The Quant Thesis by Nikhil Namburi

As of May 2024, there are ~660 U.S. "unicorns." Of course, gaining access to early checks in these startups is the goal of early-stage managers who hope to achieve venture-scale returns.

Among these companies, an overlooked cohort emerges—those started by former employees of quantitative finance firms. There are 19 unicorns (aggregate last-round valuation of \$50.7B) that were started by technical employees (traders, researchers, or SWEs) of quant firms, with 4 more unicorns started by non-technical employees (aggregate last-round valuation of \$9.4B).

The Case for Quants

Most talent pools with such density of success would be flooded with outreach from venture associates. But while most firms readily build relationships with BigTech SWEs, early employees at top startups, and researchers/engineers at preeminent AI labs (DeepMind, Meta AI, AI2, Mila, SAIL, MIT CSAIL, BAIR) well before company formation, investors treat quants as if they exist outside the sphere of potential founders. They go uncontacted until they 1) join a tech company or 2) start their own company, leaving their founder potential untapped for a crucial period. Such oversight has caused investors to miss seeing early rounds in highly-covered categories like AI (Imbue, Perplexity), Crypto (Aptos, Talos), Data (Scale AI, dbt), and DevTools (Anyscale).

Many quant founders also sit at the unique intersection of technical talent and commercial acumen. Their dual-threat nature, as well as their raw intellectual horsepower, may explain why quant founders have been successful outside of dev/Al products alone—companies like Crusoe (buying excess natural gas to power data centers), Cedar (healthcare billing and financial engagement), Apollo.io (sales intelligence), and Nuro (autonomous delivery vehicles) fall outside the expected expertise of quants, but each have become massive outcomes.

Small Search Space

23 companies—or 3.5% coverage of unicorns—may seem trivial, until you consider how small the universe of quants truly is. There are <100k active professionals who work/worked at major firms, with only a fraction ever leaving finance. (<5k are actively in C-suite, non-finance roles, including at mature companies.) At a given time, there are 30-40 firms (most in NY or Chicago) with junior talent, making the network so dense that investors gain near-complete information coverage with just a couple thousand nodes. Most firms require an army of investors and pricey seeds to find 23 unicorns in one cohort—this strategy would only take ½ of an associate's time.

Early Access

At the risk of abstracting, let's call the moment that a founder signals the start of their company the time "t = 0." An investor thus has their first interaction with a founder at one of three stages:

- t < 0: Where the investor has an existing relationship with the founder prior to the signal.
 - This might occur if the investor anticipates founder potential, shares mutual acquaintances with them, connects with them because of previous work, etc.
- t = 0: Where the investor meets the founder at the time of the launch.
 - An investor sees a SalesNay, Tweet, or email notification regarding the launch.
- t > 0: Where the investor meets the founder after the company has launched.

Whether someone is a quant is a t < 0 characteristic, meaning it is knowable well in advance of company formation. While junior investors rarely establish contact with startups prior to t = 0, a quant-exclusive investor could know all relevant parties before ideation and gain access to early rounds, creating more ownership per t = 0 invested through more bets or a smaller capital base.

Importantly, quants are friends with the most promising engineers and researchers outside of trading, too, so one would expect a quant community to create differentiated access to other top startups and talent. If one believes AI will eventually replace low-difficulty dev work, engineering leverage will aggregate to top intellects, making quants and their friends even more valuable.

Implementation with an Existing Venture Fund

I personally know 30-40 quantitative finance firms that draw top junior talent. (Many are not represented in previous unicorns because these firms only recently began hiring junior talent.) I focus on junior talent because 18 of the 23 quant unicorn founders spent less than 5 years in a quant role before transitioning directly to their startup or another tech company.

For venture firms that do not want to exhaustively cover every quant, the highest-yield approach is to identify all of the students who spend their junior internship at a quant firm, make contact with them in Fall of their senior year, and create specialized job boards/referral links for top Al research labs/startups. Undoubtedly, many quant interns either become disenchanted with quant work or do not receive return offers, but their salary expectations will stay anchored to the quant rate. Al research labs and startups may not match quant rates, but they can surpass the compensation and responsibility offered in BigTech SWE or academia. After time in both quant and tech, many of these individuals will be especially well-positioned to found a company.

For a more exhaustive approach that might fit well within a large venture fund, a possible structure is a modified "SPC for quants," allowing them to explore startup formation or contract as fractional/full-time talent for partner AI labs/startups, including during garden leave. An easily overlooked appeal of this strategy within a scaled venture fund is the ability to match top talent with PortCo roles. Large venture funds (\$500M AUM, or lead check-writer into startups that can pay employees top dollar) would obviously benefit from placing top engineering talent within their portfolio, and matching engineers with other top-paying (often public) tech companies would create PortCo synergies as both an insider sales channel and a customer diligence mechanism. Most importantly, seed checks could still readily be sourced out of this model.

The quant-SPC model could also be run as its own company, with dual monetization: 1) startup equity through seed bets and 2) a premium take-rate as a fractional/full-time talent marketplace.

Independent Strategy

I mentioned earlier that as AI eventually replaces low-difficulty dev work, engineering leverage will aggregate to top intellects, like quants and their friends. Given the small search space, the high coverage of unicorns, and early access, an independent quant-focused strategy will not only have a probabilistic edge (high ownership and # of successful investments per \$ deployed),

but also engineering talent that will create scaleups that are progressively more capital-efficient. This capital-efficiency can meaningfully reduce average dilution across the venture portfolio.

While a lot of ex-quants might cluster around similar ideas and have thin industry experience, focusing on this group would allow a fund to systematically gain early access to the ones who are exceptional. The appeal here is a differentiated, potentially high-alpha portfolio approach that cannot easily be replicated by some associates just "keeping an eye on quants." Having an investor dedicated to this group would require patience, but would yield an amazing MOIC: the winners are what matter, and this strategy will access the plethora of winners from quant first.

Like every aspiring asset manager, I have thought a lot about scalability—LPs will not back a strategy that cannot accommodate increasingly large checks. Due to the aforementioned secular trend in engineering leverage, quants would be the perfect technical operators to lead AI transformations of non-software-native businesses. A quant-focused fund could scale its assets by operating like a growth buyout firm, while quants get the perfect balance of equity upside, impactful work, and work/life balance they desire. (Would appreciate suggestions on scalability!)

Added Bonus: Garden Leave

When a quant leaves a firm, they are typically placed on 6-24 months of garden leave, which prevents the departing employee from joining another trading firm. In exchange, the employee is generously awarded full base pay. Many individuals use that time to travel, stay with family, or rest. With increased hiring (and turnover) at quant firms, garden leave is increasingly prevalent.

When departing a firm, quants are faced with three choices: join a competitor firm (likely already signed), take a significant pay cut to leave the industry, or work on their own project. With a nice nest egg and a natural disposition towards probabilistic thinking, a good quant realizes their best bets are either 1) stay in the industry or 2) own equity with high upside. Garden leave allows for both to happen at the same time, but there are no existing, targeted structures that allow quants to explore startup opportunities during this time—building such a structure could serve as a clever wedge to offering a differentiated product to quant founders.

Deploying a Specialized Product

This piece is just a conversation starter: there are many outstanding questions on how to deploy a product that will ultimately maximize the terminal value of quant-founded, venture-backed companies. Here are a few of the most important questions, as identified by Yoni Rechtman.

- Why don't more (ex-)quants start companies? What needs to be done to change that?
- How do you maximize the odds of quants starting the highest EV companies?
- What specific product can you deploy to become the best partner to top quant founders?
 Corollary: Can you avoid adverse selection (attracting only bad quant founders)?
- Why are you the right person to access this community? (Hint: They're my friends.)

I have early iterations of answers, so if you're interested in hearing more, please feel free to reach out by email at nikhil.n@columbia.edu or by phone at (971) 716-5634. For more information on former quants who started unicorns, take a look at my quant unicorn tracker!