InvestSense

November 2022

The Icarus Syndrome

"Exclusive: 30-year-old billionaire Sam Bankman-Fried has been called the next Warren Buffett. His counterintuitive investment strategy will either build him an empire—or end in disaster" – Fortune Magazine, August 2022.

In Greek mythology, Icarus was a relatively minor character. His father, Daedalus was a famous inventor who produced a great maze on an island for a king. The maze was so complex that Daedalus himself couldn't find a way out of it. After building the maze, Daedalus fell into disfavour with the king, and he and his son, Icarus, were forced to live out the rest of their days stuck in the labyrinth Daedalus had built.

But rather than accept his fate, Daedalus, the great inventor, built wings of wax and feather that he and his son would use to escape the maze by flying over it. Just before takeoff, with their wings attached, Daedalus gave Icarus two important pieces of advice. Firstly, he told his son that if he didn't fly high enough, his wings would get wet in the ocean and he would drown, and secondly, if he flew too high, the sun would melt the wax and he would fall from the sky.

As the two of them took off, flying over the labyrinth, Icarus had every intention of heeding his father's advice. However, as he gained more confidence in his ability to fly, he soared higher and higher into the sky. Soon, believing he was unstoppable, and ignoring his father's advice, Icarus flew too close to the sun and his wings of wax melted.

In many ways, the story of the failed crypto exchange platform FTX and its founder, Sam Bankman-Fried (SBF), provide us with the quintessential example of what has come to be known as the *Icarus Syndrome.*

Defining FTX – For Heavy Traders Only

Cryptocurrency exchange platforms operate like most traditional exchange platforms, although, unlike the New York or Johannesburg Stock Exchanges, investors buy and sell cryptocurrency on them as opposed to shares in companies. Two additional differences between crypto exchanges and regular stock exchanges are that (1) they often allow investors to store their cryptocurrency on the exchange and (2) they may offer investors the ability to invest in a cryptocurrency backed by the exchange, and in the case of FTX, that cryptocurrency was called FTT.

Crypto exchanges have been influential in the growth of the cryptocurrency market across the world, primarily because prior to their advent, the only way investors could acquire crypto was by either mining it, or by arranging to buy it from individuals who already owned it. In February 2010, a user on the cryptocurrency platform Bitcointalk.org set up a portal where users could buy and sell Bitcoin from each other - this is considered to be one of the first cryptocurrency exchanges. Today, there are over 500 cryptocurrency exchanges across the world. In comparison, there are roughly 130 stock exchanges worldwide.

A combination of significant investor demand and a lack of regulatory oversight has been responsible for much of the growth in the cryptocurrency exchange market to date. In addition, in a world with so much optionality, it is tough to make yourself stand out. So, what did FTX do that made it so successful?

Well, FTX actually stands for "Futures Exchange", and one of the reason's the company was able to differentiate itself from other exchanges was because it was really the first to offer investors a way to cost-effectively trade in cryptocurrency derivatives. A derivative is a security with a price that is dependent on the value of another security. In the case of FTX, that underlying asset is usually a crypto currency. According to Patrick Gruhn, head of FTX Europe, FTX's target market was "heavy traders" and not cryptocurrency newcomers. By allowing investors to trade "on margin", this opened the floodgates and reduces the barriers for investors to actively trade in high volumes.

Some of the products FTX offered to users of the exchange included derivatives, options, leveraged tokens and tokenized stocks. It isn't really necessary to understand how these products actually work, but it is important to recognize that apart from trading in cryptocurrencies in general, there are a whole host of additional risks that come with trading in derivatives, especially if they are being used to speculate. This is an important point worth elaborating on. Clearly, FTX's business model is an exceptionally high risk

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one. Not only is the company's revenue linked to the value of speculative cryptocurrency prices, but users of the platform can further speculate by taking out derivative contracts on those cryptocurrencies.

While the purpose of this article is not to delve into the technicalities of derivative usage and why they can both increase and mitigate risk for investors, it is important to note that FTX's success was largely due to the kind of products it was offering to investors that allowed them to speculate through the use of derivatives.

And so, against that backdrop, how did FTX go from hero to zero in less than a week?

Before we answer that question, it is important to understand how FTX's own cryptocurrency, FTT has played an integral part in the FTX saga.

12 Days in November

It isn't uncommon for crypto exchanges to offer users their own cryptocurrency, to set themselves apart from their competitors. These cryptocurrencies are known as 'exchange tokens' and generally offer users of the exchange platform a whole host of benefits if they choose to transact in that cryptocurrency. Some of those benefits include fee discounts, rebates and preferential access to specific token sales.

FTX launched its exchange token, FTT in 2019 and offered users many of those benefits. It is difficult to separate out FTT from FTX, given how integrally linked the exchange token was to the platform. Ultimately, trading on FTX was cheaper and easier if you were using FTT. Not only that, but the default collateral[1] underlying many of the futures contracts traded on FTX was FTT. FTT is described as the "backbone of the FTX ecosystem" on FTX's website for these reasons.

FTT may have seemed like a solid bet for most crypto investors. Ultimately, the currency was integrally linked to one of the fastest growing crypto platforms out there and at one point in 2022 one coin was worth $80.However, it is difficult to give any credence to that valuation given that tens of millions of FTT tokens were not widely held. In fact, a lot of FTT still belonged to FTX and was being valued on FTX's balance sheet using the publicly traded value of FTT.

In addition, FTX's balance sheet was also being propped up by tokens that the company had received from SBF's hedge fund, Alameda Research, as collateral for billions of dollars in loans. Essentially, there was a giant hole in FTX's financial statements.

FTX's collapse took twelve days. On the 2nd of November, various revelations came to light suggesting that both Alameda's and FTX's balance sheets were being propped up by a cryptocurrency that wasn't worth very much. In addition, many of those assets were collateral for the derivatives that FTX had issued. Once those revelations became clear to the market and it wasn't long before FTT crashed and FTX filed for bankruptcy on the 14th of November.

A lot of the details surrounding the extent of the rot at FTX are still coming to the fore and it isn't worth spending too much time on those details until the full picture starts to take shape. However, there are a few important themes worth drawing on in the interim.

To do that, we first need to understand who exactly SBF is and how he became the golden child of Silicon Valley.

SBF and the Kimchi Premium

Born in 1992 on the Stanford University campus, where both of his parents were law professors, from a young age, SBF developed a keen interest in mathematics and science. From 2010 to 2014, he attended the Massachusetts Institute of Technology where he studied Mathematics and Physics.

After graduating, he went on to work for a high frequency trading firm called Jane Street, as an ETF trader. There is no doubt that SBF was a gifted trader, during his time at Jane Street he was so successful that other traders in the firm used to literally watch him trade. But that wasn't the only drawcard that set him apart from his fellow traders, he was also highly ambitious.

In 2017, SBF left Jane Street and cofounded the hedge fund Alameda Research. It was at Alameda that he really established his reputation as the golden child of Silicon Valley, by exploiting something known as the Kimchi Premium.

The Kimchi Premium is the name given to the difference in crypto prices between parts of Asia (mostly South Korea) and the rest of the world, based primarily on Bitcoin. First identified in 2016, at one point in 2018 the price of one Bitcoin in South Korea was over 50% higher than it was in other markets.

The reasons for the Kimchi Premium's existence could form the basis of an entirely separate article. But essentially, an astute trader who could pick up that the price of Bitcoin in South Korea was higher than most other markets could buy Bitcoin in those markets and sell it in South Korea for a massive profit. In the world of finance, this is known as an arbitrage opportunity – the purchase and sale of the same asset in different markets to profit from pricing differences in those markets.

At the age of 25, in a Berkley apartment, SBF was that astute trader. SBF was one of the first people to identify and exploit the Kimchi Premium. Ultimately, the trade was so successful that not only did it make him a billionaire, but it also paved the way for the eventual establishment of FTX, which was in part seed funded by trading profits Alameda had made exploiting the Kimchi Premium.

At this juncture, it is easy to see why FTX may have seemed like a solid investment option for some of the biggest investors in Silicon Valley like Sequoia Capital, the Menlo Park based venture capital firm that is known as one of the early investors in Google, YouTube and Paypal.

On the surface, SBF was young, intellectual, had altruistic ambitions and was wickedly smart. He had also shown his crypto acumen by successfully profiting from the Kimchi Premium. At that stage, it would have been easy to draw comparisons between him and Mark Zuckerberg or even Steve Jobs.

In fact, so enamored was Silicon Valley by FTX and ultimately SBF that in July 2021, that company raised $900m from 60 investors at an initial valuation of $18bn. A few months later, the company was able to raise a further $400m at a valuation of $32bn. This for a company barely two years old.

This is an important point and draws on one of the key themes underpinning the FTX saga. How does a two-year-old company get valued at $18bn and then have its valuation double less than a year later?

Due Diligence – Heavy Hitters and the Price of Possibility

There are levels of nuance associated with the question above but ultimately there are two important points to draw on: the time during which the valuation was performed, and the level of due diligence associated with the investment itself.

Firstly, FTX received the majority of its funding during a time in which the price of crypto assets was soaring. This was attributable to a number of factors including unprecedented levels of monetary stimulus that drove the price of speculative growth assets higher and higher, peaking around August 2021.

Secondly, what has come out in the wash as the FTX saga has unfolded is that there were glaring operational, risk management and compliance issues within the FTX business that largely contributed to the company's downfall. So much so that the current CEO tasked with turning the company around, and who was also tasked with turning Enron around, has noted that FTX is in a worse state operationally than Enron ever was.

Surely then, these issues should have been picked up in the due diligence when the later funding rounds were completed? Due diligence is the process followed by investors before they make an investment in a company to see that the company does what it says it is doing and that there are real tangible assets underpinning what they are buying into. So, then what led to a lack of due diligence being done?

In general, there are two important points worth discussing:

- **The Presence of Heavy Hitters** – Some of FTX's investors are the most successful venture capital companies in the world including Sequoia Capital, Temasek and Soft Bank. The fact that these firms were willing to invest in the company may have filled other investors with a false sense of confidence that there were no glaring due diligence failures. After all, surely if one of YouTube or Instagram's early investors' thinks FTX is a solid bet then why shouldn't anyone else? This kind of herding behavior is very powerful and has the ability to thwart critical thinking.
- **Paying for the Possibility** – This is something we quite often see with secular growth investors. Even if the company they are investing in is not in the best shape they are willing to pay up just for the possibility that it might become the next YouTube or Google. In an article that Sequoia published on SBF which was subsequently removed from their website, "just the possibility" that FTX could meaningfully compete with big banks like JP Morgan Chase, Bank of America or Wells Fargo as a financial sector behemoth, meant that the $32bn valuation was justified.

Ultimately it is always easier to see how in hindsight investing in FTX implies a level of due diligence failure. However, there are certain factors that may have led to appropriate due diligence not being conducted. Recently, Sequoia Capital has told its investors that it is taking steps to assess where and how its own due diligence process failed, although it seems a bit like closing the barn door after the horse has bolted.

The Regulatory Failure

It is easy to play the blame game when it comes to FTX. Clearly, the company's founders played an integral role in creating an entity that has ultimately cost a lot of people a lot of money. You could probably even take the blame game a step further and rightly question why so few of the company's investors did their homework before committing client capital to something so unstable.

However, it is difficult to holistically assess the FTX debacle without at least mentioning the regulatory oversight or lack thereof that was in part responsible for creating this situation.

The cryptocurrency investment case is to such a large degree dependent on the concept of deregulation and has for a long time operated under a different set of rules to most capital markets. One of the main goals of Decentralised Finance, or DeFi, a concept closely related to cryptocurrencies, is to create a financial system that is not dependent on traditional governance structures. DeFi proponents argue that under such a system, banking and other costs that financial companies charge will disappear.

However, in the wake of FTX that is not likely to be the case for much longer. Investors in these types of ventures are likely to demand greater regulatory scrutiny on a forward-looking basis to prevent this kind of situation from ensuing in the future.

The Entrepreneur Complex and Short-Term Noise

We started the article by referencing a relatively obscure segment of Greek Mythology that concerns itself with the story of Icarus and how his hubris ultimately fueled his demise. It is important to note that in particular, the US is a country built on entrepreneurship and ingenuity.

America's entrepreneurs have built the country and are heralded as some of the smartest people in the world – from Henry Ford and the Wright Brothers to Jeff Bezos and Elon Musk. The kind of hype and image that was created around SBF was in many ways no different and led many smart people to believe his story and gloss over the cold hard facts that presented themselves in the investment case.

A few months before FTX unraveled, Sequoia published an extensive puff piece on him that made him out to be a visionary of sorts, and there were even murmurs that he may become the world's first trillionaire. In addition, headlines like the one that prefaces this article are not difficult to come across through a simple Google search.

So then, what were some of those clear red flags that investors could have picked up on before investing in FTX?

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The Due Diligence Red Flags

- **The Business Model:** First and foremost, FTX's business model is incredibly risky. Not only does the company generate its revenue from highly volatile cryptocurrency where prices are often determined by investor speculation and not grounded in fundamental reasoning. But that the business model was also inextricably linked to the use of derivatives to further speculate on something that is already very speculative.
- **Crypto Hype:** Clearly, in August 2021, crypto prices were firmly planted in bubble territory. While hindsight is often twenty-twenty, FTX's valuation almost doubling from $18bn to $32bn generally defies reason. Even the fact that this valuation was broadly accepted by the market should have been a red flag.
- **The Due Diligence Gremlins:** Due diligence isn't very fun. Often, checking that a company or a manager are doing what they say on the tin involves endlessly pouring over operational or business processes and procedures to assess if they are sound and reasonable. However, cases like FTX show us why it's such an important part of the investment process. If proper and rigorous due diligence had been performed, investors may have spotted a lot of the red flags.
- **Deregulation sounds better than it is:** As investors, we often bemoan the cumbersome nature of regulation. However, the case of FTX shows us why it is needed to protect investor interests. The mere fact that FTX operated within an industry that thrives on a lack of regulation means that potential investors should be aware that their investments have one less layer of protection.
- **The SBF hype:** As we have previously mentioned, a lot of hype was generated around the twenty-something MIT whiz kid that was on his way to becoming the world's first trillionaire. Often, that kind of hype can be seen in hindsight as a red flag.

The Future Crypto Reckoning

Clearly, there were warning signs from get-go that should have made it very difficult for FTX to pass the sniff test. However, are there any broader implications for the future of crypto and crypto exchanges in general?

Well, one of the most obvious is likely to be greater regulatory scrutiny which is exactly what the industry doesn't want. It's all fine to have decentralized finance, but when the man on the street loses money, governments step in.

In addition, it seems that the FTX story may have been the straw that broke the camel's back. Investors are likely to approach crypto investments with more scrutiny than previously, being more questioning about the kinds of cryptos they buy and the types of exchanges they invest on. Ultimately, these are all good things for an industry that's in need of a healthy dose of skepticism.

Ultimately, the basic rules of investing apply no differently to a crypto investment than they would to a traditional investment. Investment merit, due diligence, suitability and value for money are some of the basic checks which investors can use to avoid flying too close to the sun.

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[1] Collateral is the security pledged for a specific futures contract

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data provided by Refinitiv

MARKET REPORT

30/11/2022

		3m	YTD	1yr	3yr pa	5yr pa	10yr pa	5yr Vol1	10yr Vol1
LOCAL MARKET INDICES									
FTSE/JSE All Share Index (ALSI)	ZAR	13.0%	6.0%	11.1%	14.8%	8.4%	10.5%	16.6%	14.0%
FTSE/JSE SA Listed Property	ZAR	10.6%	-0.6%	7.2%	-4.4%	-6.7%	2.7%	27.8%	21.7%
SA All Bond Index (ALBI)	ZAR	2.8%	3.6%	6.4%	7.5%	8.9%	7.2%	8.3%	8.0%
SA Cash Index (SteFI)	ZAR	1.5%	4.6%	5.0%	4.8%	5.8%	6.1%	0.4%	0.4%
Balanced Benchmark	ZAR	-0.4%	-4.5%	2.4%	8.3%	6.7%	9.7%	11.1%	9.3%
SA Inflation (1 month lag)	ZAR	0.7%	7.1%	7.6%	5.3%	4.9%	5.2%	1.4%	1.4%
GLOBAL MARKET INDICES BASED TO USD									
Global Equity (Datastream World)	USD	4.1%	-14.1%	-10.4%	8.0%	7.9%	10.1%	18.0%	14.4%
Emerging Markets Equity (Datastream EM)	USD	-1.7%	-18.6%	-17.1%	0.5%	0.0%	2.4%	18.9%	16.8%
Global Property	USD	-4.6%	-22.0%	-15.8%	-0.7%	2.7%	5.4%	17.9%	15.2%
Global Bonds (Barclays Global Bond Index)	USD	-1.4%	-16.7%	-16.8%	-4.5%	-1.7%	-0.5%	6.3%	5.6%
Global Cash	USD	1.0%	2.0%	2.0%	1.0%	1.5%	1.0%	0.3%	0.3%
MAJOR INDICES BASED TO RANDS									
FTSE/JSE All Share Index (ALSI)	ZAR	13.0%	6.0%	11.1%	14.8%	8.4%	10.5%	16.6%	14.0%
Global Equity (Datastream World)	ZAR	3.8%	-8.5%	-5.0%	13.5%	12.8%	17.5%	17.1%	15.4%
Emerging Markets Equity (Datastream EM)	ZAR	-2.0%	-13.3%	-12.0%	5.6%	4.4%	9.3%	14.0%	13.4%
Global Property	ZAR	-4.9%	-17.0%	-10.7%	4.4%	7.3%	12.5%	18.2%	15.5%
SA All Bond Index (ALBI)	ZAR	2.8%	3.6%	6.4%	7.5%	8.9%	7.2%	8.3%	8.0%
Global Bonds (Barclays Global Bond Index)	ZAR	-1.6%	-11.3%	-11.8%	0.4%	2.7%	6.1%	15.6%	13.7%
COMMODITIES									
Gold (US Dollars)	USD	1.9%	-3.9%	-1.6%	6.2%	6.5%	0.2%	13.2%	14.6%
Gold (Rands)	ZAR	1.6%	2.4%	4.4%	11.6%	11.3%	6.9%		
CURRENCIES									
Rand / Dollar	ZAR	0.3%	-6.5%	-6.1%	-5.1%	-4.5%	-6.7%	16.4%	15.0%
Rand / GBP Pound	ZAR	-2.1%	6.4%	4.5%	-2.2%	-1.9%	-3.6%	14.5%	14.6%
Rand / Euro	ZAR	-2.1%	3.6%	3.0%	-2.7%	-1.5%	-4.2%	14.3%	13.5%

Spot Rates		30-Nov-22	Latest Quarter	1 Year Ago	5 Years Ago	10 Years Ago	20 Years Ago
CURRENCIES							
Rand/US$	Rand	17.0	18.0	16.0	13.6	8.9	9.3
Rand/GBP	Rand	20.3	20.1	21.2	18.4	14.2	14.4
Rand/EUR	Rand	17.5	17.6	18.0	16.3	11.6	9.2
RATES							
Libor 6m $	US$	5.2	4.2	0.2	1.7	0.5	1.5
Repo Rate	Rand	7.00	6.25	3.75	6.75	5.00	13.50
Prime	Rand	10.50	9.75	7.25	10.25	8.50	17.00
All Bond Index Yield	Rand	10.9	11.4	11.6	10.0	7.3	9.7
COMMODITIES							
Gold ($/oz)	US$	1 751.9	1 674.1	1 780.1	1 279.1	1 718.0	319.0
Platinum	US$	1 025.0	864.0	944.0	940.0	1 612.0	592.0
Oil (Brent Crude) $	US$	85.4	88.2	70.4	63.8	112.3	25.3
INFLATION							
SA Inflation	%	7.6	7.5	5.4	4.6	5.6	9.4

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