

Fourth Quarter 2020

April 26, 2021

Dear Client:

The fourth quarter was as wild as three leading up to it. The Nasdaq was up 16% in Q4 alone and as the table at the end shows, we did even a little better than that.

Looking back, it feels like 2020 contained as much "excitement" in twelve months as we'd experienced in the previous decade and most of it was scary. Let's see, we had:

- a trade deal with China
- the impeachment and acquittal of the President for abuse of powers
- the Covid pandemic
- the pandemic-induced stock market crash
- the largest fiscal stimulus the country has ever seen
- negative oil prices
- months-long protests against police brutality toward African Americans in many cities
- massive wildfires across the American West, leaving the sky an apocalyptic orange
- a nasty and contested election after which the outgoing President failed to concede, leaving a third of the electorate doubting the legitimacy of the incoming administration

Somehow after all of this, the Nasdaq ended the year 43% above where it started. If you'd told us one or two of the items in the above list, we would have struggled to believe that the market would be up at all. If you need it, consider this further evidence that we should stick to picking companies and not try to time the market.

Unsurprisingly, our accounts were volatile. Between the peak last February and the bottom a month later, we suffered our largest drawdown since I began managing money in 2011, and recorded both our #1 and #2 biggest single day losses -- and yet somehow the year ended as our best year yet by a considerable margin. As it turned out, the pandemic accelerated the very transitions toward a more digital economy that were already a central theme of our portfolio.

In mid-May, after three months of lockdown in New York, my wife and I bought a van, packed up our kids, and left. It seems distant now, but after weeks of round-the-clock ambulance sirens in Brooklyn, it was quite a relief to cross the George Washington Bridge and head west. After camping for two weeks in Utah, we spent the summer in our house in what was then relatively Covid-free rural Northern California. Among the podcasts we listened to on the drive back to New York at the end of the summer was historian Jill Lepore's "Who Killed Truth?"

As I understand it, the idea of a shared fact-based truth isn't actually that old. A few hundred years ago, everybody assumed that Truth came from God, or some version thereof. The invention of truth as something that can be discovered through the application of the scientific process was one of the great gifts of the Enlightenment. But as Lepore shows us, our

relationship with truth isn't simple. The truth is not just facts to be uncovered by science; it is always framed by the stories that give meaning to those facts.

The stock market has its own set of relationships with truth. While the market is a platform that renders shared valuations for companies, investors in the market differ not only on how to arrive at those valuations, but also on the fundamental purpose of the market itself, a tension that appears to have been highlighted by the stress of the pandemic. Originally, the market was a place for entrepreneurs with new ideas to meet speculators willing to take the risk to fund them. In the last two decades, investors have become increasingly risk-averse, moving to index funds that don't even try to pick stocks, and to hedge funds that all too often are focused on the monotonous task of predicting if the next quarter will beat estimates by a few pennies. Lost in this sea of beige is what we think is the market at its best: a place for risk-seeking speculators to fund big wild ideas that might not work out, but if they do, can change the world.

Amid the disruptions of the pandemic, Reddit's /r/wallstreetbets crew has been running with their own version of this classic approach to the market. While some of their picks -- such as Gamestop -- seem to be fueled by anger or nostalgia, and sometimes their valuation methodology, as Matt Levine wrote, is "based on proximity to Elon Musk rather than cashflow", out of the chaos also comes some inspiring and original research. In the stock market, over the long term, you pay a price for being wrong, so it is likely that on average the /r/wallstreetbets crew is going to pay a tax to more careful investors. At the same time, they will probably find a big idea or two -- an idea that with their financial backing stands an even larger chance of being a success. This enhanced appetite for risk -- as with Tesla (+64.5% during the quarter) -- might benefit all of us tremendously. While most investors have been sucked into their spreadsheets, the /r/wallstreetbets crew is looking for truth in stories -- and along the way they might just help some of those stories come true.

Our plan is to continue doing what we've been doing for the last nine and a half years, looking for exciting companies where an important aspect of their business is not well understood. However, at the margin, we are increasing how much attention we pay to interesting ideas that might become great stories as they fuel great businesses. The next paragraphs include a few of these newer more story-driven ideas.

Space based communications

Two fascinating companies in which we've taken small positions are AST Space Mobile (+24.5% during the quarter) and the defense contractor Loral Space and Communications (purchased in Q1). Both are building low earth orbit satellite constellations to improve communications. AST Space Mobile's is launching a network of LTE base stations in space. Unlike other satellite systems which require special hardware ASTS satellites will enable your existing iPhone to use the internet potentially anywhere in the world. Their investors and partners (for spectrum and customers) include AT&T, Vodaphone, Telefonica, and Rakutan. Deploying anything in space is really hard, but they've tested the system by sending a handset to space and communicating with their base station technology on the ground. They expect to launch their first satellites in 2023. If we gain more confidence in their plans, we look forward to becoming larger shareholders.

Loral owns 68% of the Canadian satellite operator Telesat. Telesat is planning a network of 298 low Earth orbit communications satellites that will offer very high bandwidth connections for businesses, mobile phone towers, ships, and planes. Telesat has a contract with Jeff Bezos' Blue Origin for launch and plans to launch their first satellites in early 2022. In the near future, they plan to start trading as Telesat rather than Loral and we hope this transition will attract more investor attention.

It's not a coincidence that all of a sudden there are multiple companies pursuing exciting ideas in Space. Two big trends, all-electric satellites and vastly lower launch costs, are enabling enterprising companies to experiment with new ideas.

While launching stuff into Space is a great story (as my Kerbel Space Simulator obsessed seven year old will tell you) we know that the story isn't everything. The hype around electric vehicles and streaming media in the aftermath of Tesla and Netflix/Roku's (+8.1%/+76% during the quarter) phenomenal business successes may be leading people to give too much credit to weaker companies capitalizing on these themes.

Batteries

In our margin accounts, we have shorted two companies that we suspect might be, as they say in Texas, all hat and no horse. In the fall, we made the (so far) terrible decision to short QuantumScape (-37.8% during the quarter, but +550% from where we shorted it!), a ten-year-old battery company that claimed to have solved their multitude of technical challenges almost as soon as the new CEO showed up. We interviewed ex-employees who said that as recently as two years ago, they were stuck on a number of super hard problems. We finally decided to short it after hearing from management that bringing the technology from test cells in a lab to large scale production was trivial. From talking to Tesla, Enphase and others who do primary research on battery chemistry over the years, we are convinced that the process of going from making "coin cells" in a lab to volume production of large format cells is as Elon Musk says "90% or perhaps 95% of the game with any battery innovation."

Entertainment

Another of our new shorts is Fubo TV (-21% between when we shorted it and the end of the quarter). We shorted the company in December after the stock ran up 600% to over 60\$ per share. The company offers a sports first linear TV (cable) package over the internet that competes with YouTube TV or Sling. They ended the year with 584k subscribers up 72% YoY. We love the service but don't see how they can make a business out of it. In Q4, Fubo collected 104mm in revenue from customers. They paid 90mm to content providers (ESPN, Viacom, etc) and another 10mm to Fastly (which we also own) for distribution. Unlike with Netflix, which pays once to make a show, Fubo's content costs are per subscriber and rise with each new subscriber they sign up. Management seems to agree with our concerns about the profitability of their business, saying that the profit will come from enabling sports betting on their service. We are skeptical. We think punters use their cell phones while they watch games and it makes a whole lot more sense to enter the bets on a phone than via a TV remote. In fact, this is our thesis with Penn Gaming (+18.8% during the quarter) which we bought after they purchased the mobile first content company BarStool Sports, merging its rabid mobile first sports fan base with betting licences in many states. We've done okay so far on Penn and Fubo, however

our short of Sinclair broadcasting group was 62% against us in the quarter. We shorted the company in October after Hulu stopped carrying their regional sports networks, but unfortunately before the company began talking up the potential to turn their regional sports networks into sports gambling hubs. Traditional TV and thus Sinclair's sports networks are declining at an accelerating pace; we aren't sure there will be many viewers left even if they do figure out gambling.

Looking forward, we're excited. It feels like the pace of innovation is increasing, and measured by the number of new innovative companies with great stories that we are hearing about every week, more of them are joining the public markets at an earlier stage. That many investors are still focused on index funds and short-term-oriented hedge funds has made it easier for us to get meetings with exciting new companies, learning about them sooner, and if we do our job well, investing earlier. However, any change in the market usually makes it more volatile, and therefore riskier. We might never have another year with performance as good as where we ended 2020, but we are optimistic, and we will continue to do our best!



Alex Derbes

P.S. We have had two very good years. Please consider your personal financial situation and don't hesitate to give us a call if you'd like to discuss taking some money out.

We have always reported a single performance statistic, summarizing a range of results. Many factors affect where your account landed in that range. Accounts that missed one or more top performing stocks, or had a larger position in a poorly performing stock, can land at the bottom of the range. The performance of new accounts, smaller accounts and accounts that had significant deposits or withdrawals during the period is particularly variable. Even among the remaining accounts, there is a wide range from the aggregate performance we report¹.

We derive aggregate performance by totaling the equities in all of the accounts under management and calculating performance (net of commissions or wrap fees) as if we managed one account. This methodology weights large accounts more heavily and is not representative of any particular account. Therefore, we provide the worst performing account² in the relevant period to give an indication of the potential range in investment performance. Please look at your account statement for changes in value from one period to the next³.

¹ All accounts, except for non-commission and non-fee paying accounts, are included in the calculation of aggregate performance. Past performance is not indicative of future results. Aggregate performance and the worst performing account are net of all fees, commission and expenses and includes the positive impact of reinvestment of dividends. At the end of Q4 2020, Alex Derbes managed 118 margin accounts, 10 cash accounts, and 60 retirement accounts.

²The worst performing account excludes accounts opened within the period, accounts with an equity of \$1,000 or less, accounts that transferred between GGHC money managers during the period, and uninvested accounts.

³ Non-retirement accounts pay a commission rate of 1.5% per equity trade. Retirement accounts pay an annualized wrap fee of 2.5% to 3% based on account size. See GGHC ADV for details.

	Q4 2020	Q4 2020	FY 2020	FY 2020
	aggregate	worst	aggregate	worst
Margin	40.0%	25.0%	186.5%	118.5%
Cash	33.3%	33.6%4	144.0%	118.0%
Retirement	35.1%	23.7%	139.0%	95.4%
S&P 500	12.1%		18.4%	
Nasdaq	15.7%		45.0%	

The companies discussed in this letter were selected because they are representative of our thinking. Since GGHC manages individual accounts, some of the companies discussed in the letter are not necessarily held in every account.

Please remember our goal is to build your wealth by aggressively investing your capital over the long term. This approach carries considerable risk and is not for everyone. It requires tremendous patience and commitment in the face of large swings, and has the possibility of failure. At the same time, success can only be measured on an absolute basis. We do not invest with any particular benchmark in mind. While we provide comparative performance of various widely-reported indices to give you a sense of the overall market environment, you should not expect our results to track any one of them. There are material differences between GGHC accounts and the indices shown, as volatility, investment objectives and types of securities differ.

The Dow Jones Industrial Average is a price-weighted average of 30 significant stocks. The S&P 500 is a market-capitalization weighted index containing 500 widely held companies. The NASDAQ Composite is a market-weighted index that measures all stocks listed on the NASDAQ Stock Market. The Russell 2000 is an index of the smallest 2,000 companies in the Russell 3000 Index, as ranked by total market capitalization. All index results shown are calculated on a total return basis with dividends reinvested. Index results do not reflect the deduction of any fees or expenses.

You can access the GGHC Privacy Policy and our Firm Brochure, Part 2A of Form ADV and our Form CRS on our website at www.gghc.com. This letter is intended for you, our client. If you would like to share it, please contact us and we will gladly provide a copy to the intended person.

⁴ Please note that aggregate account performance is across all accounts in the category, while worst account performance excludes accounts opened within the period, accounts with an equity of \$1,000 or less, accounts that transferred between GGHC money managers during the period, and uninvested accounts. **Due to this methodology, the worst performing account in Q42020 slightly exceeded the average account performance**.