

January 2022

Dear Fellow Investors,

The Fund¹ returned approximately -9% net in the fourth quarter, bringing the full-year net return to approximately 3%. Individual returns will vary by class and date of investment, so please check your statements. Our 2021 performance diverged from that of the larger indices in part because we owned no stocks in the S&P 500. Greenhaven's orientation towards smaller companies has benefited us sometimes (2020) and was a hinderance in others (2021). Our Partnership is not unique in diverging from the larger indices; for example, Warren Buffett compounded at 22% from 1968 to 2012 but underperformed the S&P 500 in one out of every three years during that run.

The fourth quarter – particularly in November and December – was a period in which growth became a four-letter word. The logic is that inflation is here and interest rates are going up, therefore the multiples that investors should pay for high-growth companies are coming down. When multiples come down, share price and investment returns follow suit. That said, multiples often adjust far more quickly and violently than the underlying fundamentals of a company.

We did not own the “most expensive” highest growth/highest multiple companies, such as database developer Snowflake (SNOW), which traded at more than 100X revenues (not profits) before the recent pullback. However, our portfolio had a bias towards companies with long runways for growth that will not require additional cash to reach their potential. This was a “negative factor” in Q4.

Why own any growth at all? It comes down to math. If a company can sustain 30% growth over a five-year period with a steady multiple, we nearly triple our money. If the multiple expands... even better. But even if the multiple were cut in half on day one, the investment would still deliver an 85% return over those five years. In another example, if a company can sustain 20% growth over a five-year period, we earn almost 150%. If the multiple were lowered by 25%, we still earn about 85% for the period. Conversely, on a no-growth or shrinking company for a 3% annual dividend yield, a 25% multiple contraction would cause us to lose money over the same five-year period. If we can find the right combination of reasonable price and the ability to sustain growth, we can do quite well **over time**, even with multiple compression.

The “**over time**” part of the last sentence is important. For the last four years, my work bag has held a bound copy of the investor letters for Nomad, a simultaneously storied and under-the-radar investment partnership run by Nick Sleep and Qais Zakaria from 2001-2013. These letters were gifted to me in a shroud of secrecy. I was to tell nobody I had them and show nobody their contents, just study them. About a year ago, the letters were published online by Nick Sleep's charitable foundation ([link](#)), so I was released from my vow of silence. I have never met Nick Sleep, but from everything I can tell, he managed their partnership in the right way, attracting philosophically-aligned limited partners and generating very attractive risk-adjusted returns. I occasionally daydream that investing would be so easy if I had had those letters in real time. With the benefit of 20/20 hindsight, we know the returns are excellent. Buy, hold, and ring the register. It would have been so easy just to copy Nomad... or would it have been?

One of Nomad's largest investments was Costco (COST), whose share price is up more than 11X from their thesis write-up published in Value Investor Insight ([link](#)) back in 2005. If you had reinvested your \$50+ in dividends along the way,

¹ Greenhaven Road Capital Fund 1, LP, Greenhaven Road Capital Fund 1 Offshore, Ltd., and Greenhaven Road Capital Fund 2, LP are referred to herein as the “Fund” or the “Partnership”

you would have done even better. But here is the rub: if you bought at the date of publication, you would have lost money at the end of the first four years. It was not a straight line up. The returns came in chunks, **over time**.

Several of our underlying companies had a very strong 2021 operationally, though that strength didn't show up in the share price. For example, PAR Technology (PAR), a Top 5 holding both entering and exiting the year, saw its annualized recurring revenue (ARR) per share *double* in 2021 while the share price declined by more than 15%. It is unlikely that ARR per share doubles again in 2022, but there are a number of reasons to believe that sustained 30%+ growth is likely (further discussion below). If the growth does occur, **over time**, PAR should deliver very attractive returns. While the PAR share price had a difficult 2021, the underlying business got much stronger.

TOP 5 Holdings

Four of the top five holdings have been written about extensively in past letters, so in this letter, I will highlight why I believe that their growth may persist. While I will focus on revenue growth, these are companies for which profit growth should outpace revenue growth as they benefit from operating leverage. These are also businesses with excellent reinvestment opportunities, so it is rational for management to forgo short-term profits to instead reinvest in the business.

Digital Turbine (APPS) – In 2021, digital advertising company Digital Turbine completed 3 acquisitions that allow them to control the mobile advertising process from end to end. The company enjoys technology advantages by being pre-installed on devices, as well as first-party data advantages from their carrier partnerships. At their most recent analyst day, Digital Turbine laid out a path to quadrupling revenues and growing EBITDA by 10X in the next three to five years. Given today's starting multiple of less than 8X this year's expected gross profits, anything approximating achieving their "plan" should yield very attractive returns **over time**.

Reasons for optimism include the fact that their software is currently installed on less than 20% of mobile phones, providing a notable growth opportunity for existing technology without additional capital spending. The company also has opportunities to increase the number of carriers and phone manufacturers that they work with, as well as the number of services each carrier purchases.

Digital Turbine also has a massive opportunity with their SingleTap technology, which dramatically improves the likelihood that an app is installed when a user clicks on its SingleTap-enabled ad. SingleTap has grown to a \$100M+ business with just 15 customers. At their analyst day, Digital Turbine's Chief Revenue Officer charted the path to "...really accelerate this into a \$1 billion-plus business over the next few years." In his words, "[t]he way we see this is a very relatively moderate growth from 15 advertisers to 150, which, by the way, represents only a subset of our total advertiser customers today at Digital Turbine." The current run rate revenues for the entire company are \$1.2B per year, so growing SingleTap to \$1B in revenue itself would nearly double company revenue overall. This doubling only requires blocking and tackling on an existing product with a very high value proposition to a subset of customers; it does not require a moonshot invention. The SingleTap technology could also be licensed to other platforms such as Snap and Meta (Facebook). At an investor conference in December, management tried to highlight their announcement that Facebook was live-testing SingleTap, which could be a very big deal since Facebook is the second largest distributor of Android apps (Digital Turbine's priority). The market yawned, and the shares ended down.

The market was also indifferent to the positive announcement of two new partnerships with Asian hardware manufacturers OPPO and Vivo. While these names are not familiar to most Western investors, they do represent 20% of the worldwide

smart phone market ([link](#) – note: you will need to create a free Statista account to view the table). They are mostly China-focused, so monetization will be lower, but it is another step forward in terms of growing the footprint of software on phones.

Digital Turbine has a history of aggressively growing revenue and earnings and has secular tailwinds, technical advantages, and data advantages. Shares currently trade for less than 8X this year's gross profit. Yes, inflation may raise its head, interest rates may climb up, and multiples may compress, but just as the sun rises every day, people want their cell phones and advertisers want to reach them. I believe that the number of devices Digital Turbine software will be installed on will be higher, price per app install will be higher, revenue will be higher, earnings will be higher, and, ultimately, the share price will be higher. **Over time**, I expect that the multiple finishes compressing and the health of the company will be rewarded.

PAR Technology (PAR) – In previous letters, I have written about the importance of the people at PAR, and this investment being a “jockey bet.” Fortunately, it is becoming a jockeys bet as CEO Savneet Singh has continued to attract talent, including a head of M&A from 3G, a CTO that used to run Salesforce's marketing cloud software, and long-time Panera CEO Ron Shaich, who has made a sizable personal investment in PAR. The combination of talent and secular tailwinds set the company up well for success. I believe that the company should be able to grow software revenues substantially even if they do not sign up another large chain (I suspect they will sign up several). There is significant embedded growth to be realized from revenue contracted but not yet live for their loyalty division (Punchh), cross-selling, and penetrating franchise locations that have not yet adopted the Brink POS system.

PAR has substantial cross-selling opportunities. As with Digital Turbine, there is a very long runway for growth that does not require acquisitions or significant capital expenditures. The company has three primary products for enterprise restaurants – a POS system, a back-office management system, and a loyalty system – which should work best when used in combination rather than individually. The Brink POS system sells for roughly \$2,000 per year, back office for \$1,500 per year, and loyalty for \$1,000 per year. Because these divisions were brought together through acquisitions, there is limited overlap in their customer bases so far. As existing products are sold to additional existing customers, growth will ensue. The company is in the process of launching a fourth product, payments, that will add another \$2,000 per year of very high margin revenue per location that adopts it. In aggregate, if a customer uses all of the modules (POS, back office, loyalty, and payments), the revenue per location will exceed \$6,500, more than 3X what was possible three years ago.

In addition to cross-selling, PAR also has the opportunity to raise prices, something they just did with their Brink POS system for the first time in several years. Brink POS benefits from low churn (there is not a leaky bottom of the proverbial bucket) and a favorable competitive landscape where the enterprise products they compete against are buried within large companies, particularly NCR and Oracle, for whom restaurant POS systems are not their primary business or focus. Current customers do have alternatives, but small price increases are most likely far more palatable than re-arranging a restaurant's entire operations to leave the platform.

PAR will not double recurring revenue per share again in 2022, but there is a lot of low-hanging fruit that will provide an attractive runway for growth independent of new customers. There is certainly reason to believe they will continue signing up new customers, particularly for the Brink POS system, as technology becomes increasingly important for restaurants to survive and compete in a labor-constrained environment.

PAR has a current valuation of approximately \$1B. If you back out the profitable hardware business and the profitable defense business, which will be sold, the shares trade for 6X my estimate of 2022 year-ending recurring revenue, which



should grow in excess of 30%. Again, **over time**, the multiple should finish compressing and the health of the company will be rewarded.

KKR (KKR) – The path forward for KKR is well-defined. As a class, alternative assets will likely continue to grow at a double-digit rate as investors are attracted to the relative returns in a low interest rate world. The largest players should continue to attract a disproportionate share of AUM as they have the best fundraising platforms and carry the lowest career risk. Nobody gets fired for hiring KKR.

In the case of KKR, growth will likely be augmented by an expanding base of retail investors for whom KKR products have not been available historically. To seize this opportunity, the firm had quadrupled the headcount by focused on retail investors. As co-CEO Scott Nuttall noted, “We raised about \$2 billion in the first 9 months of [2021] as these products have been launched. Candidly, we’re ahead of our expectations because there’s been a significant amount of interest, and we have been growing these relationships. And a lot of the team that we’ve hired is just showing up in the last 6 months, and there’s going to be many more here next year.”

KKR will also benefit from growth in products developed for insurance companies, in part aided by the closing of their recent acquisition of Global Atlantic. Co-CEO Nutall recently suggested that the “asset-based finance opportunity” will easily exceed \$100B and should get closer to \$200B. Given that fee-paying AUM is currently \$350B, retail and insurance related products should move the needle even with lower fees.

Will the returns for private equity investors decline over time with the growth in AUM and fund sizes? Most likely. However, we are not investing in KKR XII, which recently closed with \$18.5B in commitments. Instead, we are investing in the investment manager of this mammoth fund (and others) that will earn management fees on the capital and has the opportunity for gargantuan incentive fees. We can argue about how fast AUM and earnings will grow, but until interest rates are multiples higher than today, they are selling water to allocators in a returns desert. The potential for KKR is impressive and no capital needs to be raised to seize the opportunity.

Elastic (ESTC) – Elastic is the market leader in search and has a strong product line-up in security. Very few companies are able to consistently generate 30% more revenue from their existing customers than they did the year before. Elastic is one of them. Their Net Revenue Retention (NRR) has been hovering around 130% or higher for as long as it has been disclosed. The company has the benefit of operating in growing industries (data and security) and continues to both add new products and transition free (open source) users into paid users, particularly for their cloud-hosted business, which grew over 80% last quarter. Elastic recently announced that their CEO would be transitioning back to CTO, which spooked investors, but they also announced that they had exceeded guidance and will generate cash from operations this year. This is a company that has grown to \$1B in sales in less than a decade and still has all of the capital that it raised on its balance sheet. Shares currently trade for less than 9X this year’s revenues, which should grow over 30% as the company becomes operating cash flow positive.

Teledoc Health (TDOC) – See new holdings section

SHORT POSITIONS

The Fund remained short major indices, an innovation-focused ETF, a former SPAC, and a recent electric car IPO.



NEW HOLDINGS

In past letters, I have written about the disadvantages that come from being subscale. The larger incumbents have more resources to invest in product and a larger customer base to cross-sell new products into. Both of the new investments we made in the quarter are in companies that have the competitive benefits of being a scaled provider.

Teledoc Health (TDOC) – I agree with the common sentiment that we have seen the end of the tailwinds many companies enjoyed due to the massive customer behavior changes necessitated by staying home. Shares of “Covid beneficiaries” have sold off dramatically as a result. The share price of Teledoc Health (TDOC) is down $\geq 75\%$ and instead of selling for 20X revenues, they are trading for less than 5X revenues.

What do we get at this reduced price? For starters, unlike many other “Covid beneficiaries,” Teledoc still expects to grow 25-30% per year for the next three years, regardless of progress to a more normalized environment. Is this plausible? For starters, management pre-announced revenues and reaffirmed their projections at the JPMorgan healthcare conference after their big selling season was complete, so there are indications that the company continues to believe. More importantly, the path to continued growth is primarily from selling additional products to existing customers. Over the past ten years, Teledoc has evolved from being a Zoom solution for doctors to a much broader swath of comprehensive service offerings, including the delivery of mental healthcare, the monitoring of chronic conditions, lab testing, and specialist referrals.

Teledoc is a telehealth provider that benefits from a large number of offerings as well as a broad geographic footprint in the U.S. and internationally. This scale enables it to provide a comprehensive solution for a health plan or a company making selections for large groups of patients. The benefits of scale are also realized on the development/product front, where there is a large base of 76M end customers to spread investments across. The net result of their product breadth and technology investments is that the company can provide “whole person care” on a purpose-built technology platform.

I understand that medicine has had serious challenges integrating technologies. I recently had a routine diagnostic assessment, and when I asked how the results would be recorded in my electronic record so my primary care physician could see it, I was told that the results would be scanned, attached to an email, and sent to my doctor. After fifteen years of talk about electronic medical records and getting a picture of the whole patient, they are still using what is effectively a 2005 solution. Given the industry’s challenges with technology, on one level, it is surprising that Teledoc’s net promoter scores (a customer loyalty metric) are so high. That said, Teledoc provides access and convenience, and the legacy model of going to a doctor’s office and sitting in a waiting room is much worse in the eyes of most. My daughter would give her telemedicine visit a 10 out of 10 – she saw a dermatologist while waiting in line for a ride at Disney. For mental health patients, technology can allow access to providers that would not be possible in the physical world. Covid had the effect of pulling forward adoption, and Teledoc’s addressable market is well above \$100B and growing.

If Teledoc can achieve their stated growth ambitions, it will be a result of cross-selling, which has been successful for them historically. For example, more than 40% of telehealth users today have accessed multiple products, compared to just 10% in 2017. If every Teledoc patient used every product, revenue would grow more than 25X without adding a single new customer. Of course, every product is not right for every person, so that is not realistic, but a path of incrementally cross-selling offerings that have broad applicability (e.g. mental health services) is a non-herculean path to sustained growth.

Teledoc is a technology-enabled platform that users enjoy (or at least prefer relative to other options), provides greater convenience at lower prices and, in many cases, can actually lead to better outcomes given its greater accessibility, among

other factors. Teledoc should be a beneficiary of an increasing role of technology in the care of mental health and chronic health issues. In one of the largest and least efficient or effective sectors of our economy, the company is generating cash and has the benefits of scale in an area where that really matters. TDOC is currently valued at a touch over \$10B or less than 5X this year's revenue and less than 4X next year's revenue.

Cellebrite (CLBT) is a recent SPAC/carve-out from a Japanese company, Sun Corporation. The sponsor of the SPAC is Adam Clammer, who spent 18 years in growth investing at KKR. The company is in the Digital Intelligence "DI" space, and their customers are primarily government agencies and law enforcement (state and local) who use their products to extract and manage data from cell phones. From a quantitative perspective, Cellebrite checks a lot of boxes. They have a broad base of customers with an installed base of over 5,000 public safety and 1,700 enterprise customers. The company is growing revenue at 25%, but that is understated as users shift from licenses to SAAS. Net revenue retention is over 140% and recurring revenue is growing over 30% per year. As both the frequency and amount of data collection rises, the company benefits from secular tailwinds and their solutions have a large ROI for end customers as they allow technical personnel, which are the constrained resource, to be more efficient. Cellebrite has 80% gross margins and is seizing on the opportunity to sell more seats and more modules to existing customers, estimating that they are 20% penetrated on their current base. Shares are currently trading for less than 5X 2022 revenues, which is a $\geq 50\%$ discount to peers in the DI space. I like our chances for continued growth and even multiple expansion **over time**.

Outlook

We are definitely in a time where volatility is rearing its head, and it may not go away quickly. In my opinion, the Federal Reserve is going to keep raising rates until they are convinced that inflation is under control or we are in a recession – and neither path is good for the overall markets.

To start the year, the broad indices are down low double digits and our portfolio is down more than the markets. Historically, in market drawdowns, we have suffered with the market on the way down and outperformed when it recovers. In 2020, after the markets recovered from the initial Covid shock, I wrote:

“Returning to the lessons from Q1. I should have specifically encouraged existing LPs to add capital when we were down significantly and made it attractive to do so. I am blessed with a wonderful group of limited partners, several of whom added capital at the depths, but not because they were encouraged by me. It takes guts to ask somebody for more capital when their account is down 30%+. It just does. Anger is a reasonable reaction to such a request, as it violates social norms. I did not have the guts. Unfortunately, given my personality, it is unlikely I will pound the table vocally next time either. So now, during calmer times, I am making a change to our partnership that will be automated and not require me to muster courage when our performance is at its weakest but our prospects maybe their brightest. Going forward, any time our partnership is down 25% or more from the ‘high water mark,’ any new capital invested by existing LPs will receive a 25% discount on all fees for the three-year lock-up period.”

I do hope it is years before this idea is implemented, but it may not be. Markets tend to “overshoot” to both the upside and the downside, and we no longer have a President who views the stock market as his scorecard, pulling every trick out of the bag to support it. It is worth summarizing the mechanics to provide clarity on the general wording above. For LPs, if the Fund ends a quarter more than 25% below your prior year-end statement balance, any new capital you add will receive the



reduced fee rates over the subsequent three years. We will notify you via email should this scenario arise, and the window of opportunity will be open for a minimum of two months, so you will have some time to make your decision and add to your investment if desired.

I believe that there will be two sweet spots for our investments in the short term. The first opportunity is companies with the following attributes: very realistic chances to grow 20%+ for years to come, trading at attractive multiples, high margins, little to no debt, secular tailwinds, and the ability to reinvest into their business (e.g. PAR Technology (PAR), Digital Turbine (APPS), and Elastic (ESTC)). The second opportunity is companies that are selling for deep value that have not been available (at least not at prices we would pay) over the last several years. We are currently buying a company for less than 1X cash flow (it is cyclical). Will either of these groups of companies escape near-term gyrations? Unlikely. Will either of these groups compound at high rates **over time**? I like our chances.

It is worth pointing out that our current challenge is that our economy is *too* strong, there is *too much* demand, and prices are rising. In my opinion, this is preferable to 2008 when the assets underlying our highly leveraged financial institutions were crumbling, the financial viability of the institutions were in question, and – because of the inter-related nature of the institutions – one failure could cause other failures. Our current situation is also preferable to 2020 when we were in uncharted waters with the more widespread onset of the pandemic. As consumers were shut into their houses, industries such as airlines saw demand fall by 95% and restaurants were forced to close. These and similar industries were only saved by the government printing money. We did not know the timing or effectiveness of a vaccine. Today’s situation is quite different, though you might not know it looking at the short-term charts of many companies. Yes, interest rates are almost definitely rising, but that does not necessitate share price declines. In fact, the data is quite mixed with equity markets frequently rising in years of rate hikes.

I end every letter saying, “as volatility arises, I will attempt to take advantage of the opportunities it creates. We will continue to invest with a long-time horizon, and we will continue to invest like it is our own money – because it is. Thank you for the opportunity to grow your family capital alongside mine....” We are in a period of volatility. There are no guarantees, but I will do my best to make sure that two years from now we will be able to look back on this period as one of opportunity.

Sincerely,

Scott Miller

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