Important Notes

With fund marketing, you'll need some guidance from Erika on what you can and can't say in writing versus in person / on a phone call.

Pitch Point's Summary

- Capital preservative strategy versus other funds that are down 90% this year - this fund is up 26% over 4 months (equates to 99% per annum). We generate these returns because our fund is fully hedged versus USD.
- For Ivan Deck (We are a capital preservative strategy that offers upside to the cryptocurrency market without the volatility, because we fully hedge our returns versus USD.)
- Our team is composed of traders and algorithm developers that have worked at top tier investment banks Goldman Sachs, Deutsche Bank, Credit Suisse and hedge funds that have assets under management > $ 1 billion USD. The senior traders and developers have more than 50 years of combined experience in institutional finance.
- Superior technology
    - All trading in equities, foreign exchange and bond markets is fully algorithmic. They days of human traders are over. Crypto will quickly follow this path (emphasise how Chinese manual traders just can't compete)
    - Within money management you need to have worked in the investment business in the real world managing > billion dollar risk and have managed real risk (emphasize how new breed of crypto managers have not managed risk in a trading environment and are down 90%)
    - The edge long term advantage is:
        - Superior algorithmic logic: market makings in equities is similar to markets in foreign exchange and extend to crypto. The algorithmic logic that has worked well in the traditional asset classes can be translated into crypto: institutional traders have a huge advantage here.
        - Robust / fast code: optimizing code and compiling into faster languages like C++, colocating servers so they are closer to exchange, scaling our algos to multiple servers with more CPU and memory these are all incremental speed advantages that give us an edge. We apply similar principles that we have used in high frequency trading in the equities market.
        - Edge cases / black swan events: Badly programmed code can lead to trading algorithms performing badly and losing a lot of money in a volatile or unexpected market conditions. We adopt a robust process in terms of

stress testing and rolling out our algos which comes from over 50 years combined experience in trading and developing trading algorithms.

- Three vertical's for active trading strategy
    - High Frequency Trading
        - Connected to over 50 exchanges and we are making multiple small trades every second. Very low risk as we are buying and selling across multiple exchanges we typically hedge out our risk in seconds. Over 2000 trades a day. Example: for a microsecond a large buyer appears on Coinbase and pays 0.10% more than fair market value on BTC, we will automatically sell to him/her and buyback on a cheaper exchange.
    - Quantitative Trading
        - We look at multiple data sources that have predictive ability for short term movements and trade this. Data inputs such as: 1) Ethereum blockchain transactions and when there are large transfers to exchanges 2) Which exchanges move first when the market suddenly moves up (typically Bitfinex / Bitmex) 3) Analysis of the recent trades: are they going through on the bid or offer and the general skew of the order book (i.e. what is the ratio of the bids to the offers and how does this change)
        - All the factors are weighted into our model and our trades are triggered at certain thresholds.
        - Because we are expecting short term price outperformance we keep tight stop losses and stop out if the trade runs the other way.
    - Relative Value + Structural Arbitrage
        - Taking advantage of structural inefficiencies and mispricings in assets that are listed across different products.
        - For example for a period of time the interest rate on Bitcoin futures on Bitmex was 50% p.a. And the rate to borrow Bitcoin on Bitfinex was 12% p.a. You can borrow Bitcoin on Bitfinex and buy it on Bitcoin (so you are hedged versus market direction and capture this 38% spread).
        - Because there are new exchange products appearing monthly as exchanges look to gain market share there is an evergreen opportunity set over the coming years.

Investment Process

HFT Example

Exchange1 , Exchange 2, Exchange 3, Exchange 4, Exchange 5 …. Exchange 30
-> Price Feeds
-> Quantitative Global Fair Pricing Model (Fast processing and execution of algorithms)

-> Send thousands of hundreds of orders above and below global fair price through propietary best execution algorithms.
-> Orders get hit and we hedge automatically on another exchange.

Quantitative Trading

Dataset 1 (Trade Data) + Proprietary Dataset 2 (Order Book Skew) + Dataset 3 (Exchange Dispersion) + Proprietary Dataset 3 (Blockchain Data) + Proprietary Dataset 4 (Proprietary) + Proprietary Dataset 5 (Proprietary)
-> Feeds into Quantitative Model
-> Run through historical backtests.
-> Apply statistical analysis
-> Run model in live trading and compare with backtest.
-> Determine correlations with other strategies and scale up.

Relative Value / Structural Arb

>>> Injest all exchanges and all products into global valuation model (constantly sweep for new products)
>>> Run through fair valuation model adjusting for basis, currency and liquidity premium + discounts.
>>> Execute pair trading and stat arb strategies.

Examples Trades

This is complicated so I suggest to use this summary to explain our strategies / verticals.

- Overview of vertical / explain in an elevator pitch how we make money
- Give an example
- Get the client excited about the opportunity set

HFT Example

- Our systems determine global fair value.
- We send hundreds of orders over 30 exchanges.

- Give coin toss example where you are flipping heads 80% of the time how many times would you play the game.
- Example there's a microsecond where a trader sells on Coinbase and for a moment it's mispriced, we go and buy it on Coinbase and automatically turn around and hedge it on other exchange.
- That's why you do 1000's of trades a day.
- Opportunity set is unique in Crypto where 1) highly volatile 2) fragmented markets (like early days of equities 3) retail euphoria during speculative periods of bullmarkets (buy at any price I want in or I"ll miss the coin going up 10x Litecoin on Coinbase was trading at a 10% premium during bullmarkets) and intense bearish periods in down markets (sell at any price I just want to get out!)
- Limited risk as we hold the coins for a few seconds only.
- Competitive advantage: comms rates, technology, experience compared to new entrants.

Quantitative Trading

- Data inputs into our model 1) Ethereum blockchain transactions and when there are large transfers to exchanges 2) Which exchanges move first when the market suddenly moves up (typically Bitfinex / Bitmex) 3) Analysis of the recent trades: are they going through on the bid or offer and the general skew of the order book (i.e. what is the ratio of the bids to the offers and how does this change)
- Dataset 1 (Trade Data) + Proprietary Dataset 2 (Order Book Skew) + Dataset 3 (Exchange Dispersion) + Proprietary Dataset 3 (Blockchain Data) + Proprietary Dataset 4 (Proprietary) + Proprietary Dataset 5 (Proprietary)
- Run through quant model and apply backtest
- Run statistical analysis
- Example our quant analysis shows that Bitfinex / Bitmex lead the markets, when there's an acceleration in price and the dispersion in prices of the leading our sweeper goes out and buys BTC on all the lagging exchanges.
- Evergreen strategy in the equities 5 of the top 10 hedge funds in the world are quantitative funds managing $30-$60 billion USD each. The ones that were successful were the ones that adopted the models early in equities.

Relative Value / Structural Arb

- Asset across different products that have a fundamental relationship and valuation due to market fragmentation are priced inefficiently or incorrectly.
- How are futures for Bitcoin priced in Bitmex versus OkEx + Huobi.
- How are is BTC/EUR priced

- How is USD priced on Bitfinex
- How are stablecoins priced (TUSD 10bps versus Paxos free)
- Quanto swap for ETH/USD
- Give example of BTC funding annualized at 50%. I.e. for the last 2 months of 2018 you received an additional 5.4% by being long BTC on Bitmex. You could borrow BTC on Bitfinex and short and pay about 0.25% interest and buy the same BTC on Bitmex fully hedged and collect this interest rate differential of 5.15%
- Tether arbitrage, tether is trading at a premium right now you can actually mint tether and sell it and make 1%.
- Because there are new exchange products appearing monthly as exchanges look to gain market share there is an evergreen opportunity set over the coming years.

Fund Questions

What is the fund structure? How much are we raising? Can Americans invest?

- It's a fund that is incorporated in the Cayman Islands and we follow the standard hedge fund setup
- Raising $20m initially for our first fund to execute the strategies we have been running our proprietary capital in which is annualizing 99% (our highest return with lowest capital risk strategy)
- Initial capital goes into highest profit strategies we will hard close at $20m.
- Americans can invest as long as they meet sophisticated investor requirements (Erika can provide details)

How do we hedge against USD, BTC, and ETH? How much exposure are we taking at any given time?

- We hedge by shorting using futures contracts such as the ones on Bitmex and also by utilizing shorting on Bitfinex.

Do we transfer funds between exchanges (rebalancing)? If so, how are risks of this process mitigated?

- Because our strategies take into account inventory on exchanges our algorithms automatically tilt when inventory is low. I.e. we dynamically start sending inventory across to other exchanges. This is all done via API and only on whitelisted addresses

to minimize risk. Traders do not have withdraw access from exchanges only principals of the fund. If there is a non-whitelisted address that funds are being sent it requires 2FA approval from the principals.

What is the average size of a trade?

- On the high frequency trading side our largest order sizes is typically $20,000 USD. Average order size is $1000 USD. Order size is a function of the coin we are trading and how much the market can support without us impacting the price / moving the market.

- We typically hold onto the position for less than 1 minute so academically on a worse case scenario for $20,000 USD order and the market drops 1% in 1 minute the maximum we can lose is $200 USD.

How frequent are trades? How many do we do per day?

- We are trading every one millisecond when the market is volatile and we typically do over 2000 trades a day.

When we place orders, how quickly are they filled?

- Instantly when we enter a position and when we exit a position it's typically instant or if the market moves too fast we will hold the position for up to on average 60 seconds.

What happens if more sells are being filled than buys (or vice versa) since the price is moving? How do we mitigate losses?

- This is a function of risk limits and delta risk. We keep a maximum delta of 10% of fund NAV. This means our exposure to the market is only 10% of the fund. A large crypto down movement in a day is 20%, therefore the max we can lose on a day is 20% of 10% which is 2% of the fund.

- We typically don't go up to 10% delta unless it's for high conviction trades.
- In the event sells down aggressive and all our buys are filed and we aren't fast enough to hedge on other exchanges we will slowly unwind our exposure to bring our delta back to zero to ensure we don't have large losses.

How far back is our backtesting?

- We've run backtesting for 3 years in BTC and 1 year in ETH as far as reliable data goes. High-frequency trading strategies are not dependent on backtesting, quantitative strategies are more reliant on backtesting. In addition at the end of the day, backtesting is used a guide only and point us in the right direction of potentially where profitable trades are. The proof is in the pudding which is what are your actual returns when you start trading which we are annualizing with 60%.

What kind of algorithms have we built?

- We've built market making algorithms and quant trading algorithms that is based on our experience making markets and quant trading in the equities market.

What is the risk of holding so much money on exchanges? Is it worth the returns? Do we have good relationships with exchanges we're trading on?

- See another on custody below we repasting here. We have good relationships with all exchanges as well where we have preferential terms and commission rates.
- Like all actively traded funds we keep a certain % of assets on the exchange this is where the opportunity is
- We have risk management systems that monitor and alert us when more than 20% of the funds NAV's assets is on 1 exchange.
- Traders don't have withdraw access only principals. Everything is secured by 2FA.
- Also if you look in FY 2018 the space has greatly matured no longer are large name exchanges like Binance, Bitfinex, Bitmex, OKEx hacked. If you look at the data the risk of a rogue employee or misanaging your private keys is higher than keeping assets stored on a tier 1 exchange.
- We've spoken to multiple fund admins but none are able to come up with a multi-currency / multi-exchange NAV marking we've built our own in house system.

What strategies do we use?

- See above in pitch points

Do we use derivatives?

- Not but we will use futures for hedging

- We do not take excessive risk or speculate using futures or any derivative instruments. The reason why our returns are smooth and it's a capital preservative strategy is that we are market neutral (everything is hedged and there is no directional view on the market).

What platforms are we using for shorting?

- We have a selection criteria on exchanges that our risk team uses to determine if we can trade on that exchange and the notional limit on that exchange.
- Some of the criteria we use as part of the selection process is
    - How long has the exchange been running
    - Number of assets on exchange
    - Volume traded one exchange
    - Has exchange previously been hacked
    - Founding + management team of the exchange and their backgrounds

What about margin trading?

- Margin trading is another form of shorting we use this to hedge and we follow a similar selection criteria that we explained above for exchanges.

When we're not trading, do we tether? How often? How do we decide when to tether?

- We don't hedge our exposure using tether we hedge using a short.
- We do hold USDT to market make as there are many coins that trade with a USDT pair.
- We believe the market concerns about tether are unfounded, it is actually the most liquid stable coin. If our analysis is incorrect and there is a structural problem with Tether it trades over $1 billion USD a day and we have algorithms to exit this position instantly if required.
- This is little known fact but Tether trades $4 billion USD a day so it's the second most liquid coin after Bitcoin. If there is a systemic risk in Tether we can get out much faster than other stable coins like DAI or PAXOS or USDC.

Is trading monitored 24/7?

- Trading is monitored 24x7 we also have built a complex system of automated alerts to assist the traders with trading.
- Some examples of phone alerts are:
    - Risk limits breached
    - Large movements in BTC/ETH in a short space of time
    - An exchange goes down and is unresponsive.

    - Large delta increases in a short period of time.

How many traders do we have in total?

- 3

Team experience

- See above. Repasting here:
- Our team is composed of traders and algorithm developers that have worked at top tier investment banks Goldman Sachs, Deutsche Bank, Credit Suisse and hedge funds that have assets under management > $ 1 billion USD. The senior traders and developers have more than 50 years of combined experience in institutional finance.

Why will we make more money in the bull market vs. the bear market?

- We will typically make the most money when the market is very volatile and volumes are high which occurs in a bull market.
- Also when markets are up > +10% daily like they are in a bull market, investors typically do not care on paying an extra 0.5% or 1% to get into a position. It's decisions like this which causes price inefficiencies that our systems + traders automatically capture at scale. With our delta fully hedged the capturing of these inefficiencies at scale add up to a high return.

What factors contribute to whether or not we make money?

- Because we are hedging our delta to USD we expect to make consistent returns and it is a capital preservative strategy.
- However we expect **higher** returns when the volume + volatility of the crypto market is higher.
- We also expect a structural increase in returns over time as more exchanges and traders come into crypto: fragmentation of markets and traders is typically positive for our strategy as it leads to greater structural and pricing inefficiencies in the market.
- However if other traditional finance players come in with similar experience and technology and the space becomes more competitive we can see our returns diminish.

Why is now the best time to invest in an algo fund?

- If you are looking capital preservation and lower volatility in your returns and still want upside exposure for the crypto market this is a better investment product.
- Most crypto funds are typically "long only" or "vc" style funds where they can go up 1000% or also go down a large amount.

Are we rewarding people to help with fundraising?

How much of your own capital committed.

- We've committed $1m USD of partners capital

How is this related to CoinFi. What is the relationship with parallel capital

- We leverage some of the data tools that CoinFi has built
- Started off managing CoinFi's own treasury position and saw that there was a demand for this product.

Who is your legal counsel

- Ogier the premier legal firm that does all the legal work for traditional hedge funds.

How do you handle custody. Who is your fund admin?

    - Like all actively traded funds we keep a certain % of assets on the exchange this is where the opportunity is
    - We have risk management systems that monitor and alert us when more than 20% of the funds NAV's assets is on 1 exchange.
    - Trades don't have withdraw access only principals. Everything is secured by 2FA.
    - Also if you look in FY 2018 the space has greatly matured no longer are large name exchanges like Binance, Bitfinex, Bitmex, OKEx hacked. If you look at the data the risk of a rogue employee or miss managing your private keys is higher than keeping assets stored on a tier 1 exchange.
    - We've spoken to multiple fund admins but none are able to come up with a multi-currency / multi-exchange NAV marking we've built our own in house system.e

How big is your team?

    - 5 developers
    - 3 traders
    - 2 operations

What is average daily profit?

- We expect to make 15-20bps blended daily across multiple strategies.

What is your ideal investor base?

I would answer this in the form of which investor can benefit the most from investing in our fund.

- An investor who holds BTC/ETH who is long term bullish and thus long term holders and looking to generate additional returns on the BTC/ETH they are holding for the long term.
- An investor who holds USD who is looking to invest in crypto because they believe in the long term upside in the space / ecosystem but wants stable consistent returns with lower volatility.
- An investor who invests in the traditional space of equities/bonds/commodities/foreign exchange but wants to diversify to a new asset classes which gives a) good risk adjusted returns 2) non-correlated returns to the rest of their portfolio.

An ideal investor is one who:

- Has a good understanding of the product they are investing in and how the trading team makes money.

What exactly is the advantage of having multiple bank accounts / the same bank accounts as clients/investors/exchanges? @Sandy you used this in the pitch

- There is diversification of risk in the sense that no bank can shutdown the account and stop the trading of the fund (banks are still not 100% crypto friendly)
- We bank with all the crypto friendly banks that allows us to clear millions of USD (because they are comfortable with our institutional grade KYC process). This opens us to trading opportunities in BTC/USD and ETH/USD pairs that aren't available to our competitors who can't clear fiat.
- We also partner with specific crypto banks that give us trading and settlement advantages in speed when clearing FIAT funds within 30 minutes (much faster than bank wires almost as fast as receiving crypto).

How do you perform compared to long/short fund? What is the value of actively trading / quant trading? (tldr how do we compare to a strategy like Multicoin's)

- For traditional long short or fundamental funds their returns will be much more volatile than a well managed actively traded / quant fund.
- This year they are all down 90% can you stomach the returns in these funds.
- There is no liquidity or ability to exit typically you need to hold for 10 years ours allows for monthly redemption (because we manage our risk well and only size appropriately into trades and lean on actively trading liquid coins only).

What coins have you traded?

- We are actively trading in the top 20 coins by coin market cap
- We also market make in the top 100 coins, below the top 20 we are more selective and look closer at the volume profile of the coin, estimate real demand, project quality and founders.

What were your returns before the 4 months

- Excluding our combined 50 years of experience in instititional finance, we have been building algorithms and trading over the past year in crypto.
- Prior to the last 4 months we were trading partners capital and didn't accurately benchmark returns because of the high volumes in the market and the profits we were making, we were returning in the range of 4-10% per month.

How to ensure there is downside protection of investment.

- Our strategy is unique in the sense that it is NOT correlated to the direction of the market. This is because we hedge very single investment we are making. I.e. if we collect funds in USD and we are doing high frequency trading in BTC we will buy BTC to trade. However at the same time we are selling the equivalent amount of BTC via a future or a structured product to hedge this exposure so we **don't** make or lose money regardless of the way Bitcoin moves. We only make money if our trading strategy on high frequency trading in Bitcoin is successful i.e. taking advantage of these micro dispersions.

Volumes are so low how are you making money.

- Have a look at the volume for the last year in this chart: https://coinmarketcap.com/charts/
- At the peak of the market we were trading $70 billion USD a day now in the depths of the bear market we are still at $17 billion USD a day.
- The drop in volume won't have an impact on your returns unless your trading operation is a significant % of the market.
- For example if you capture 1% of market volume in this bear market you ar trading $170 million USD a day. If you are returning 15bps on average per trade this is $255k a day or $93m USD a year. There market is early stage and fragmented and plenty of opportunity even with a dropoff in volume.

Will your strategy hold if the market turns? (some people I've talked to think this is only a bear market strategy; what will happen in a bull market?)

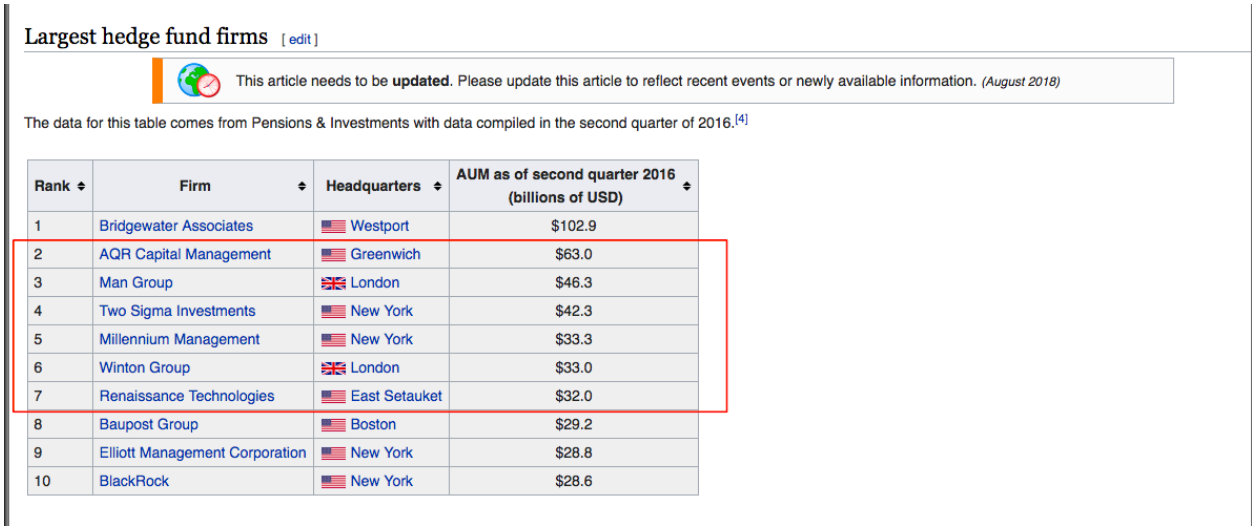
- See above notes on bull market / bear market

What is your funds capacity.

- $20m allocation has the highest returns (this is true the high frequency trading has the best ROI and has limited capacity), this is a good marketing point as well to get people to invest early as this will only open to people in the first round.
- The overall fund which has 3 verticals can scale to $200m. This is conservative given the comparable examples of equities quant funds like in the screenshot below with their AUM i.e. top 7 quant funds run between $30-$60 billion each).
- $200m is a conservative figure this is our philosophy underpromise and overdeliver.
- The number and notional size of Relative value and structural arbitrage trades will grow as new products get added to more exchanges (like futures on Huobi / OKEx and over the next year we expect derivatives to get added). Structurally as the industry grows this vertical should have higher capacity there's a possibility of > $500m.

https://en.wikipedia.org/wiki/List_of_hedge_funds#

The funds highlighted in red i.e. #2-#7 are quant funds.



Largest hedge fund firms [edit]

This article needs to be **updated**. Please update this article to reflect recent events or newly available information. *(August 2018)*

The data for this table comes from Pensions & Investments with data compiled in the second quarter of 2016.[4]

Rank	Firm	Headquarters	AUM as of second quarter 2016 (billions of USD)
1	Bridgewater Associates	Westport	$102.9
2	AQR Capital Management	Greenwich	$63.0
3	Man Group	London	$46.3
4	Two Sigma Investments	New York	$42.3
5	Millennium Management	New York	$33.3
6	Winton Group	London	$33.0
7	Renaissance Technologies	East Setauket	$32.0
8	Baupost Group	Boston	$29.2
9	Elliott Management Corporation	New York	$28.8
10	BlackRock	New York	$28.6

Isn't Your Team Size Is Small

- Our team size is suitable for the fund size we are targetting.
- It's a well followed principle that throwing more engineers at a development problem (especially in a high risk, fast moving development like trading technology) actually hinders the speed at which you work: https://en.wikipedia.org/wiki/The_Mythical_Man-Month It is better to have 5 high quality engineers than have 20 mediocre engineers.
- Because the senior management on the trading and technology side have combined 50 years experience in institutional finance we have people in our professional network we can reach out to join on the trading and technology side scale as needed.
- This is a major competitive advantage as we have the 1) the ability to vet talent with our experience 2) can recruit from our professional networks quickly and thus have the ability to scale human resources rapidly.

What Exchanges Are You Trading On?

- Our technology allows us to connect to over 50 exchanges. We are currently active on the 30 exchanges.
- These are the top 20 volumes by exchange and also selective

How Do You Monitor The Market For Trade Opportunities

- We have a quantitative analytics dashboard that monitors the market in real time to alert us of any increase in open interest, volume or volatility on assets that we are trading or looking to trade.

Liquidity In Crypto Market Is Not Good. How Can You Ensure You Can Liquidate Your Fund In The Event Of A Black Swan Event I.e. how long does it take for you to go to cash.

- We predominantly invest in liquid coins. For coins with lower liquidity we size our positions appropriately to ensure we satisfy our liquidy parameters.
- We actively monitor in real time the liquidity of the markets and adjust our positions in real time if the market liquidity changes.
- 90% of the fund can be liquidated within 5 days, the remaning 10% within 30 days.

How you managing fill you managing risk. Risk controls in place in your system no fat finger.

- We have traders that are monitoring our algorithms 24x7
- We have built a comprehensive set of real time alerts that notify traders of events such as:
    - Breach of our delta limits (i.e. if our current positions exceed our pre-defined market risk)
    - Exchange is down and not allowing trading or placing/cancelling of orders
    - Unexpected increase or decrease in our balances on exchange.
    - Sharp swings in PnL over a 5 minute window.
    - Our algorithms automatically shut off when our risk limits are breached.
    - Alerts when balances on exchanges breaches our risk limits.
- We have $ notional checks on the size of orders we are sending whether they are algorithmic orders or manual orders by traders. This is to ensure that we don't accidently buy or sell a large amount of crypto.
- We also have sanity checks on the number of orders we can send within a 1 minute window and also a gross count of the number of orders we have in the market to ensure any programming bug can't cause our algorithms to behave erratically.
- Process to move funds during system upgrades. I.e. when BItfinex last did their major upgrade where the exchange was down 10 hours we took all our funds off the day before. In fact when the exchange resumes there are trading opportunities for mispriced / leftover orders that we take advantage of.

How do you safeguard your assets / what is your operational security like

- Only partners have access to the private keys.
- Like all actively traded funds we keep a certain % of assets on the exchange this is where the opportunity is, we have risk management systems that monitor and alert us when more than 20% of the funds NAV's assets is on 1 exchange.
- Traders don't have withdraw access only partners. Everything is secured by 2FA.
- We have technology that automates the transfer of inventory across exchanges to whitelisted addresses only so that

Isn't building a quant fund hard?

https://www.tokendaily.co/blog/why-building-a-quant-fund-in-crypto-is-harder-than-people-think

Many of these people tried launching funds that did exchange arb, others focused on market making, and some of the established funds, who already had a captive capital base, tried pursuing quant approaches.

But exchange arb is hard, and everyone is either doing it or already looking at it, so finding significant spreads is near impossible. And market-making became ultra competitive, with a lot of high frequency shops entering the space early with infrastructure that is hard to replicate.

- We are more than a quant fund (quant trading is ⅓ of the verticals we also do HFT and structural arb & rv).
- This is exactly the point on why we think there's hedge building a HFT fund because you need institutional experience and a technological edge (50 years combined insto experience on our senior team) to be competitive in this space.
- Also the article doesn't mention relative value or structural arb it's not aware of these strategies.

Historical price/order book data is sparse, and without reliable/accurate data you can't build functioning quant models, period. While some alternatively rely on a host of 3rd party data vendors, it is hard to validate where they received their data cache/know how accurate it is. To know, you'd have to quiz them on how exactly where they were able to procure data from past years if they didn't have websocket or API connectivity with various exchanges – and even then, it's hard to know who is being truthful.

- Depending on your quant strategy you don't need orderbook data on every single exchange. This comes from experience in quant ttrading the person who wrote this article hasn't done quant trading and looking at it from an academic point of view. I.e. you run a strategy just on binance data which is relatively reliable and a large part of the liquidity pocket of the crypto market.

So now you have an approved model and are hunting for the right place to trade it. How do you choose an exchange? Counterparty credit risk is as pertinent in crypto as it was in the credit markets before Lehman Brothers went bankrupt. In a sense, you are essentially trading bilateral swaps every time you don't take physical delivery of the coin within your own cold storage solution.

- See comments above on exchange counter party risk it's over exaggerated.

You are forced to put up 40% or more Initial Margin for longs and up to 125% margin for shorts. You read that correctly – 125% Initial Margin for shorts. This means you have negative leverage!

- This is not only true for BTC futures on CBOE and CME exchanges. The bulk of the liquidity is NOT on these exchanges but on crypto exchanges where the margin requirements. We trade very safely on 20-30% margin as we have systems to automatically send and add margin when it drops below our thresholds.

Alpha Hurdle: Slippage and Exchange Fees
Once you are comfortable with an exchange, you'll ideally repeat the process a few times until you have a few counterparts to trade with. Now comes the interesting part…slippage. Slippage is the difference between your desired entry level and where you actually get filled. When buying the S&P500 future, slippage is only a few basis points. In crypto, slippage can be as large as a few percent if you don't have a plan in place for executing trades.

- If you are trading crypto and you have slippage of a few percent you might as well go home.
- With our smart algorithms are execution cost is below what it is in equities because the market is not mature and is in the single digit basis point range.
- We actually get paid on certain exchanges to trade.

Beta vs Alpha

Perhaps the biggest stumbling block of all for traders are the quant strategies themselves. Many are fooled by terrific results in 2017. The reality is that anyone made money in 2017 if they bought crypto before mid-December. The true test of a manager's skill is whether they made money in 2018. It's no different for systems. Many managers are fooled into thinking they've created a brilliant quant model when all they did was benefit from the exponential move of 2017. Right place, right time and nothing more. A solid model makes money both long AND short, including in 2017. Anything else is simply beta disguised as alpha. Beta is easy, alpha is truly hard.

- This is music to our ears we were up in 2018

- Yes true alpha is hard thats why you need professionals who have made alpha in the traditional markets and have the skillset to apply it to the crypto markets. You want to invest in professionals who an institutional investing pedigree and who have managed large amounts of risk.

Actions

Meeting 8th of Jan 2019

- ~~Flow chart (Tim)~~
- Bios (Tim)
- ~~FAQs + risk questions (Tim)~~
- Liquidity advantage our fund versus ICO funds (Ivan)
- Finish off draft deck to finish, end of Wednesday draft (Ivan)
- Jane / Sandy pitch practice sessions.

Agenda

Ivan go over any questions
Actions from yesterday
Brainstorm elevator pitch (esp. For Monday meeting)

Actions to do

~~Tim: Risk~~
~~Tim: Security~~
~~Tim: Liquidity metrics, 90% of the fund we can liquidiate within 2 days.~~
~~Tim: Exchanges we are trading on. What % of liquidity. Which exchanges important.~~
~~TIm: Dashboard analytic~~
Tim: Voice pitch points for team
Ivan: Draft done wednesday USA time.