

**Fourth Quarter 2018**

April 22, 2019

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. Also, smaller accounts pay a higher rate of commissions compared to larger accounts, which has an adverse impact on the performance of those smaller accounts¹. Even among the remaining accounts, there is a wide range from the aggregate performance we report.

We derive aggregate performance by totaling the equities in all of the accounts under management² 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 accounts. Therefore, we will now also provide the worst performing account in the relevant period to give an indication of the potential range in investment performance.

	Q4 2018 aggregate³	Q4 2018 worst⁴	FY 2018 aggregate	FY 2018 worst
Margin	-21.5%	-33.4%	15.8%	-8.7%
Cash	-17.8%	-19.8%	15.6%	4.7%
Retirement	-16.7%	-21.1%	11%	3.2%
S&P 500	-13.5%		-4.4%	
Nasdaq	-17.3%		-2.8%	

Please look at your account statement for changes in value from one period to the next. If you would like further clarification, please do not hesitate to give us a call.

¹ Commissions are charged per trade on a sliding scale with a maximum of 2% and decline gradually as the trade value increases. Retirement accounts are charged an annualized wrap fee with a maximum of 3% based on assets under management, with a decrease in the fee when the asset value reaches \$1,000,000.01. See GGHC ADV for details.

² Deposits and withdrawals within individual accounts, and accounts opened or closed during the period, are included in the calculation of aggregate performance.

³ Past performance is not indicative of future results. Aggregate performance and the worst performing account are net of all fees, commissions and expenses and includes the positive impact of reinvestment of dividends. At the end of Q4 2018, Alex Derbes, managed 62 margin accounts, 6 cash accounts, 20 retirement accounts.

⁴ When determining the worst performing account, we include closed accounts, but exclude accounts that were opened within the relevant period, accounts with an equity of less than \$1,000 and uninvested accounts.

Dear Client:

The fear of missing out on rising stock prices in the first three quarters of 2018 turned to other fears in Q4: fear of higher interest rates, fear of waning benefits from the tax cut, fear the trade wars and fear of an increasingly unpredictable US President. After seven quarters of rising stock prices, investors (us included) were perhaps complacent and the market was primed for a correction. The selling seemed to have been kicked off by the President's announcement on September 17th that he was actually serious about increasing the haphazard tariffs that he'd imposed on Chinese imports from 10% to 25%.

We have mixed feelings about his trade war. While we strongly agree with the President that it's unfair that China has retained the protectionist barriers that made sense when they were a developing country, we also believe that because the US is an even larger beneficiary of the current system of global trade than China, we should be careful what we agitate for and how we do it. Specifically, it's disturbing to hear the President talk about protecting relatively small industries like steel where the US is not, nor should it want to be, globally competitive, while he seems to seek an excuse to punish the technology industry where the US is indisputably the best in the world.

In November, I spent two weeks in China and Vietnam with my co-workers Lucy and Anne Marie. We had thirty meetings across five cities in fourteen days, and we met with everyone from startups to large Chinese internet companies. One theme that emerged from our trip was that the reasons the Chinese economy isn't doing well are complicated. While the trade war with the US hasn't helped, the larger issue seems to be structural. The last decade of Chinese growth has been driven by local governments borrowing to build stuff, and that these hotels, airports and bridges to nowhere just aren't generating enough economic return to cover the interest. Because the Communist Party tied promotions for local government officials to the economic growth of their region, local officials approved projects that now seem not prudent.

On our trip, we learned that in the last few years, local governments got the startup/disruption bug and started investing in startups. With this trend now a few years old, it's clear that many of these startups will never work out and the ones that are failing are adding to a wave of unemployment among educated office workers in eastern China. We heard stories of substantial layoffs at hot Chinese technology startups, and one employer in Shanghai told us that he had so many resumes from new college graduates that salaries were down 20% YoY and indications of consumer confidence like new car sales and apartment sales are down 15 - 20% YoY. While almost everyone we spoke with thinks that it will be okay because the government will initiate another debt-fueled stimulus like they did in 2008 and 2016, that seems like a risky bet. One thoughtful economist that we spoke with noted that while factory output in China is down significantly, the same factories are also struggling to find workers! Apparently

the Chinese startups that have succeeded, like Didi (the Uber of China), and Meituan which delivers food, are employing so many drivers and delivery people that they have taken up all of the slack labor. We wonder if the Chinese government is less likely to launch another round of stimulus than in previous cycles because the current downturn isn't affecting the blue collar labor market from which political unrest would likely originate.

After coming back from our trip we initiated a number of new positions. We shorted the Chinese car startup NIO. NIO is most easily described as the "Tesla of China," but it's different in some important ways. Realizing that selling luxury cars is about selling brand and lifestyle, NIO has tried to accelerate the process by opening a dozen NIO club rooms around China in the best locations in each city. The club house we visited in Shanghai is at the bottom of the staggeringly beautiful Shanghai Tower. The show rooms have fancy coffee bars whose aesthetic closely mimics the American coffee chain Blue Bottle, and lecture series for appropriately chosen motivational speakers, with a play area for the kids -- all the trappings that the aspirational affluent aspire to have. Compare this to Tesla, whose entire marketing department is Elon Musk's deeply authentic Twitter account.

While we love what they're trying to do, we shorted the company because the difference with Tesla in how they are building the brand isn't the only difference. Unlike Tesla, who took years to aggressively design a high-performance, low-cost car, NIO, in its rush to get its car to market, outsourced most of the design to Western suppliers like Bosch and Continental, and they're paying another car company to build it in their factory. Overall, we just aren't convinced that NIO can earn enough margin to cover their expensive branding exercise. Between our trip and March when they reported Q4 numbers, the stock went against us every day, and while it was back to where we shorted it by the time they reported Q4 numbers and gave Q1 guidance, ten days before that we were down 60% on our position. While they reported strong Q4 numbers, they also said that units for Q1 would be down a gut-wrenching 50% from Q4, that gross margins would be negative through most of 2019, and that they were shuttering their plans to expand their clubhouses to additional Chinese cities, while slower expansion of their sales and marketing efforts will help preserve cash, the lower volume is going to make it even more difficult to get to positive gross margin.

Another startup we met with is Luckin Coffee. While Starbucks is designed to be a "third place" where people spend time outside of the home and office, Luckin sells fancy coffee in more ascetic shops throughout China. At the end of 2018 they had 1,700 stores, and are on track to double that in 2019 and have more stores in China than Starbucks. Luckin's goal is to use technology to deliver a better quality product than Starbucks at a lower effective price and high retained gross margins. So far, it looks like they might just do it. All ordering and payment at Luckin is on mobile, and when they enter a new city they start with delivery, promising your beverage in thirty minutes or less. Then, as they get data on where their customers live, they open small shops in the lobbies of good buildings, so you can order your coffee in advance. While their listed prices are the same as Starbucks because you can't signal value and sell at a

discount, they use their lower costs to reward customers with a bevy of coupons that also encourage customers to share the Luckin experience with their friends.

We look forward to Luckin's IPO later this year and during the quarter hosted the Chairman and founder at our office. In the meantime, we were so impressed with Luckin that we shorted Starbucks. All of Starbucks' growth in the last few years has come from China, and with a disruptive company like Luckin who will likely have more locations than Starbucks by year end, we wonder if Starbucks will have a more difficult time going forward. While we've been focused on Starbucks in China, our colleague Cedric has convinced us that Starbucks US business might come under pressure because the founder is running for President.

Losers weren't hard to find in Q4. Four fifths of our long positions declined among what seemed like indiscriminate selling. One of the more significant losers was ROKU, which declined 42% during the quarter, as investors were worried about Amazon's entry into the TV operating system world and a confusing re-organization at Roku's top TV partner, the Chinese company TCL. We had an advantage in understanding the issues at TCL since we had visited with TCL at their Shenzhen headquarters on our China trip a few weeks before, and feeling positive that the issues at TCL were misunderstood, we bought more.

As we write this letter towards the end of Q1, the first quarter so far has been nearly the opposite of the previous one, with stock prices going up almost as quickly as they went down in Q4. We're as confused by this as we were by the price declines in Q4. The issues that investors were worried about in Q4 that caused the selling remain or in some cases are more significant than they were last fall. If all this volatility has you feeling queasy about the size of your account, please reach out to discuss your financial situation.

Sincerely,

Thanks for your support,

A handwritten signature in dark ink, appearing to read 'Acl' followed by a stylized flourish or arrow pointing to the right.

Alex Derbes

The companies discussed in this letter were selected because they are representative of our investment thesis. 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 don't 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 S&P 500 Index is a market-capitalization weighted index containing the 500 most widely held companies (400 industrial, 20 transportation, 40 utility and 40 financial companies) chosen with respect to market size, liquidity, and industry. The NASDAQ Composite Index is unmanaged and measures all NASDAQ domestic and non-U.S. based common stocks listed on the NASDAQ Stock Market. The index is market-weighted. The 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.

Please notify us immediately of any changes in your financial or personal circumstances, so that we may consider them in relation to the size of your account relative to your other assets.

You can access the GGHC Privacy Policy and our Firm Brochure, Part 2A of Form ADV (required by the SEC that describes our firm at length) 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 be glad to provide a copy to the intended person.