56bac25deb194764a858892926bb8280.pdf}$

As for a separate investment vehicle managed by this house and solely focused on Cryptoassets, we might have news on that in the next few months/years.

For now, we will finish this section stating that we feel even more bullish about the new paradigm Cryptoassets will bring than when we first wrote about the subject in this space. Indeed, finance will never be the same.

In our past letter⁹ we wrote about the Buttonwood tree and how modern finance was metaphorically born beneath its shades in the southern tip of the island of Manhattan, New York City, back in the 18th century.

The crypto revolution might mean a new tree will blossom besides the original one. In other words, from now on, "TradFi" (for traditional finance) might co-exist with a new tree with a different set of rules. If we are right in our analysis, traditional finance and crypto finance might one day constitute a garden of different varieties.

But let's not get ahead of ourselves. First, some context on what Ethereum is, its history, and why it is so important and necessary.

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The Ethereum whitepaper was written in 2013 by a then 19-year-old genius programmer called Vitalik Buterin.

Back then, Buterin's paper argued that "whereas Satoshi Nakamoto's Bitcoin was a radical development in money and currency, being the first digital asset, arguably the most important part of the Bitcoin experiment was the development of the concept of a Blockchain, a tool for distributed consensus"

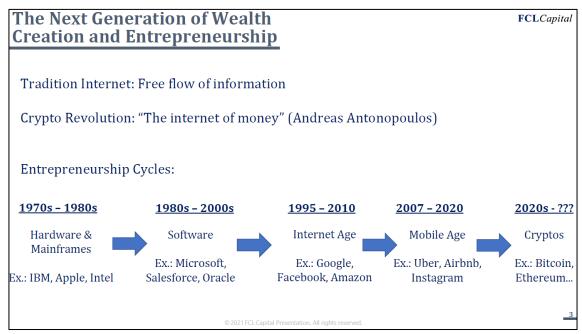
Vitalik's proposal was to take the idea of a blockchain further, creating a different blockchain with built in Turing Complete coding capabilities, in other words, capable of running smart contracts.

If Bitcoin was censorship resistant global (and maybe even interplanetary) money, then Ethereum would be a programmable money, able to be used in ways that only human ingenuity could limit.

Simplification sometimes helps and to the eyes of this house, if Bitcoin is "digital gold" (a digital form of money out of governments negative interference), Ethereum could in some ways be thought of as a "crypto app store" or "a Crypto Nasdaq"

As we have argued in this space before, entrepreneurship doesn't happen in a vacuum. It usually happens in waves when conditions are ready for a new cycle of amazing ideas to flourish. This is exactly what happened in previous waves like the mainframe revolution, the mobile revolution and it should very well happen this time too.

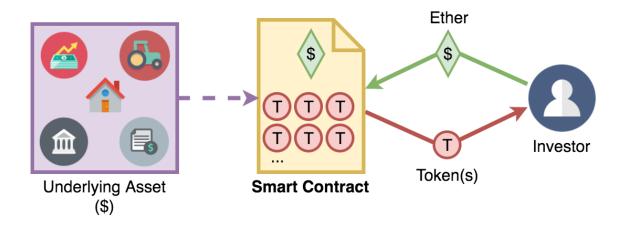
 $⁹ https://dfadd525-2053-48ac-bbf9-6aa66145e272.filesusr.com/ugd/8d6b17_f85fe96800b44c45bc1ad8a35086d3f3.pdf$



Part of an internal presentation regarding Cryptoassets

Many of the most inventive things entrepreneurs are creating with cryptocurrencies nowadays are run on the Ethereum smart contract solution. From Augur, a project designed to be a prediction market, to recent Decentralized Finance applications, it is on top of Ethereum that crypto applications are usually built.

Why is this relevant? Because to run an application designed on top of Ethereum, the user typically exchanges its Ethereum coins for tokens used to run the specific solution. An analogous process is a teenager that would exchange its US dollars for tokens to play arcades in a mall.



This mechanism is the reason this thesis is so unusual and collides with financial purism. This house will be the first to admit we can't perfectly model how much Ethereum should be worth. Over the past couple of years we have been deep at work perfecting some tools, iterating some models, some borrowed from Econometrics, some from monetary theory,

others from our regular domain of public companies investing, yet others from sheer comparative analysis and common-sense extrapolation.

Discounted cash flow is one method of analyzing asset values among countless other tools and frameworks. As Warren Buffet once said, "we prefer to be slightly right about something than being precisely wrong", hiding behind a false science of exact numbers.

The basic fact is that a digital currency doesn't produce expected cash flows like a company (although with the recent Ethereum's London Fork this is, in some ways, starting to change). Some traditionalists, facing this reality, rushed to declared cryptocurrencies "worthless". Nothing could be further from the truth.

For the scope of this thesis, this house will be content if our readers also appreciate the fact that the more applications and entrepreneurship inside the Ethereum ecosystem, the bigger the demand for Ethereum coins (since they are needed to be exchanged for the specific tokens that run the applications built on top of it), much in the same way better arcades would produce increased demand for the arcade store tokens.

This is where Apple's example comes to mind. Steve Jobs is undeniably a genius and one of the most consequential human beings of the past 30 years. He helped revolutionize several industries, created what is probably the most successful consumer product ever released and made machines look sexy. But maybe his most enduring creation is the App Store. This system allowed hundreds of thousands of entrepreneurs around the world to unleash their ideas to the global IOS audience and some of these ideas became widely successful, like Uber, Tinder, Instagram and Airbnb. The Apple Store was a feature of what is now called web 2.0, the second generation of internet, in which people access it mostly through mobile phones.

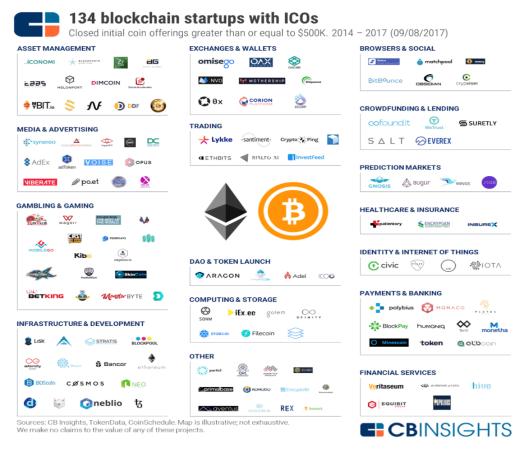
What is sometimes overlooked is that Apple gets a 30% cut, of all the revenue App makers get when their products are being used in the App store¹⁰, be it a Tinder Subscription, an item bought in a game users play or anything else. In other words, Apple is giving access to the platform and letting entrepreneurs do their magic while taking a cut of whatever human entrepreneurship might create.

In some ways we can think of Ethereum as a giant App Store or Stock Exchange. Even if we don't know at this point which applications built on the top of it will be the most successful, betting on Ethereum is like betting on the house.

And the ecosystem only gets more exciting every day.

¹⁰ There are several judicial disputes and exceptions to this norm, most recently by the gaming company Epic

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Source: CB Insights

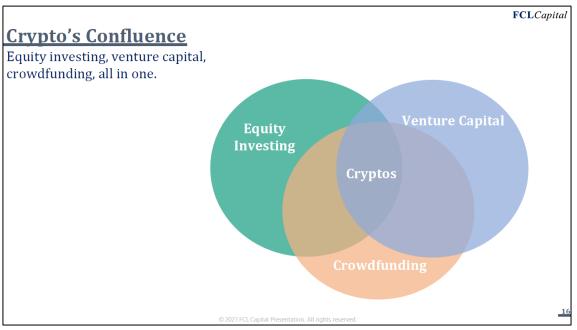
To summarize, while we can't perfectly model Ethereum's expected price, our investment certainly had as rigorous an analysis that demanded as many hours of study and diligence as all our other investment in global listed companies. Over the past year we started investing in an ETN listed in the Stockholm Stock Exchange that holds Ethereum and therefore has its price fluctuating with it. It is not technically the same as having direct exposure to Ethereum (FCL Opportunities' bylaws only allows us to invest in listed financial instruments) but the financial results are very similar.

Interestingly, during our last annual investor's meeting this past March, one of our longtime investors asked us about our current crypto exposure and strategy. We stated that, since everything is new in this area, we tried to reach a tradeoff between not being completely out of this revolution and not having too much exposure to something the world is still trying to perfectly understand. So we decided to hold 1% of our FCL Opportunities assets in the above mentioned Ethereum ETN, before we launch a separate vehicle specifically designed for crypto exposure. Since then, with no additional purchases, the exposure went from 1% to 1,9% of our fund's assets due to Ethereum's skyrocketing price increase this year.



Source: Bloomberg, FCL Capital

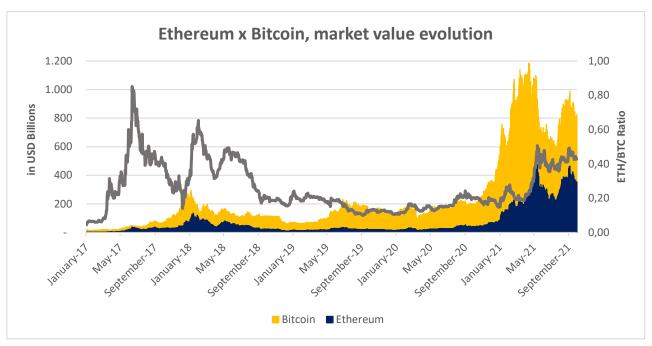
Crypto is indeed fascinating. As we argued back in our October 2017 letter, it sits at a confluence of Equity investing, venture capital and crowdfunding, having interesting elements of all three without exactly being any of them. If the idea prospers, it might provide early external funding to entrepreneurs on a global scale while giving 24/7 liquidity to investors and creating a global community of investors.



Part of an internal presentation regarding Cryptoassets

It is a fact of life that the digital world (comprised by the internet and crypto) is thriving while our material world (comprised by atoms and our locked down cities and decaying global infrastructure) is suffering. Crypto might tip the scales even further.

The basic aspect of our Ethereum position is that we believe one day, with its smart contract solution and its real-world utility, Ethereum might surpass Bitcoin and become the most valuable Cryptoasset of all.



Source: Coinmarketcap.com, FCL Capital

And where might the Ethereum revolution take us?

Ethereum is increasingly being thought of as a fuel for different use cases and applications. Right now, probably no single one is hotter than the so called "DeFi" (for "decentralized finance") applications. It is beyond the scope of this initial thesis to give an in-depth perspective of the whole DeFi Ecosystem that is, in essence, an extraordinary attempt to reimagine a new global financial system from the ground up.

Literally thousands of ideas are being tested for borderless value flows, lending and a lot more on the DeFi space. One of the most fascinating, this house thinks, is the concept of "staking": by agreeing to "lend" your tokens to a platform and receiving a higher amount at a later date we have a transaction that resembles in many ways the good old fixed income investing from traditional finance (while being more secure than bank centered traditional finance since it is written in code!).

And this is only scratching the surface on DeFi: Stablecoins (backed by a real word value system like gold or the US Dollar), flash lending and countless other ideas and concepts will test their sustainability in the next few years. Like it always happens in innovation, many of them will eventually fail. But this is a feature not a bug.



Beyond the realm of DeFi, even more strange ideas and experiments are being conducted. One that has recently caught global attention is the rise of NFTs (non-fungible tokens) that may bring art collecting and investing to the global masses.

In its purest form, an NFT is simply a digital verified way to give ownership rights to someone, usually not in the form of an artwork in the physical world, but in its tokenized digital version.

Increasingly, society gives more value to immaterial things, be they pictures, songs and books, than their "real world" counterparts. Most NFTs started almost as jokes, but some "collections" are clearly gaining prominence in public imagination, like the "Digital Ape Yacht Club" a collection of 10.000 unique, digitally verified and owned NFTs of funny looking gorillas, that recently had a group of some of its exemplars selling for more than US\$26 million at an auction at Sotheby's, one of the planet's most important art auction houses¹¹.

¹¹ https://news.artnet.com/market/bored-ape-nfts-26-million-sothebys-record-2007862



One of the "Digital Ape Yacht Club" gorillas

Over the longer term some enthusiasts even talk of DAOs (decentralized autonomous organizations) that could even replace the role corporations occupy in the global economy nowadays. The reasoning is that since everything can be written in code, we could have a perfect set of incentives for countless people to do their specific functions without the need for a specific command and control company on top.

If this house had a vote, we certainly think that despite all the excesses, frauds and concerns regarding the so called ICOs (Initial Coin Offerings) when they first rose to prominence, some newer and maybe more regulated form of offering might eventually reemerge.

ICOs might be the final blow on the tyranny of geography: they allow any entrepreneur with a good idea and some online following to raise money on the internet wherever his actual location is, while also giving investors around the world, not just the ones located in Silicon Valley or the South of China, early access to the best (and worst) investment ideas. They are the perfect hybrid of all the advantages of venture capital (early exposure to new ideas), stock investing (liquidity) and crowdfunding (building a community). They could even potentially take the three concepts further by introducing nonstop liquidity and faster testing and adoption of ideas and business models.

Of course in the eternal creative destruction (in the terms immortalized by Schumpeter) that is capitalism, other blockchains are also running with the objective of displacing Ethereum from its current prominence.

In fact, in the eternal trilemma of a blockchain (it can have only two of the following three characteristics: be decentralized; be scalable; be secure) other competitors are designing their solutions with slightly different tradeoffs.

Vitalik Buterin, Ethereum's most important mastermind, always said that he sees decentralization as nonnegotiable. This house agrees with his thinking. If Bitcoin or Ethereum ran at a specific single place, say, Canada, the US or Switzerland, in servers located there, they wouldn't be, to use a jargon from the crypto community, "censorship resistant". In other words, a specific government or a specific event in a specific place could "shut it down" or harm it. If Bitcoin were, say, a New York company, ultimately the US president could consider the whole thing scary and rule it out of existence.

It is exactly decentralization, in other words, the fact that Bitcoin is everywhere and nowhere at the same time, that make it impossible for any government or any person, no matter how powerful, to stop it.

On the other hand, decentralization certainly comes, as everything in life, with tradeoffs. It makes it slower and harder to scale, although countless adjustments and iterations, called "forks" and layer 2 solutions, are being designed and implemented in all blockchains to make them better.

Solana, for example, on the date we write this letter is the seventh most valuable blockchain with its coins reaching a combined valuation of around US\$ 25 billion, is way faster than Ethereum, but on the other hand more centralized.

Cardano, yet another blockchain that is also considered by some an "Ethereum killer" has a set of theoretically very elegant and academically brilliant solutions but has been very slow to actually implement things, only recently being able to finally add its smart contracts solution.

Of course, in such a new space, only time will tell what will turn out to be the correct set of tradeoffs, assumptions and execution. In other words, who will be the winner to power the DeFi, NFTs and Smart Contracts space. But this house thinks Ethereum certainly has a head start, with its powerful resources, global and thriving community and amazing minds behind the project, especially but not restricted to Vitalik.

Lastly, but certainly not least, we will face the challenge of talking about a valuation.

Currently¹², Ethereum has a market cap (the sum of all its tokens combined) of approximately US\$331 billion, still way behind Bitcoin's U\$777 billion, but significantly ahead of any other Blockchain behind it.

¹² At the time we write this letter, late September 2021

Many approaches have been discussed and tried in the past few years in the desperate attempt every financial professional currently has of trying to come up with a method on how to value Cryptoassets.

Some¹³ have taken inspiration from Monetary Economics to propose the equation M*V = P*Q drawing inspiration from the classical economics equation that tried to determine the amount of value of money in circulation in a given economy.

Others tried to come up with more simple comparative analysis framework, for example comparing Bitcoin's value with all gold minted in the planet.

Still others try to draw more parallels with corporate valuation metrics, especially a discounted cash flow analysis that maintains that a company's value is the present value of all its expected future cash flows. And so cryptocurrencies, with their fees that could be used to "burn" coins (take them out of circulation in a process not entirely dissimilar to a stock buyback from a public company), could metaphorically also be analyzed this way.

We feel that although no single approach has, in our minds, completely cracked the code yet, all of them are promising and have merits. Certainly different approaches will be more suited to valuing different Cryptoassets in the same way different companies are modeled in traditional finance with different metrics and tools, like price-to-book value for a bank, price-to-sales for a startup tech company and price-to-free cash flow for a stablished retailer.

That being said, although we ran a lot of internal models, valuation analysis assumptions and calculations over the past couple of years on Ethereum and other Cryptoassets, this house will try not to publicly expose how we are trying to come up with a specific estimated value for Ethereum, stating instead that, in our minds, with its nascent and exploding ecosystem, the increasingly possible scenarios in which it becomes a global reserve of value, and the increasing "fees" it will collect, we think Ethereum's market cap should already be in the trillions of dollars.

Of course, and this is the part where traditional finance purists get agitated, no other investment in our portfolio carries as much uncertainty both on the upside as in the downside, and that's exactly why it is more volatile and also why FCL Opportunities exposure to Ethereum (or cryptocurrencies in general) will always be in the low single digits.

That being said, if there is more downside in this particular investment if our assumptions are wrong, we just have to think, however, about everything that could happen if the upside case proves to be correct. It is certainly enough to make our eyes start glowing. No other investment in our current portfolio carries as much uncertainty and promise, if everything goes right no other thesis we published before in this space could potentially fly so high.

¹³ We particularly recommend the book Cryptoassets by Chris Burniske https://www.amazon.com/Cryptoassets-Innovative-Investors-Bitcoin-Beyond/dp/1260026671

Performance

FCL Opportur	nities
Year to Date, 2021, in BRL	-2,91%
Year to Date, 2021, in USD	-7,36%
12 Months, in BRL	17,99%
12 Months, in USD	22,13%
MSCI All Country Index, 12 Months, in USD	25,54%
Since Inception (30/01/2017), in BRL	165,29%
Since Inception (30/01/2017), in USD	51,89%
Avg Annual Return, since inception, in BRL	23,13%
Avg Annual Return, since inception, in USD	9,35%

FCL Hedg	e
Year to Date, 2021, in BRL	-6,88%
Year to Date, 2021, as % of CDI	-272,36%
Since Inception (01/02/2017), in BRL	29,71%
Since Inception (01/02/2017), as % of CDI	101,67%

FCL Opportunities shares ended the quarter with their NAV at 2,6528 BRL, which is some 20% below their all-time high reached in March this year. In US Dollars our performance is somewhat better, with our NAV around 15% below their all-time high.

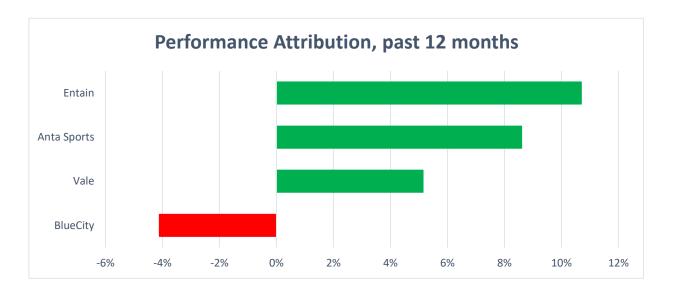
This decrease happened during the second and third quarters of the year, basically because of the underperformance of our Brazilian, and especially, Chinese positions. More recently, towards the end of the third quarter a general sell off mood conquered global markets and affected our US positions as well.

However, as our long-time readers and investors know, we are a long-term oriented partnership. Periods of NAV decrease and underperformance will eventually happen from time to time and they are part of the package: if we didn't have those that would mean we are not deviating from the consensus and without doing that it is impossible to beat the market.

If we look at our results over the past 12 months, this house is still satisfied with our current performance: FCL Opportunities NAV increased 18,0% in the year ended on September 30th, 2021, when measured in Brazilian Reais and 22,1% in US Dollars. Our most important internal metric, however, is annualized performance since inception. Since we opened our fund on January 30th, 2017, our accumulated performance is 165,3% in Brazilian Reais and 51,9% in US Dollars, resulting in a compounded annual performance of 23,1% in the Brazilian currency and 9,3% in the US currency.

Over the past 12 months, the biggest positive contributors for the performance of the fund were Entain (+10,7 percentage points of contribution), Anta (+8,60%) and Vale

(+5,14%), while the biggest detractor was BlueCity (-4,11%), a position we no longer hold in our portfolio.



At the end of the quarter, FCL Opportunities top 5 positions were:

Position	Country	% Fund NAV
Entain	UK	13,20%
Capri Holdings	USA	11,47%
GoDaddy	USA	10,09%
Yduqs	Brazil	9,18%
Fleury	Brazil	8,55%

FCL Opportunities Portfolio Composition on September 30th, 2021:

Porfolio Composition by Sector	
Technology	32,69%
Consumer Discretionary	28,69%
Healthcare	10,21%
Education	9,18%
Consumer Staple	3,05%
Basic Materials	2,63%
Industrials	2,26%
Financials	2,07%
Crypto	1,92%

Currency	y Exposure
BRL	28,73%
USD	26,47%
HKD	13,86%
GBP	13,20%
CNY	7,92%
EUR	6,77%
DKK	3,05%

Geographic Distribution	
Brazil	26,36%
China	21,78%
USA	21,56%
Europe	21,08%
Global	1,92%

Portfolio Concentration	
Top 5	52,5%
Top 10	80,7%
Top 15	91,2%

As for FCL Hedge its performance in the past 12 months was 6,84%, or 227,37% of the Brazilian CDI. Since the inception of the current strategy, FCL Hedge performance is 29,71% or 101,7% of the Brazilian CDI.

On September 30th, 2021, FCL Hedge portfolio composition was:

FCL Hedge	
Stocks and ETFs	66,29%
Cash and Fixed Income	22,87%
Other Positions	10,84%

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China: a history of bear markets

In a brilliant piece on the Financial Times on October 4th 2021¹⁴ Charles Schwab's Global Chief Investment Strategist outlined the bull case for investing in China: it is by no means a low volatility market: in seventeen of the past twenty years, the Chinese stock market experienced a drawdown of at least 20%, the conventional definition of a bear market. Since China hasn't experienced any recession for over thirty years, economic downturns can't be the reason behind such volatility. In reality, however, those bear markets were caused by policy changes and investors scares of the news flow coming in from China. Not even the unprecedented growth of the Chinese economy in recent decades was sufficient to stop investors panic-selling their shares at the first minor sight of trouble. And this year, by the way, seems very typical in this aspect.

Even with its history of high volatility, the Chinese market has over the past twenty years outperformed the US market¹⁵ by three percentage points (12,3% annually vs 9,3% annually in US dollars in the period) while also outperforming virtually every other major global stock index.

¹⁴ https://www.ft.com/content/d615d98e-4bba-47eb-a697-3dc821af251c

¹⁵ As defined by the S&P500

In the words of Howard Marks (a frequent source of quotes in this space), "China is an economic adolescent: erratic, unstable, but its best decades lie ahead". We couldn't agree more.

As our investors can see when comparing our current portfolio exposure to the one last quarter, we did reduce some of our Chinese positions due to this house's concerns and perspectives about particular regulatory changes happening in the country. But this certainly does not mean we will simply sell everything. China is a perfect test for investors patience, stamina and talent to eye opportunities.

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Entain

On September 21st, 2021, Reuters announced that the British online gambling company Entain, FCL Opportunities largest single position, had received a takeover bid by its American rival DraftKings.

Entain has one of the best collection of brands, proprietary technology and apps in the expanding global online gambling industry and this house is not surprised by the bid. In fact, the offer comes after a failed attempt by MGM, Entain's partner in BetMGM, a gambling app in the USA, to also acquire the company¹⁶. According to news sources, the DraftKings cash and stock offer would value Entain at £2.800 a share, a 45% premium to Entain's closing price on September 20th and more than a 100% premium of MGM previous takeover bid back in early January 2021.

According to British takeover laws, DraftKings has until October 19th to formalize the terms of its offer. Since MGM has preference to acquire the 50% stake in BetMGM owned by Entain, we envision a few different possibilities:

- 1. DraftKings buys Entain assets in Europe while allowing MGM to buy the BetMGM stake in the US;
- 2. DraftKings is able to persuade MGM to let it buy Entain's stake in BetMGM (we find this unlikely);
- 3. MGM counterbids and offers a higher price then £2.800 per share and acquires Entain:
- 4. The deal doesn't come through.

Overall this house feels any offer bellow the proposed takeover price of £2.800 significantly undervalues the company and its long-term potential.

¹⁶ Both companies hold a 50%-50% stake in the BetMGM joint venture

Entain is a thesis we are very proud of ¹⁷. Over the past couple of years the company started to realize its amazing potential, while also being at the forefront of the sustainability aspect when it comes to gambling ¹⁸.



Source: Bloomberg, FCL Capital

For the past year this has been by far our most profitable position, and these are definitely exciting times: over the next few weeks we shall know what the future holds for Entain: either as part of a newly formed powerful conglomerate or as a standalone company with a no less promising future ahead.

If the first possibility happens, either the acquirer being DraftKings or MGM, this house would immediately analyze the terms of any potential combination to decide the best course of action for our investors, either by selling our stake or embarking on a new journey with new partners.

If, on the other hand, the deal doesn't come through, as the market seems to think it won't, based on recent stock prices, we feel no less excited about the possibilities ahead for Entain.

In order to create an official channel through which we can easily and directly communicate important information to our investors, we recently launched FCL's Telegram group. The idea is that any new communication about our funds (Fact Sheets,

entertainment/

Investors' Letters, Podcasts participations etc.) will be sent in the group as well as
informed through our already existing channels. Should you, dear reader, be interested in
joining, please enter the link bellow or send us an email (info@fclcapital.com) requesting
to join.

https://t.me/fclcapital

As always, we end by thanking our investors for their trust and commitment over all these years.