August 1, 2019

Dear Fellow Investors,

Greenhaven's Fund returned approximately -4% in the second quarter, bringing the YTD gains to approximately +12.5%. Investors, please check your statements as individual returns will vary by class and date of investment. In brief, this was a quarter where our returns zigged when the market zagged. As you know, we are not going to have the chance to beat the market over the long term by *being* the market. To be successful, I believe we must invest in a concentrated portfolio that includes off-the-beaten-path companies and accept some short-term volatility from time to time. A divergence from the indices is not a surprise, as we are not imitating them. Our current portfolio consists of 14 companies that are greater than 2% positions, only one of which is in the S&P 500 and half of which are outside of the Russell 2000. Further, by my estimate, more than one-third of our portfolio companies do not have any "real" analyst coverage.

Nobody is making me buy smaller, off-the-beaten-path companies, but I have. Remember, I have the majority of my liquid net worth invested in the fund, right alongside your capital. Why are we playing on the fringes? The simple answer is that this is where I currently see potential to earn the best risk-adjusted returns. In the market at large, recent returns have been driven primarily by multiple expansion within certain sectors such as large, defensive, low-volatility companies and very high growth SAAS (software as a service) companies. Analysts are twisting themselves into pretzels to justify companies selling at 15X, 20X or even 30X sales. One interesting example is Lightspeed (TSX:LSPD), a Canadian point-of-sale system that competes with one of our holdings, PAR Technology (PAR). In 2018, Lightspeed's revenue grew 36% to $70M, or a bit more than $90M Canadian dollars (CAD). The company went public a few months later in March. What would be a generous valuation for this promising company? Would it surprise you to learn that, post-IPO, the company was worth in excess of $1.5B CAD? Would it surprise you to learn that Lightspeed has nearly doubled in value in the last five months since the IPO? PAR Technologies has not been the beneficiary of this level of multiple expansion. Yet, given PAR's robust sales pipeline, new payments business, defense business that they can sell off to fund growth, and complementary hardware business, I would rather own PAR than LSPD trading at 25X+ sales. Currently, Lightspeed's far "cleaner" growth story is the flavor of the day. Time will tell which is the better investment.

When I go through our portfolio, I see a group of companies that have the potential to double and triple in value. Of course, I can be wrong. Mispricings can persist for very long periods of time and often become more pronounced in the case of a large market selloff. That said, I don't want to confuse "not working in the short term" with "cannot work." I think we have significant "juice" in the portfolio and are well-positioned for the future.

## TOP 5 HOLDINGS

**KKR & Co. (KKR)**: Our largest position, asset manager KKR, benefits from secular tailwinds that have been pushing assets into the largest private equity firms. KKR has grown AUM at 18% per year since 2005. Given the anemic rate environment and volatility in equity markets, it is unlikely that pension funds and others that need a path to 8%+ returns are going to reduce their allocations to private equity any time soon. All indications are that AUM will continue to grow, which will provide further tailwinds to management and incentive fees.

Excluding the balance sheet investments, shares are trading at approximately 6X earnings. This in itself is an inexpensive valuation, but fortunately for us, the company is likely underearning in three ways. First, there is $60B in capital committed but not yet invested (dry powder) that is not yet earning fees. Of course, some capital will roll off with distributions to LPs, but overall AUM and management fees should increase over the intermediate term. Second, the firm has been launching new strategies that are not yet benefiting from scale or operating leverage. The economics of a private equity fund are such that losses are generated during the fundraising portion of a fund's life cycle, and profits are small during the initial investment phases (pre-incentive fees). However, the economics get materially better when a second and third larger fund are layered on top of the initial fund and fees begin to be earned concurrently on multiple funds in the same strategy. Eighteen of KKR's 22 strategies are less than 10 years old. To give a sense of how narrow the base KKR has been earning from, in the past 12 months, 84% of the realized incentive fees came from 28% of the AUM.

Finally, the company states "distributable earnings," the industry norm for reporting and a conservative way to reflect the earnings available to the owners of the business (us). This is effectively management fees + realized incentive fees + realized investment gains (or losses), effectively stripping out accrued carry and unrealized gains (or losses). KKR is realizing gains through distributable earnings more slowly than they are accruing them. For example, 2017 distributable earnings amounted to approximately 6% of the value of the balance sheet investments. Historically, KKR funds have posted a return in the mid-teens. With $10.7B or $13 per share in investments held on the balance sheet and invested in KKR funds, the difference between realized and accrued can be very material, effectively understating revenue by hundreds of millions of dollars. To be clear, reporting distributable earnings is more conservative and removes the volatility of paper gains and losses, but it also defers likely future gains by accounting for them on the balance sheet rather than the income statement until they are realized.

**Digital Turbine (APPS)** – Discussed at length in the appendix of our last quarterly letter (linked here), our Digital Turbine thesis remains the same. Digital Turbine serves as a neutral third party that works with wireless carriers to pre-install apps on new cell phones, then sells the "slots" to app-driven companies such as Uber, Amazon, and Netflix. The company is in the early stages of a relationship with Samsung, the world's largest cell phone manufacturer, to enable Digital Turbine to monetize in geographies where they do not yet have wireless carrier deals in place. Over time, I expect the number of devices as well as the revenue per device to increase materially. Both of these earnings drivers could go up 50%, and then if one layers in multiple expansion, share price can still appreciate significantly from here.

**PAR Technology (PAR)** – Also discussed at length in the last letter, Point of Sale (POS) technology provider PAR is in the very early stages of a potential transformation. It is easy to distribute press releases and hold investor conferences portending a bright future, but actual business building takes time. In Q3, the company will begin the rollout of a payments solution that has the potential to bring incremental revenue from existing and future software customers. Many POS software providers make more on payments than on the actual software. PAR may never reach this end-state since many of their larger customers may stay with their current providers, but a viable payments offering will be a major step forward.

PAR primarily sells its system, Brink, to larger restaurant chains at the corporate level and was installed in just under 8,000 locations as of the end of Q1. However, including franchisees, current customers such as Dairy Queen

have more than 30,000 additional aggregate locations where PAR is approved and Brink could be installed. Given this captive pool of franchisees as well as a pipeline of new restaurant chains, there is a very plausible path to 20,000 locations at the end of next year. This expansion, coupled with likely rising prices and a credit card payment processing offering, means the economics of PAR may look very different in the not too distant future. There is of course execution risk and some optimism built into the share price, but if management comes even close to the potential, this too falls into our "it could double" bucket.

**SharpSpring (SHSP)** – discussed later in this letter.

**ETSY (ETSY) –** Etsy is the most expensive company that we own on a price-to-sales basis. It also one of the highest quality and most resilient as a vibrant two sided marketplace. Management is making several operational improvements that have grown revenues and improved margins. With price increases, they are investing in growing the base of buyers, improving the search results shoppers receive, and enhancing the tools available for sellers. Etsy has announced their first significant acquisition, and we believe this boutique Amazon alternative has a long runway for growth with no additional capital requirements.

## SHORT POSITIONS

The fund has a very long bias and remains short ETFs targeted at short-term traders. We are also short two ETFs that are proxies for major indices, an auto manufacturer with a credibility problem, and a wildly valued consumer goods company where there appears to be a complete disconnect between the multiple (high) and the growth rate (meh). We are also short a company where we believe the best explanation for the valuation is "ticker confusion" with which many share purchasers are literally mistaking the ticker for that of another company. During the quarter, we also initiated and exited a short on a food delivery platform. Given today's often stretched valuations, it would not surprise me if we added more short positions over the coming quarters.

## CHANGE HAPPENS

This past quarter, three factoids particularly captured my attention for different reasons. The first arrived from Twitter. In 1930, Tulsa, Oklahoma had the busiest airport in the world, with more passengers than London, Berlin, and Paris. This air passenger traffic was driven in part by an oil boom (external factor) and Tulsa's central U.S. location, which was critical for refueling planes. The location advantage disappeared over time as technology improved and planes could fly further without refueling. This is a helpful reminder that the early days of an industry may look very different from a more mature industry, and improved technology can wipe out "moats."

A second factoid came from Fortune magazine. In 1969, Sears' sales made up 1% of the U.S. economy and half of the nation's households had a Sears credit card. Today, Sears is bankrupt. (Fortune | Sears' Seven Decades of Self-Destruction) Moats erode, leadership changes, and operating environments/competitive landscapes evolve.

The third factoid came from a family friend at my niece's graduation. He was recalling his freshman year at Boston's Northeastern University in during a time of acute civil unrest and Vietnam War protests. That spring of 1970, the

army reserve killed four student protesters at Kent State University in Ohio. Northeastern's school administration was so concerned about the anger and unrest in their community hundreds of miles away that they cancelled the remainder of the school year – including finals – and all students were given passing grades. Our family friend recounted the drive home with his father, who was in shock. Relatively speaking, we are in a more stable and peaceful period, but it will not last forever, especially given the intensity of today's social and political tensions.

Investor Mohnish Pabrai gave a recent talk where he eloquently laid out how not all great companies are great investments and how not all great investments are great companies. (YouTube | Pabrai Lecture and Q&A with Peking University) In an investment landscape where "quality" is commanding a very large premium and massive multiples, are these great companies going to be great investments? My biggest concern is multiple compression. When we have a modern-day equivalent of the Vietnam War dividing the country and a flash point like Kent State, will these multiples really hold?

Since the last letter, we have exited several larger and/or long-time holdings, including Box, Inc. (BOX) and Interactive Brokers (IBKR). We also bought and sold our starter position in Roku (ROKU) this quarter after shares traded up from 6X revenue to 10X revenue within a month. I elected to just take the profit, though shares have appreciated another 15% since. These portfolio changes may look foolish through the lens of time and with the benefit of hindsight, but the goal is to get a more concentrated portfolio with less exposure to the most stretched multiples. One of our advantages is having a long investment time horizon that is not myopically focused on quarterly earnings and consensus estimates, but this is a reminder that our holding period for all investments is not forever… times change.

**SHARPSPRING BOARD INVOLVEMENT**

SharpSpring (SHSP) is a top five position for the fund, and like any of my three daughters on a given day, it is straddling the fine line between glorious and headache. This past quarter, we significantly increased our holding as a large shareholder exited their position. More on that later.

This summer, shares of SharpSpring have declined substantially from their peak. While our initial purchases are still up 2X, they were up more than 4X at one point. The decline in share price was likely caused by a number of factors, including concerns about a slowing growth rate (24% year over year) and the company's decision to convert debt to equity. If the product continues to evolve and SharpSpring can maintain a lifetime value/customer acquisition cost above 5, this sell off will likely be a blip on the way to a bright future. A recent sell side research initiation report had SharpSpring trading at less than 4X forward revenue while their peer group was trading above 12X. There are some rational concerns in the marketplace that help account for some or all of that discount, but I believe there is also the opportunity for significant revenue growth, margin expansion, and multiple expansion given the product quality and end market growth.

SharpSpring has two significant negatives in my opinion. The first is that the company remains dependent on the capital markets to grow at high rates. In Q1, company revenues grew by 24%, cash flow from operations consumed $2.4M, and the company had a cash balance of $17.7M. Simple math says that they will either have to raise more

capital or reduce their future investments in product and sales & marketing. This is not unique for a growth company, but choices will need to be made on investments in growth and the capital to fund them.

The second issue is low insider ownership. Their core SharpSpring product is the result of an acquisition. CEO Rick Carlson, who founded the acquired company, currently owns about $5M worth of stock and has options for a similar amount. He definitely cares about the common shares and has been shareholder-friendly. The newly-hired CFO owns 100,000 options that are out of the money. SharpSpring's Board consists of the CEO and four other members who were all brought on board for distinct and valid reasons. However, three members own very little stock, and the fourth – who was a large shareholder through convertible debt – will presumably exit the Board soon as he has sold the investment for a substantial profit.

One of my worst investments has been in Ashford Inc. (AINC), where I gravely miscalculated the damage that could be done to the common shareholders when not well represented on the board. To be clear, SharpSpring is not Ashford, but once bitten, twice shy, I reached out to the largest shareholder in SharpSpring to point out that should the remaining stock-owning Board member exit, common shareholders would not be well represented going forward. I suggested that one of "their people" go onto the SharpSpring board to represent their fellow shareholders. Unfortunately, despite this investor being the largest SHSP shareholder, the stock is a sub-2% position for their fund. A call to another large shareholder elicited a similar polite decline. Running out of top professional shareholders, we effectively have three choices. The first is to just trust the current board. The second is to sell our shares. The third is to try to proactively address the situation by offering to fill the soon to be vacated board seat.

I am very protective of my time. Many of the investors I most respect pride themselves on open schedules that allow for reading and learning and listening. The simple heuristic is that meetings are bad, but I have come to believe that being involved on the board of SharpSpring could be very beneficial. First, I believe that it can lead to better returns for our fund by giving us a seat at this company's capital allocation table. SharpSpring has to make critical decisions among growth, capital preservation, and capital raising. The answers are not obvious. I would like a role in helping to flesh out those decisions and communicating them to shareholders. In addition, there have been more than a dozen acquisitions of marketing technology companies including Adobe's acquisition of SharpSpring direct competitor Marketo at 12X revenue. A similar multiple would imply well in excess of 200% return for current SHSP shareholders. I believe that SharpSpring has an attractive opportunity in front of it, and not selling may also be a very smart decision. I think our partnership would benefit if we had voice at the table.

Finally joining the board of SharpSpring would be an opportunity to learn. Rick Carlson and his team are smart operators facing fierce competition. They are the kind of people I want to back. Rick is committed to building the business and is very thoughtful in his approach. Rick and his team are the kind of people from whom one cannot help but learn. I have no idea what investing insights would come out of participating in the governance of SharpSpring, but if I cannot glean any investing insights from helping to support Rick and his team, it is time to put away the laptop.

I have offered my services to the company. There are very rational reasons for them to accept or decline the offer, and we will see what happens. Joining the board would restrict our ability to sell shares to specified windows of time, but given our projected multi-year holding period, I think it is an acceptable risk. If not, I will help the

company find a replacement and avoid the four formal meetings per year. All board fees earned would go to the fund.

**NEW HOLDING – NINTENDO**

We added one significant new position to the portfolio in the second quarter: Nintendo (NTDOY). Given the average age of our limited partners and their likely preference for reading over gaming, our readers might be surprised to learn that today's worldwide gaming market is estimated to be in excess of $120B, far bigger than the movie industry. Nintendo is the publisher of 20 of the top 25 all-time games, including hits such as Mario Kart, Super Mario Brothers, Legend of Zelda, the Pokémon series, and Wii Sports. In fact, Mario products (games, movies, merchandise, etc.) have outsold Harry Potter products. Of course, Mario has been selling since 1981 vs.1996 for Potter, so on an annualized basis, Harry wins, but on an aggregate basis – score one for Super Mario. Comcast-owned Universal Studios has seen enough sustained excitement around Nintendo characters that they are building dedicated theme park areas for them. Comcast's CEO, who is not prone to hyperbole said, "Nintendo, which we're very excited about… [has an] IP (intellectual property) that rivals Potter in terms of its potential impact in all of the studies we've done."

Nintendo is covered in detail in a four-page appendix to this letter for those interested. The headline version is that Nintendo is likely becoming a much better business that should be able to grow revenues, improve margins, and receive a multiple expansion from the market place. With some relatively conservative assumptions, there is a path to more than doubling our capital while enjoying some downside protection from the significant assets on the balance sheet.

**ANNUAL MEETING**

This year's annual meeting will be held in early October in New York. There will be a few changes. We are going to combine the annual meetings of the Main Fund and Partners Fund. As the vast majority of LPs in the Partners Fund are also investors in the Main Fund, I think this combination makes sense. The meeting will be structured to allow LPs to hear from several of the managers in which the Partner's Fund has invested. The managers will each present a current idea, creating an "idea buffet" to provide more context than just my speaking. It should also be productive for Main Fund LPs to garner a sense of the people I interact with, one of my best sources for investment ideas. I cannot share my email inbox with you, but letting you hear from some of the portfolio managers within the Partners Fund should be powerful. I am also working on lining up a CEO of one of our portfolio companies to provide additional insights. As we have investors living on five continents, we plan to record this meeting and distribute copies for any investors who cannot attend in person. For those who can, there will be an early dinner and the opportunity to interact with some of the smartest managers I know. Details to follow.

GREENHAVEN
ROAD CAPITAL

**OUTLOOK**

These are not normal times. The United States Federal Budget Deficit for this year is expected to be approximately $1,100,000,000,000 ($1.1 trillion), even though economic data appears strong and unemployment is at a record low of 3.7%. Still, the Federal Reserve decided to trim interest rates for the first time in a decade as a preventive measure. We cannot forecast the weather in New York two weeks out, yet the Federal Reserve is attempting to manage the economy within very tight bands; I would think the Federal Reserve would want to have the flexibility to cut rates when the economy is visibly weakening. Even more difficult to explain are the $15 trillion of sovereign debt with negative yields. These are bonds where investors are paying governments to hold their money. The existence of all of the negative yielding debt makes me question my powers of prognostication. Who is buying these bonds? These are not normal times. Fortunately, I don't have to justify the actions of our Congress who approves the budget, our Federal Reserve who cuts rates, or try to sell negative-yielding government bonds. All I have to do is find a few mispriced securities a year, and as messed up as this environment is, I think it is a reasonable one in which to own stocks. The economy is strong, fixed income alternatives are weak, and there is enough volatility to create mispricings.

Just as I ended the last letter, 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

Sincerely,

Scott Miller

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**APPENDIX - NINTENDO**

Historically, Nintendo has been a "feast or famine" company that has seen its fortunes rise and fall dramatically depending on the release cycle and reception of gaming platform consoles and the attached games. The gaming console business is effectively a razor + razor blade business. Traditionally, consoles have been sold for very low margins with higher margins on games. For the past 30 years, consoles had a life of 5-6 years before the next generation was released. Videogame consoles are a capital- and research-intensive treadmill where success of the next was by no means guaranteed by the success of the current. Each successive console has faced "chicken and egg" challenges since, generally, developers only want to develop for new platforms when its installed base reaches a sufficient scale to make their efforts worthwhile and consumers only want to buy consoles that have the deepest bench of top-quality games. If either the consumers or the game developers don't show up, the console manufacturer suffers the double whammy: lackluster sales of not just the console but also the games made for it. To put this in context, Nintendo's sales fell over 75% from 2009 to 2015 as the Wii U flopped due to the company's historically minimal marketing efforts.

For the last two decades, Nintendo has been competing in consoles against Microsoft and Sony, who had balance sheets and other businesses that could subsidize the console businesses in the event of a "flop." Nintendo, on the other hand, was in a far more precarious position and has often been valued at low multiples to reflect this relative fragility despite having the greatest content creation engine in the business, coupled with an unrivaled suite of enduring characters and beloved games.

During of the Wii U debacle, Nintendo's CEO took a massive pay cut in order to avoid having to begin layoffs, and management was desperately looking to move away from the hits-driven cyclicality underpinned by the boom/bust cycle of the gaming console business. In 2014, they appeared to have found their answer, citing the cell phone market as an example of long-duration platforms where the release of each new phone did not require attracting an entire new set of app developers, allowing the build-up of the installed base of users and games:

> *"[H]ome consoles and handheld devices will no longer be completely different, and they will become like brothers in a family of systems... To cite a specific case, Apple is able to release smart devices with various form factors one after another because there is one way of programming adopted by all platforms. Another example is Android. Though there are various models, Android does not face software shortages because there is one common way of programming on the Android platform that works with various models. The point is, Nintendo platforms should be like those two examples."*

There is often a gap between management aspirations (quote above) and execution. Nintendo appears to be in the early stages of a transition towards a far longer-lasting platform that jettisons the cyclicality that defined its past in return for a stable, more resilient model that exhibits a far greater level of recurring revenues at increasingly higher margins. In 2017, Nintendo released the Switch console based on an idea that is as simple as it is revolutionary: a home and portable console in one. Practically speaking, it offers the best of both worlds: a handheld portable device with a large screen is great for travel, and the device can also be hooked up to a traditional television at home, allowing users to "switch" between fully portable and stationary TV play. While many parents may feel that $300

is expensive for an item consumed by young teens, gamer culture spans a significant age range and Nintendo data shows that the Switch is most popular with men in their early 20s to early 30s. Over 35 million Switch units have been sold to date.

Embedded in our decision to invest in Nintendo is a belief that there is downside protection. Nintendo has in excess of $9 per share in cash. Most analysts do not give the company credit for the cash as, historically, excess cash was required to survive the booms and busts of console cycles. If consoles are evolving into an iOS/Android type of business, it follows that cash is increasingly excess. Nintendo also has several valuable holdings hidden on its balance sheet. The largest is their ownership of approximately half of The Pokémon Corporation (33% directly, and additional shares through their holdings of two private companies, Creature and Game Freak). Last year Pokémon generated over $124M in profits (Nintendo | Pokémon FY Profit +50%) and License Global estimated licensing revenue of $3.5B, just behind the National Football League (NFL). It is hard to pinpoint the value of the Pokémon Corporation or Nintendo's exact ownership, but it is in the billions and conservatively worth a couple of dollars per share. Other non-core holdings offering a modicum of downside protection include a sizeable investment in the game developer Niantic, which raised capital at a $4B valuation, as well as stakes in publicly-listed companies and 10% of the Seattle Mariners. Conservatively, we believe that one-third of the value is covered in cash and assets that can be sold.

While there is some downside protection described above, we purchased the shares for the business going forward. Let's look at the company's three gaming business segments: 1) the Dedicated Console Segment, 2) Nintendo Switch Online, its online digital subscription segment (i.e., "Gaming as a Service"), and 3) the mobile segment (i.e., games for smartphones).

**A. Dedicated Console Segment**

So how is the Switch doing now? U.S. hardware sales are strong, rising more than 30% year over year. The Switch was also the best-selling device in June (Business Insider) and the most searched item during Amazon Prime day. Moreover, the near- to medium-term outlook for Nintendo's console business should benefit from a highly anticipated (and popularly pre-ordered) lineup of games to be released over the next 12 months as well as 2 recent developments – its partnership with Tencent, and the upcoming launch of the Switch Lite – neither of which is included in the company's full-year hardware guidance of 18 million units.

> **Partnership with Tencent:** This past April, Nintendo announced that Chinese network communications and gaming juggernaut Tencent Holdings Limited would distribute the Switch in China. Tencent is noted for its expertise and unrivaled reach in China, the world's largest gaming market, which generates approximately one-third of industry sales. Nintendo's entrance into China could easily generate an additional 1-2 million units per year in annual hardware sales in the immediate term, heading higher from there. A Tencent-Nintendo partnership also sets the stage for Tencent to port its top-selling mobile games to the Switch and for Nintendo to port its console titles to Chinese smartphones.

> **Launch of the Switch Lite:** On July 10th, Nintendo announced the upcoming fall launch of the Switch Lite, a cheaper, portable-only console intended to appeal to younger and more value-conscious buyers. The

Switch Lite is targeting the 75 million-strong user base of Nintendo's previous handheld, the 3DS, and has the potential to add millions of console units well before the holiday season.

In short, both the Tencent partnership and the Switch Lite should augment the Switch platform's momentum and expand the market of buyers laying a solid foundation for the Dedicated Console Segment's growth.

So how much is Nintendo's Dedicated Console Segment actually worth? We believe it should grow in value along with the installed base, with a projected installed base of 117 million by 2022, which is greater than the Wii's 101.6 million and the 3DS's 75 million, but less than the 154 million notched by the entire family of Nintendo DS portables.

We further assume software sales continue on a trajectory similar to those of the Switch's 9th generation counterpart, Sony's PS4. That gives us 3.42 per games sold per device per year. As a result, our model implies Nintendo's DCS will earn $5.2 per ADR in 2022. Next, let's assume an average multiple of 15x for what is an above average business. That yields an implied value of the DCS segment alone – before any incremental contribution from NSO – of $78 per ADR, or almost double the Fund's cost basis.

**B. Nintendo Switch Online**

In the fall of 2018 Nintendo launched Switch Online, a $20/year service that allows players to purchase new games for their devices, play each other online, and access classic game titles as long as the user is a current member (Gaming as a Service).

To date, it's been reported that Nintendo has in excess of 10M Switch Online subscribers, implying a 30% attach rate on an installed base of over 36 million to date. The Online offering linked to the Switch console comes years after Microsoft and Sony introduced similar platforms, but it's better late than never and can be a significant source of recurring, high-margin revenue that should be a material driver of earnings worthy of a much better multiple than the historical boom-bust console business. Sony and Microsoft Online services have attach rates hovering around 35% and 45% respectively, and cost on the order of $60/year. An installed base of 117M Switches and an attach rate of 40% at $30 per year would be $1.4B in revenue for the online service. As a result, it would contribute ~$1 per (ADR share) in pre-tax earnings, which is meaningful in the context of a company that we paid roughly $30 per ADR ex cash & investments.

**C. Mobile**

Another attractive market that Nintendo is finally showing up to is mobile gaming. In the old console business, having exclusive content around Nintendo characters allowed the company to offer exclusive games for their consoles, which in turn helped seed demand for each successive console generation. In the pre-digital, pre-smartphone era, the risks of a failed console were far greater than the benefits of making the Nintendo IP widely available.

We have finally reached an inflection point where the mobile opportunity has grown so big (2.5 billion cell phones/game-playing devices) that Nintendo is finally embracing the mobile game market. In July, Nintendo

released Dr. Mario World, whose style and pace are similar to Candy Crush. At launch it was the number one game on iOS. Later this summer, Nintendo will release Mario Kart for smart phones. While it is very difficult to predict which games will be hits and which ones will be misses, Nintendo is beginning to aggressively go after the mobile market. Given the size of the market, the familiarity of the characters, and improved monetization efforts, it is not unreasonable to think that substantial profits could come out of Nintendo's nascent mobile business, which has not materially been reflected in historical numbers. We are arguably paying zero for the optionality.

We purchased the majority of our shares in the low $40s, which, when backing out the cash and investments, implies a forward P/E of a bit north of 10 for the core business. Nintendo has the potential to grow revenues (mobile, China, Switch), improve margins (digital vs. physical), and get a multiple re-rating as the quality of the business improves (subscription/mobile). It is highly likely all of these improvements are coming; the question is the magnitude of each and the multiple investors are willing to apply. With a little bit of good fortune, there is path to more than doubling the value of our investment over the next couple of years.

Attribution: I was made aware of the Nintendo opportunity by Ryan O'Connor of Crossroads Capital, who has helped provide context to this parent of three non-gamer girls.

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