

October 26th, 2020

Dear Partners,

In Q3 2020, the Voss Value Fund, LP and the Voss Value Offshore Fund, Ltd., returned 19.91% and 19.88% to investors net of fees and expenses, respectively, compared to a 4.93% total return for the Russell 2000, a 2.01% total return for the Russell 2000 Value, and an 8.93% total return for the S&P 500.

As of September 30th, 2020, the Fund's total gross exposure stood at 180.2% and the beta-adjusted net long exposure was 100.9%. Our top 10 longs had a 56.1% weighting, and our top 10 shorts had a gross weight of -32.8%.

Firm assets under management stood at approximately \$155 million as of September 30th, 2020.

Voss Value Master Fund Complex

ESTIMATED NET MONTHLY PERFORMANCE 2020					
PERIOD	Voss Value Fund, LP	Voss Value Offshore Fund, Ltd.	Russell 2000 TR	Russell 2000 Value Index	S&P 500 TR
JANUARY	1.75%	1.75%	-3.21%	-5.47%	-0.04%
FEBRUARY	2.35%	2.36%	-8.42%	-9.88%	-8.23%
MARCH	-21.21%	-21.45%	-21.73%	-24.93%	-12.35%
1st QUARTER	-17.95%	-18.18%	-30.61%	-36.05%	-19.60%
APRIL	3.33%	3.25%	13.74%	12.22%	12.82%
MAY	1.73%	1.71%	6.51%	2.63%	4.76%
JUNE	-0.98%	-1.03%	3.53%	2.67%	1.99%
2nd QUARTER	4.09%	3.93%	25.42%	18.24%	20.54%
JULY	15.25%	15.23%	2.77%	1.96%	5.64%
AUGUST	5.39%	5.56%	5.63%	5.17%	7.19%
SEPTEMBER	-1.28%	-1.44%	-3.34%	-4.86%	-3.80%
3rd QUARTER	19.91%	19.88%	4.93%	2.01%	8.93%
OCTOBER					
NOVEMBER					
DECEMBER					
4th QUARTER	0.00%	0.00%	0.00%	0.00%	0.00%
YEAR TO DATE	2.41%	1.94%	-8.69%	-22.86%	5.57%

The table below shows the Voss Value feeder fund returns compared to some of the relevant indices:

Net Return Comparison as of September 30th, 2020							
	1 Month	3 Month	YTD	1-Year	Compound Annual Growth Rate		
					3-Year	5-Year	ITD ⁽¹⁾
Voss Value Fund, LP	-1.3%	19.9%	2.4%	10.7%	11.9%	14.2%	16.0%
Voss Value Offshore Fund, Ltd.	-1.4%	19.9%	1.9%	N/A	N/A	N/A	N/A
S&P 500	-3.8%	8.9%	5.6%	15.2%	12.3%	14.2%	15.2%
Russell 2000	-3.3%	4.9%	-8.7%	0.4%	1.8%	8.0%	11.4%
Russell 2000 Value	-4.7%	2.6%	-21.5%	-14.9%	-5.1%	4.1%	8.7%
Russell 2000 Growth	-2.1%	7.2%	3.9%	15.7%	8.2%	11.4%	13.9%
HFRX Equity Hedge Index	0.0%	3.6%	-3.0%	-0.4%	0.0%	1.6%	2.3%

(1) Investment to Date measures the time period from Voss Value Fund, LP's inception date of October 1st, 2011

All performance figures are unaudited, estimated, and may be subject to subsequent adjustment. A limited partner's actual returns may vary from published fund returns based on the timing of capital and fee arrangements. This statement represents information based on the policies of the fund's managers and general partner. Please contact Taylor Steinhauhoff of Voss Capital, LLC, with any inquiries.

Voss's two largest positions, Rosetta Stone (RST) and Benefytt Technologies (BFYT), were bought out this quarter. We had filed 13-D's on both and together they comprised ~30% of the portfolio after the buyouts, so we had plenty of capital to recycle. We have found several new core sized ideas which we highlight below.

Companies going through business model transformations are one theme we have utilized to find ideas in the software space. Most notably a conversion from perpetual licenses to a subscription model. This transition, pioneered to great success by Adobe, has the short-term impact of lower revenues and cash flows but with the long-term advantages of lower volatility and improved margins/economics coming out of the transition. While this theme is now so universally known in the investment community that we are arguably in a software stock bubble, we believe there are derivations of that type of conversion that remain attractive.

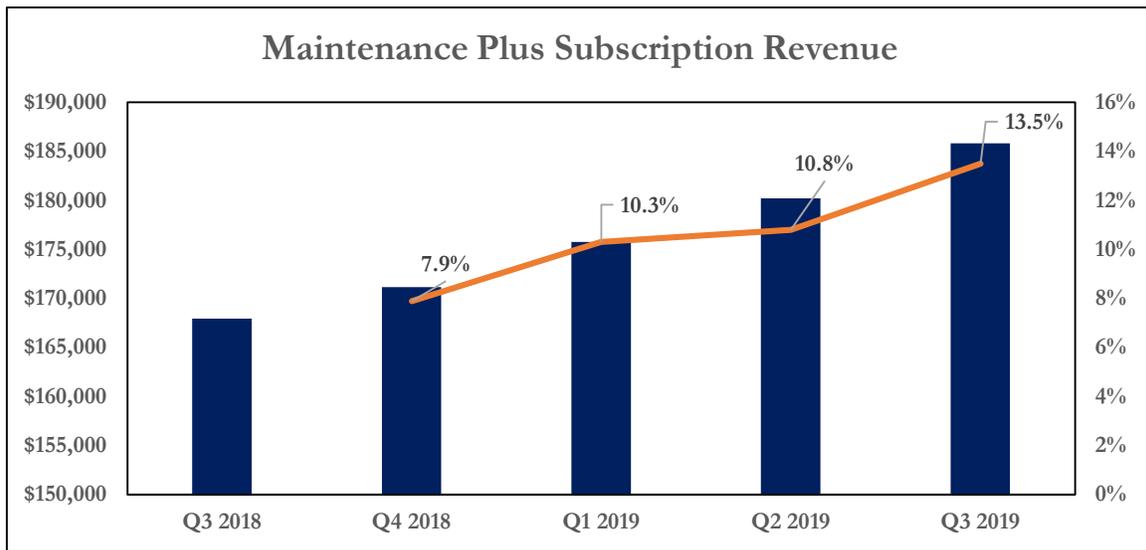
One such derivation is the hardware to software transition. In other words, a company known primarily for one-time hardware revenues is either building more of a recurring hardware model or layering recurring software revenue on top of the model (or both). This dynamic can cause the same type of short term disruption that a subscription transition can have in that many times the company will have to sacrifice some hardware margin economics to build the recurring software business and, often, the hardware business is in decline to start with. This transition, from Product to Service revenue, is even harder to pull off for many reasons (culturally and logistically to name a couple) and can take longer. In evaluating these situations, we are looking for signposts that the management team not only understands how to execute the transition but show clear indicators of early success.

Long Avid Technologies (AVID)

Avid Technology (AVID) is one of two leaders in a duopolistic industry (the other being Adobe) of video editing software with their Media Composer product and is the clear leader in sound editing with their Pro Tools products. Additionally, they are well known for their integrated Nexus line of hardware products for media storage and have pushed collaborative editing through their Avid Everywhere platform. To say Avid has undergone a messy transition would be an understatement, as they were trying to execute not only moving from perpetual licenses to a subscription model, but *also* from hardware/professional services oriented to software/recurring revenue oriented. The difficulty of this dual transition, which really began 6-7 years ago, was compounded by the previous management team that decided to lever the balance sheet for an acquisition right as they were attempting to execute the transformation (keeping in mind the transition causes a hit to cash flows). A major accounting restatement also resulted in material cash usage. Between the restatement and transitions to SaaS, the company burned \$154 million of cash between 2013 and 2016, before essentially breaking even in 2017-2018 and starting to generate modest cash flows in 2019.

We believe Avid has now done the heavy lifting for much of the transition, with inflection signs emerging that we believe will finally get the stock to break out of its multi-year range and up to a more reasonable multiple. Just as these signs have started to emerge, COVID has kept the stock down due to an ongoing hit to their remaining one-time hardware revenues along with the narrative that COVID has shut down film/TV production. While this was likely true for a few months, we believe Avid's leadership in collaboration software (multiple editors can work remotely on the same content simultaneously) will help it competitively over the medium to long term, and that the explosion of consumer and "prosumer" content creation from COVID has actually allowed Avid to gain some modest market share in the lower end of the market.

What is the evidence that management "gets it"? They have gone from 40% recurring revenue to 70% over the last four years and have moved their gross margin from the mid-50s to mid-60s since 2017. They have also doubled their software subscription revenue in just a couple years from \$32 million to \$64 million. Furthermore, total recurring software revenue (subscription plus maintenance revenue) growth has accelerated for four consecutive quarters from 8% to 14%, with guidance pointing to more helpings of the delectable Voss Sauce of expanding margins and accelerating growth simultaneously.



Note the orange line denotes sequential growth of subscription revenue.

We believe as Avid approaches \$200 million in high margin recurring software revenues, its enterprise value of \$580 million is easily justified just from this alone. Indeed, a software company in a niche vertical with this profile (at scale with \$200 million base revenue, profitable, growing 15%+, operating in a duopoly) should command a 5x recurring revenue multiple (arguably double digits in this market environment). A multiple of 5x recurring revenue would value AVID at \$19.00 a share, a 115% return from the current market price.

This ascribes no value to the \$80 million in other recurring revenue, notably hardware maintenance contracts, and no value to the remaining revenue base from industry leading hardware, albeit its lumpier and one time in nature (comprising ~30% of total revenue). Additionally, given the guideposts laid out by management (65% gross margin, high incremental operating margin, and ongoing growth in subscription revenues), we believe Avid should be able to generate \$60 million or more in FCF in 2021 (sell side consensus is at \$38 million) and they will use that cash to deleverage the balance sheet, which currently sits at ~\$180 million in net debt. This cash flow forecast is predicated on some of Avid’s hardware revenue coming back post-COVID (product revenue was down 45% in Q2), but even if it does not, Avid should be able to generate enough FCF to justify its current depressed valuation and alleviate any concerns that they cannot manage their moderate debt levels. AVID has had a major technical overhang lately as a PE firm that owned 15% of the company distributed shares directly to its LPs in April and again in August. It is plausible that they sold indiscriminately and further depressed shares in a weak tape, creating the current opportunity for Voss investors.

AVID is a 4.7% position.

Long Extreme Networks (EXTR)

We are long EXTR, Extreme Networks. EXTR provides software driven networking solutions for large enterprise campuses, universities, hospital systems, large outdoor venues like stadiums, public mass transit networks, and data centers worldwide (i.e. it enables Wi-Fi in extreme situations). It sells wired and wireless network infrastructure equipment, as well as software for network management, analytics, and security. EXTR is remarkably similar to AVID in that it’s trading at depressed multiples (0.75x EV/Sales, 1.25x EV/Gross profit, and 7x FCF), has moderate leverage (~\$215 million net debt), and has been left for dead by the investment community after years of underperformance and operational missteps. However, Voss’s variant view is the company has industry leading technology in the Wired and Wireless Local Area Network (WLAN) industry and a burgeoning subscription and recurring revenue business built off its large customer base (~60,000 enterprises globally). This recurring revenue transition was accelerated through the acquisition of Aerohive that occurred 14 months ago (which multiple of our industry contacts have coincidentally called a “game changer”). Progress was then throttled back by uncertainty surrounding government mandated lockdowns and uncertainty surrounding IT budgets, but the business

is now picking up steam evidenced by strong subscription bookings trends. Most importantly for us, there are clear signposts that the company is taking this transition very seriously. For instance:

- 96% of R&D is going into software development (despite the Wall St. perception that they are a stodgy hardware company)
- The new Chief Revenue Officer hired in June has extensive experience driving software revenue growth and transitioning companies to be more software and subscription oriented
- **In the most recent quarter, the company disclosed their software subscription business grew 42% sequentially**, and was now a \$60 million a year run rate business, with guidance for “continued strength”
- Company released new KPIs specifically around cloud/subscription progress with specific targets for recurring revenue and good disclosures on subscription unit economics (80-85% gross margin)
- Management has modified their salesforce incentive comp to target software deals more aggressively

While none of these things individually, or even in aggregate, guarantee a successful software transition, we believe these signposts along with the giant customer base of 60,000 bodes well for the company. The subscription business, which is priced on a “per year, per device” basis, seems like it has an especially long runway for continued growth. While it is currently a \$60 million business growing at 30-40%, it is our understanding that there is still significant penetration possible within Extreme’s underlying base. A recent Omdia report estimated only 6-7% of network devices are managed via the cloud.¹

Furthermore, we believe there are significant tailwinds for their core hardware business in the short to medium term that can help drive momentum and price discovery in the stock. For instance, Wi-Fi 6, the underappreciated, overshadowed little brother of 5G, is now beginning to roll out to customer bases (although COVID delayed some of this). The key advantages of Wi-Fi 6 are that it greatly expands the efficiency and capacity of a network, which is something we believe will disproportionately benefit Extreme and its customers. Extreme’s customer base is most known for its high but transient demand, specifically the NFL (26 of 32 stadiums), public transportation, convention centers, hospitals, large school systems, and other similarly complex Wi-Fi customers who may have hundreds or even tens of thousands of users trying to access the network at once.

In anticipation of Wi-Fi 6, and as part of a massive integration effort following the Aerohive acquisition, the company has refreshed most of their hardware line for the upcoming calendar Q4 under the premise of “Universal Hardware.” This effort has taken all the company’s acquisitions and consolidated the product lines to one, which is no small feat given how many acquisitions the company has made over the last five years. Despite this new hardware refresh not coming until Q4, the company pre-announced a beat for calendar Q3 on the back of “strong bookings” and “differentiation in a challenging environment.”²

We believe all these changes over the last 12 months put the company in a position to be a market share gainer for the first time in a long time. As the company notes, given the size of major competitors Cisco and HPE, each 1% industry share gain should translate to \$200 million in incremental revenue and \$85 million in incremental net income. The recently announced displacement of Cisco for all Major League Baseball teams is encouraging, as is Extreme winning Amazon Warehouse business.

Extreme has a market cap of \$575 million and an Enterprise Value of \$795 million. We believe on a normalized basis the business should generate between \$1 billion and \$1.1 billion in revenues (currently valued at 0.7-0.8x sales), 61-62% aggregate gross margin (~1.3x EV/gross profit, the third cheapest stock on this basis across the entire North American tech universe), and 15% operating margins. We believe the company will generate over \$80 million in FCF over the next twelve months (versus \$40 million consensus), and \$105 million in unlevered FCF in the next twelve months, implying a 7.0-7.5x multiple, which is cheap compared with revenue growth in mid to high single digits and gross profit growth potentially into the teens. The trading comp table below highlights this.

Ticker	Growth			Valuation (NTM)				Revisions (3M)		Performance		Margin (NTM)	
	Sales	GP	EBITDA	Sales	GP	EBITDA	FCF	Sales	EBITDA	YTD	3 Year	Gross	EBITDA
CSCO	-0.8%	-0.4%	-4.7%	3.3x	5.0x	9.2x	12.9x	-1.3%	-1.2%	-14.7%	30.2%	64.6%	35.6%
ANET	8.9%	9.3%	8.7%	6.3x	9.8x	16.1x	22.0x	5.1%	5.6%	9.7%	16.8%	64.7%	39.2%
UI	3.3%			9.4x	18.5x	25.9x	27.0x	-3.3%	2.1%	-0.1%	215.6%	50.7%	36.3%
JNPR	2.3%	3.6%	6.9%	1.7x	2.8x	8.0x	12.1x	2.1%	5.9%	-7.1%	-5.3%	60.2%	21.2%
CIEN	0.9%	0.7%	-0.7%	1.8x	3.8x	8.9x	16.0x	-8.3%	-4.6%	-2.1%	91.0%	46.5%	19.8%
VIAV	1.4%	1.0%	3.7%	2.7x	4.4x	12.0x	25.1x	1.7%	4.1%	-18.8%	28.3%	61.4%	22.7%
RBBN	14.9%	14.2%	22.4%	1.2x	2.0x	8.6x		-2.9%	6.3%	26.9%	-49.5%	58.4%	13.5%
CMBM	6.4%	8.7%	21.3%	1.7x	3.4x	14.7x	20.3x	11.4%	45.2%	110.0%		51.1%	11.9%
Median	2.8%	3.6%	6.9%	2.2x	4.1x	10.6x	20.3x	0.2%	4.8%	-1.1%	28.3%	59.3%	21.9%
Extreme	1.4%	8.8%	38.1%	0.9x	1.4x	7.6x	13.3x	6.1%	33.5%	-40.0%	-63.6%	60.3%	11.4%
Relative	-1.4%	5.2%	31.2%	-61.4%	-65.0%	-28.2%	-34.7%	5.9%	28.6%	-38.9%	-91.9%	1.0%	-10.5%

In particular, we would note the discrepancy between expected revenue growth and gross profit (GP) growth, which is illustrative of their business model transition and increasing profitability.

The ~\$80 million in cash we expect the company to generate will, per the CFO, be almost entirely used for debt paydown which will give the company a very manageable 1.0x-1.5x net debt leverage ratio in 12 months from now. Further, we believe that 40% of their roughly \$1 billion revenue base will be recurring at around 70% gross margin with 90% retention rates, meaning the company is trading at only ~2.0x their recurring revenues (assuming the other 60% of revenues, which still clock in at 50% gross margin, are worth nothing). In an upside case where Extreme has indeed hit an inflection point competitively and will consistently take share from Cisco and HPE, we believe the stock would be a multi-bagger over the next three years.

Looking at potential downside whereby the company's push into software falls flat or they continue to lose share, we believe that Extreme would not only fetch a strong premium to its current price in a takeout, but is a sitting duck for activism. The stock is only about 3% insider owned, is down 68% over the last three years with the NASDAQ up that much and has a CEO who has had five years and several acquisitions to enact his strategy with only poor shareholder returns to show for it. With these types of businesses we believe there is massive cost synergy potential by a strategic acquirer (for example, Extreme cut over 30% of the Aerohive cost base), and there are several companies who would be interested in acquiring an asset with leading technology, 60,000 customers (including many marquee customers) and a strong channel presence. Assuming an acquirer thought they could take 25-30% of the operating cost base out of Extreme, they could acquire Extreme for over \$8.00 a share, which equates to a bargain basement value of just 5x pro-forma EBIT. A short list of potential acquirers that would make the most sense includes Arista Networks, Dell, Cisco, Juniper, HPE, Palo Alto Networks, Fortinet, Verizon, and Ericsson, among others.

EXTR is a 5.7% position.

Long Thunderbird Entertainment (TBRD CN)

Another theme that has emerged within the long book of the portfolio is companies that are increasingly focused on monetizing their owned-IP. One example is Thunderbird Entertainment (TBRD CN). Thunderbird is a vertically integrated media production company who is benefitting directly from the content spending boom that is accelerating. Content spend among Netflix, Amazon Prime, Hulu, and Apple TV alone will approximate \$27 billion in 2021.

TBRD produces animated content with its Atomic Cartoons studio, and factual (scripted/documentaries/reality TV) content under its Great Pacific Media banner. On the factual side, where they own all the content outright, their most recognizable shows are Kim's Convenience (which has inked a deal for its 6th season) and Highway Thru Hell. The latter of which ranked as the number one series

premiere in Discovery Canada's history, only for that record to be broken by one of its spin-offs several years later, Heavy Rescue 401. On the animated side, TBRD's most recognized owned-IP are The Last Kids on Earth and Princesses Wear Pants.

TBRD has three different business models:

- Service - TBRD produces a show or movie at the request of a client. The client pays the cost to make the show plus a production fee to TBRD.
- Partnership - a full-service offering from TBRD where a client brings TBRD the IP and TBRD handles all creative aspects in addition to producing the content. On top of the producer fee TBRD also gets a share of the backend on any merchandise sales, licensing revenue, etc.
- Owned IP - TBRD owns the IP themselves. They create and then sell the content to someone like Netflix for a set window (e.g. Netflix gets exclusivity for two years) whereby afterwards TBRD can resell it to potentially multiple other broadcasters globally. Given they own the IP, TBRD can also sell the rights to toy lines, video games, apparel merchandise, etc. in return for licensing fees and royalties.

The Service model has historically made up most of the revenue with Thunderbird producing hit shows such as Man in the High Castle for Amazon. While Service shows provide steady work and lots of revenue, they come at low margins with little to no upside if the show is successful. A few years ago, TBRD made the strategic decision to not renew some large service contracts and instead focus on building out their owned-IP library, with an emphasis on the animation side.

Since then, the studio has seemingly built an edge in acquiring the best IP which comes from a blend of three factors:

1. As a smaller, independent studio, Atomic can be nimble, have quick turnaround while negotiating and get deals done fast
2. Relationships with all the major broadcasters like Amazon, Netflix, HBO, Disney, etc.
3. Access to financing to gap finance projects.

It is rare to have a studio with all three of these attributes. Usually the big guys have the relationships and the financing but are slow moving and bureaucratic; Atomic on the other hand can get a term sheet done in 24 hours and have revisions turned around the same day. Other small studios may be quick but lack the relationships with the majors or have limited access to financing.

Last Kids on Earth was the first big original show Atomic developed and is based on the NYT bestselling book series by Max Brallier. The first full season of Last Kids was released on Netflix this past April with season 2 premiering this month. A toy line was released this summer with a video game set to release early next year as well as an interactive "choose your own adventure" type movie also coming to Netflix next spring. The success of Last Kids and the way Atomic worked with the author Brallier now has Atomic receiving hundreds of submissions per year from content creators. From this funnel Atomic is looking to sign around 10 - 12 options/deals per year.

This transition for Atomic from a pure service production house (producing content at a fixed margin) to owning more of their own shows outright to participate in royalties and licensing deals has been underway for a couple years but the financial benefits are just beginning to hit the income statement. The first full season of Last Kids released last quarter contributed to TBRD growing revenue over 50%, with the new seasons, interactive movie, and video game coming over the next few quarters. And Last Kids is only the beginning as the studio has at least four other owned shows in various stages of production including a show based on the NYT bestseller *Princesses Wear Pants* by Today Show host Savannah Guthrie. They are looking to build franchises that will have a long tail of revenue, spin-offs, and licensing opportunities.

Despite what should become a steady release schedule of fully owned shows with high-margin licensing and royalty revenue forthcoming, **the stock trades at only 5.8x trailing EBITDA and 12x FCF while growing 50%**.

It's not all about the upside though--the management team is also prudent in the way it manages risks. They pay very low amounts for the options on IP (< \$10,000) and don't begin production on a show until it has already been bought by a network or streaming platform. Additionally, they have tremendous ability to flex expenses as a lot of their animators and production employees are on short term contracts tied to specific shows. We think just the existing content library is already worth much more than the current enterprise value (~\$65 million) and the stock can be a multi-bagger over the coming years, especially if a few of the Partnered (e.g. Nate Creates, Mermicorno, Hello Ninja, etc.) or owned shows can translate into meaningful licensing revenue.

TBRD is a 4.2% position.

Long Nintendo (NTDOY)

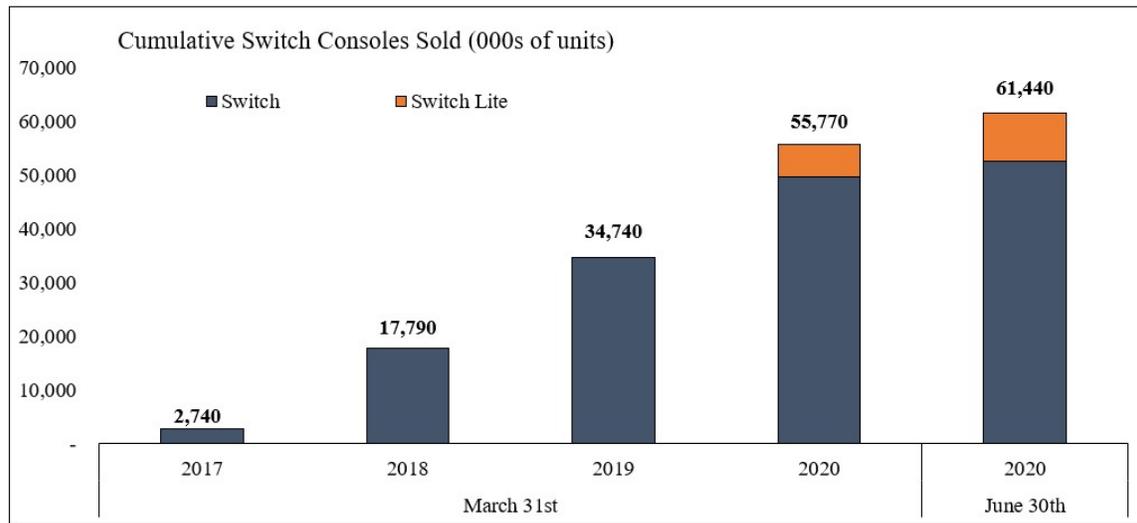
Nintendo is like a combination of EXTR/AVID and TBRD CN, whereby there is a shift in the business model underway while the company also simultaneously unlocks the power of owned-IP. Three key fundamental changes are happening:

1. They are decreasing the cyclicity of the business with the newest console the Switch, released in March 2017, aiming to follow an "iterative hardware" approach to extend the console's lifecycle
2. There is a rapid shift to high-margin digital and subscription revenue occurring that is being underappreciated by investors
3. The company has a world-class intellectual property library built up over decades which the company is just now "flipping the switch" on to begin monetizing via high margin royalty opportunities

Many of these changes began in 2017 with the release of the newest console, the Switch. Nintendo sold 15 million Switch consoles in its first full year of release and the following year sales grew 13% to nearly 17 million consoles. In fall 2019 the company released the Switch Lite, a handheld-only version of the Switch that is priced at \$200. The original Switch is priced at \$300 which can be played handheld or on a TV. Together, Switch + Switch Lite unit sales grew 24% in FY 2020 (ended March) to over 21 million units sold. Looking at the Switch and Switch Lite together is the right way to look at the install base because the different versions of the Switch are compatible with each other. This is the new "iterative" approach - release new versions of the Switch hardware every couple years in order to grow the total install base as large as possible while keeping the gamer base relatively stable versus the typical boom/bust pattern with gaming consoles where you essentially start from scratch every five years or so. The next iteration, the rumored Switch Pro, is expected to be released next year. If the strategy is successful, the company will create a massive base of Switch players (100 million+) to be able to steadily sell high-margin software to (games, downloadable content, and subscriptions) and reduce their reliance on cyclical hardware revenue.

In the most recent quarter ended June 2020, Switch unit sales were up 43% y/y. It's typically unheard of for a gaming console to see rapidly accelerating sales growth like this in its fourth year of release but the Switch has benefitted from a few factors: 1) the release of the lower priced Switch Lite 2) the release of the game Animal Crossing: New Horizons, and 3) government mandated lockdowns that sparked an increase in video game playing.

The cumulative Switch install base stood at 61 million as of June 2020 and is estimated by third parties to be over 65 million now.



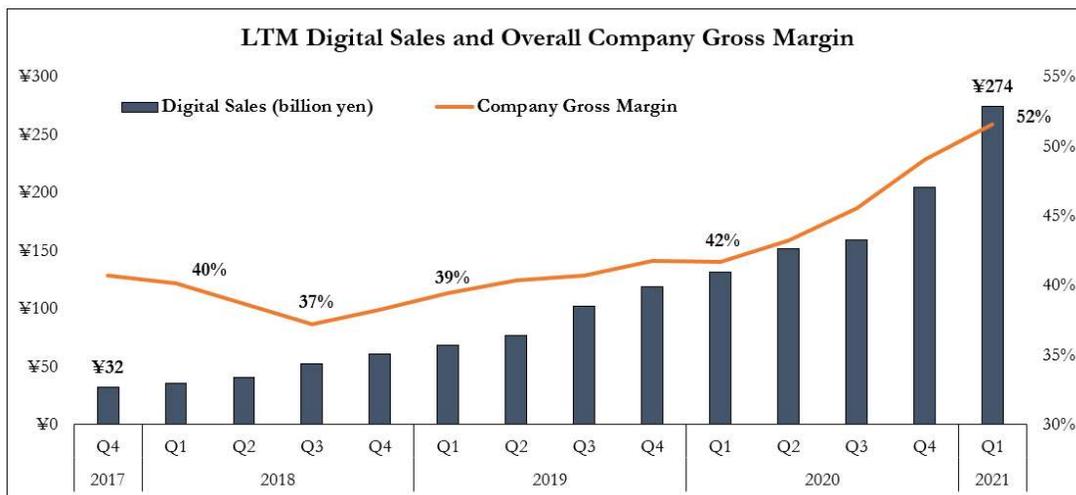
Nintendo's Digital Transition

Nintendo's reported software revenue comes from five sources:

1. Physical video games sales
2. Downloadable version of a game that is also offered physically
3. Download only games
 - These are games available only through Nintendo's online E-Shop and are typically smaller independently developed third party games priced lower (\$10 - \$40) which Nintendo takes a 30% royalty on
4. Downloadable content (DLC)
 - In-game digital add-ons gamers can buy; this includes things like new maps, outfits, new characters, etc.
5. Nintendo Switch Online subscription
 - Priced at \$20 - \$46/year depending on an annual or monthly plan. The subscription allows for online multiplayer as well as saving to the cloud, in-game perks, and free to play games

What the company calls its **digital revenue** is a subsegment of software and includes revenue from sources 2 - 5 above, i.e. everything except for the sales of physical games. This digital revenue is typically the highest margin revenue and/or the more recurring. The digital pieces have grown rapidly and accounted for 56% of total software revenue last quarter and 39% for the LTM at ~\$2.6 billion USD.

The company does not break out margins for the digital segment, but you can see the impact on the company's overall margins as digital has become an increasingly large contributor of total revenue. Gross margins have risen steadily to 52% for the LTM and 59% for most recent quarter. Similarly, the company's operating margins have expanded to 31% for the LTM and were over 40% for the most recent quarter.



Software in total now makes up 47% of the company's overall revenue and grew 46% in the LTM. **Digital revenue specifically was +110% y/y for the LTM, +230% y/y last quarter and now makes up 18% of the company's overall revenue.**

Downloadable content (DLC) is one of the relatively newer and most promising sources of high-margin revenue in the video game industry but one that Nintendo has been slow to embrace. However, that seems to be changing with the number of Switch games with DLC available increasing each year from 8 games in 2017 to 12 games through the first nine months of 2020. DLC can be incredibly high margin revenue, for example it is estimated that a new map for Call of Duty takes four developers only about two weeks to develop. When that is sold for \$3 - \$5 a pop across millions of gamers that equates to about 99% gross margins.

Super Smash Bros is an example of a game where Nintendo has done a good job with DLC. When Super Smash came out in December 2018 it cost \$60 and included 74 playable fighters and 109 stages. Immediately after the game release Nintendo announced Fighters Pass. Fighters Pass includes five Packs of DLC that would be released over the next year or so. Each Pack included one new fighter, one new map and additional music. Gamers could pay \$25 for the entire Fighter Pass or buy the Packs individually for \$6 each (\$30 total). After the success of the first Fighters Pass in 2019, the company released Fighters Pass Vol. 2 in January 2020. Vol 2 will include six Packs (two have been released so far). Again, gamers can buy the entire Pass for \$30 and receive the Packs as they are released or buy them for \$6 individually. These Fighters Passes keep the game fresh, keeps people spending money and spikes the buzz around the game each time the new fighters in a Pack are announced. Total potential spend per gamer on Super Smash Bros goes from \$60 to \$115 (so far).

A more predictable revenue stream within Digital is the subscription service called Nintendo Switch Online (NSO). NSO allows for online game play and cloud storage, as well as access to additional games and features. The subscription service debuted in September 2018 and in just two years has grown to over 26 million subscribers. Subscriptions have grown alongside Switch console sales but have also seen big upticks in growth around certain game releases that are designed for online play like Animal Crossing: New Horizons.

26 million subscriptions as of September represents 73% sequential growth from January. This is about 41% penetration in terms of Switch users with a subscription, up from 29% to start the year. With pricing ranging from \$20 - \$48/year depending if paid annually or monthly, the company is currently generating somewhere between \$520 million - \$1.25 billion in run rate annual subscription revenue. The gross margins for this subscription stream are presumed to be high with the main costs likely only being server costs.

We also believe Nintendo has some pricing power here given it is priced at a fraction of competitors price points, with PlayStation's and Xbox's subscription offerings ranging from \$60 - \$180 per year. To justify these prices, PlayStation and Xbox offer "free" access to a growing library of games for subscribers. As these companies continue to add games and build up content, the value of a subscription only grows and eventually they can raise pricing. This is a reason you've seen both Microsoft and Sony buying up games studios over the past couple years to build out their first party game libraries, with the most recent transaction being Microsoft's acquisition of ZeniMax (and its game publisher Bethesda) for \$7.5 billion. Nintendo on the other hand already has a vast library of first party games that has been built over decades with development costs spent long ago that can be added to NSO for minimal costs. If Nintendo adds a

library of remastered N64 or GameCube games for subscribers could they justify a \$5 - \$10 increase to the annual subscription price (20% - 50% increase)? We think so.

Morgan Stanley recently ascribed Xbox's Subscription Gaming business a value of \$78 billion (5.8x 2021 revenue) assuming an ~11% subscription revenue CAGR from 2020 - 2025 and 25% operating margins. Given Nintendo's vastly superior growth, pricing power and the advantage of owning a vast library of first-party content that can be added to Switch Online at essentially no cost, Nintendo's subscription business arguably deserves an even higher current multiple, likely in the 10x – 12x range.

Over the next five years we think it is possible Nintendo can at least double subscribers from 26 million to 50 million (assuming the Switch base hits 100 million consoles with a 50% subscription take rate). And as the company continues to add features like N64 online it will allow them to take the annual pricing up from \$20/year to \$30/year and monthly from \$4 to \$6, which would result in a ~\$2.6 billion ARR business at the midpoint with >40% operating margins.

We can comp the Digital segment as whole to publicly traded game developer peers, most of whom have made the transition to majority digital revenue over the past few years. Despite a fraction of Nintendo's revenue growth (comp average of 15% LTM growth versus Nintendo's 110%) the comp group trades at an average of 22x EBIT.

Video Game Comps	EV	2021 EBIT	EV/2021 EBIT	Revenue Growth	
				LTM	E2021
Activision Blizzard	\$58,080	\$3,143	18.5x	-1.7%	3.0%
Electronic Arts	\$32,863	\$1,986	16.5x	15.0%	4.9%
Take-Two Interactive	\$16,267	\$646	25.2x	19.8%	12.2%
Zynga	\$9,427	\$459	20.5x	52.3%	21.3%
Tencent	\$662,440	\$21,202	31.2x	20.9%	22.8%
Ubisoft Entertainment	\$11,932	\$642	18.6x	-13.6%	3.1%
Average			21.8x	15%	11%
		Est. NTM EBIT		LTM	Est. NTM
Nintendo Digital Segment		\$1,355		110%	30%

For the sake of conservatism, we can assume growth slows dramatically for Nintendo--down to just 30% for the next twelve months which would still be industry leading growth. At an estimated 40% operating margin and 30% revenue growth, this segment will be generating \$1.4 billion in operating income over the NTM. At 25x EBIT, a slight premium to the industry average, this segment which makes up only 18% of total company revenue is worth ~\$34 billion, or nearly 75% of the adjusted enterprise value (backing out investments).

IP Monetization

Under the new management Nintendo's approach to leveraging its IP has noticeably shifted in the recent past. In the FY 2016 annual report there were no mentions of "IP" in the strategy section. The following year in FY 2017 the company said, "In addition to our gaming business, we are also making active use of Nintendo IP". In the most recent annual report earlier this year "IP" was mentioned over 10 times, including stating "the Company's **fundamental strategy** is to expand the number of people who have access to Nintendo IP." This is coming at a time when the paths for IP-monetization and demand for content has never been greater.

Nintendo's IP library includes the rights to the Mario universe (Luigi, Yoshi, Princess Peach, etc.), Star Fox, Zelda, Donkey Kong, the newer Animal Crossing, and a substantial ownership percentage of Pokemon, among others.

Some current IP licensing initiatives include the company's foray into theme parks with Super Nintendo World being developed in partnership with Universal. It seems Nintendo is following the same model Warner Bros did with licensing the Harry Potter IP for the Wizarding Worlds at Universal parks which have been massive successes for the parks. Universal puts up all the capex (~\$250 million per park) and in return for the IP pays Warner Bros "tens of millions per park per year and royalties of at least 12% on merchandise sales."³ At \$25 million per park going to Nintendo with five parks that would be \$125 million per year plus a 12% royalty on merchandise

sales, all of which should be near 100% margin revenue. Also considering the ancillary marketing boost to the brand in general while putting up no capital, that is a great deal.

Additionally, there is a Super Mario movie in the works being produced in partnership with Illumination Macguff (creator of Despicable Me and Minions franchises) with Illumination founder/CEO Chris Meledandri and Mario creator Shigeru Miyamoto working as co-producers on the animated film. It is noteworthy Illumination has decided to work with Nintendo considering the studio's track record of producing nothing but hit movies. Their total of nine movies over the past 10 years have averaged \$723 million at the box office on average budgets of \$75 million. As with the rest of Illumination's movies, Super Mario will be distributed by Universal with an expected release date in 2022. Nintendo also recently hinted at possible TV shows last month, revealed cryptically by stating "visual content expansion initiatives won't be limited to film."

Valuation

So, what do we think Nintendo is worth? While we believe a lot of the current value comes from the digital business, this segment only makes up 18% of revenue. The remaining business consists of the physical video game sales, hardware, and the still nascent but promising mobile gaming and IP initiatives.

We make some assumptions around margins (since Nintendo does not break out the segments in this level of detail), some expectations for growth, and value the businesses individually. Blended, we think the current valuation should be around 16x NTM EBIT for the operating business, adding in cash and investments gets us to just over a \$100 stock price vs the current ADR price of \$65. Although this is our current Base Case, we believe there is a lot of embedded upside potential if things like Mobile and IP take off over the next couple years.

Nintendo SOTP Valuation	NTM Estimates				NTM Multiple		Valuation		
	Revenue	Y/Y Growth	EBIT Margin	Est. EBIT	Sales	EBIT	\$	Per Share	
Digital Business	\$3,388	30%	40%	\$1,355	10.0x	25.0x	\$33,876	\$35.55	
Console Business	\$7,020	0%	26%	\$1,825	2.1x	8.0x	\$14,601	\$15.32	
Physical Game Sales	\$5,068	25%	26%	\$1,318	3.9x	15.0x	\$19,764	\$20.74	
Mobile and IP	\$622	20%	90%	\$560	18.0x	20.0x	\$11,197	\$11.75	
Estimated Totals	\$16,097	13%	31%	\$5,058	4.9x	15.7x	\$79,438	\$83.36	
							Core Business Valuation	\$79,438	\$83
							+ Cash	\$11,945	\$13
							+ Investments	\$4,439	\$5
							Total Equity Value	\$95,821	\$101
							Current Equity Value	\$61,944	\$65
							Base Case Upside		54.7%

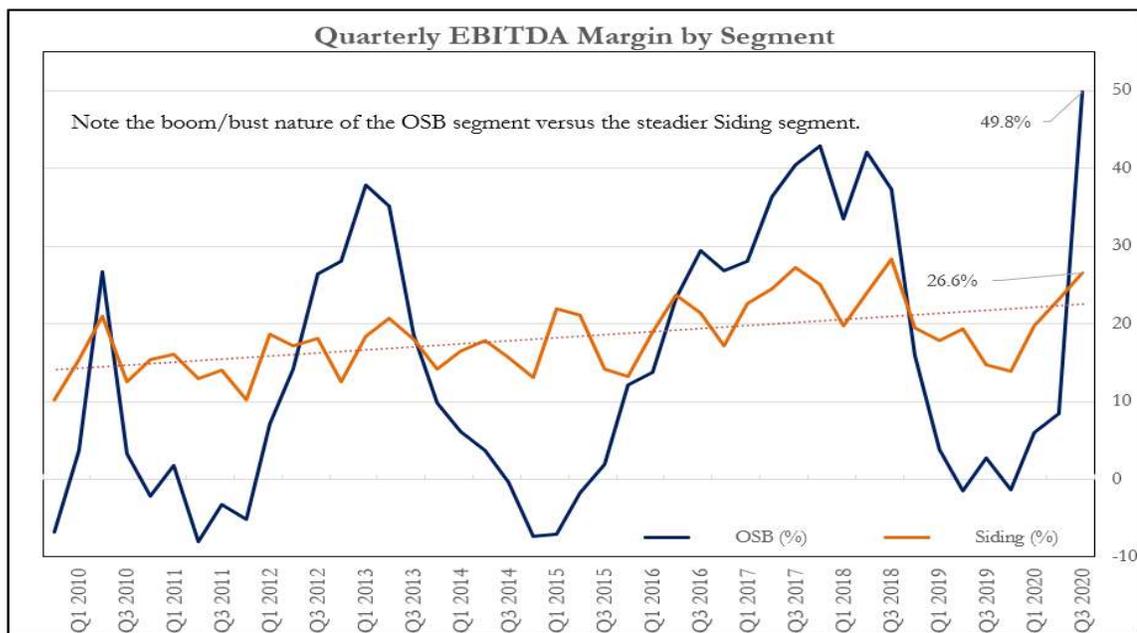
NTDOY is a 5.1% position.

Long Louisiana Pacific (LPX)

Louisiana Pacific (LPX) is another company that is undergoing a transformation. While not a hardware to software transition like NTDOY/AVID/EXTR, LPX has quietly shifted to becoming a more stable business overall. LPX is a wood products company. They are known as a leading player in the oriented strand board (OSB) market, a plywood substitute. Like most price taking commodities, OSB is a space notorious for its booms/busts tied to housing starts and home remodeling activity with lumpy supply additions/reductions that react to market prices on a lagged basis. For this oligopolistic industry, the supply side is important. The largest North American producer Norbord is struggling to ramp production due to skilled labor shortages and LPX says they won't even think about adding capacity until housing starts are sustainably above 1.4 million. Given their expertise in engineered wood products, LPX entered the home siding space in 1997 and started breaking that segment data out as far back as 2004.

LPX's Siding segment is consistently taking market share (currently at ~13% of the new home construction market), as evidenced by the segment's unit volume growth compounding at 3x the rate of growth of new home starts since 2015. Within siding, LPX's stated goal is to shift their product mix even more (from 2% to 30%+) to higher margin pre-finished products, along with a steady cadence of releasing other product variations to drive demand and further juice impressive margins. Unlike with the OSB side of the business, LPX has demonstrated pricing power by consistently raising SmartSide's pricing by 3-4% per year-and this has no connection or correlation with underlying commodity prices. And over the last decade within the OSB side, LPX has shifted >20% of the sales to more value-added and specialty products as opposed to the most basic commoditized OSB, which has sustainably lifted that segment's margins as well.

James Hardie (JHX AU) is a pure trading comp for LPX's Siding segment, selling fiber cement siding as opposed to LPX's wood-based siding. LP SmartSide can save builders on labor as it lighter, can be installed more easily and can be treated like any other wood product and be cut with the same saw blades, but there are pros and cons for HardiPlanks and SmartSide. JHX does 24-25% EBITDA margins, lower than LPX's 26.7% in the latest quarter despite JHX having the additional benefit of 3x the scale. JHX's 7-year average EBITDA multiple is 14.4x (currently >18x NTM). Its high valuation is remarkably consistent as the stock as only dipped below 11x forward EBITDA estimates for less than one month since 2012 (during the March market crash this year). Other than this last quarter due to record high OSB prices, Siding seems to have sustainably overtaken OSB as the larger profit contributor for LPX which should drag its overall valuation multiple higher with each passing quarter. Siding's steadier revenue and margins will undoubtedly act as a ballast going forward, yet the stock has not re-rated at all and remains joined at the hip with Norbord, an OSB pure play.



LPX is valued at 6.8x forward EBITDA estimates with consensus assuming a full and immediate reversion of OSB prices to Q1 2020 levels. If we give their siding segment 14x, a full four multiple turns discount to JHX despite LPX growing faster and being more profitable, and ascribe pure play Norbord's 10-year median EV/EBITDA multiple of 7.0x to the OSB segment, LPX still has over 50% upside. This ignores an additional ~\$60 million of EBITDA from their engineered wood products and South American segments, as well as a burgeoning prefabricated/off-site house framing business.

We think housing starts can exceed 2018 levels in 2021 and the mix shift to detached single family homes will increase. Each single-family home consumes three times as much lumber as a multi-family unit, providing a good tailwind for LPX with risk to consensus estimates to the upside. We believe the company's clear sum of the parts discount will eventually be closed one way or another.

LPX is a 4.0% position.

Conclusion

The master carpenter of the Yakushi-ji temple complex in Nara, Japan, Tsunekaza Nishioka, was still planning projects that may take 30 years when he was in his 80s. He was fond of pointing out how brief the human lifespan was compared to the thousand years a tree could live or how long a well-built temple would last (1,000+ years) and how this sense of perspective on time guided his daily work. For the temple renovation project that he is most recognized for, Nishioka expected it would take a decade alone just to find the suitable timber and commence the work. He and his team had a religious-like devotion to even the most banal minutiae of the project and preparation, such as spending two months just re-sharpening tools before making any cuts.⁴

We often get down on ourselves for having a bad quarter, month, or even a bad day. Instead, we must continuously strive to adopt the mindset of Nishioka by maintaining an unwavering focus on what we wish to build for the long run, rather than on short term results or how our actions may appear to others over any particular part of our overall process.

It is hard to believe, but Voss entered its tenth year in business this month. Our singular focus remains the same as it was on day one—to compound capital for our Partners and build a long-term track record of superior risk-adjusted returns. And far from 80 years old, the average (and median) age of the team here is only 31. We plan to continue for decades to come.

Thank you for your continued investment with our firm.

Sincerely,

Voss Team

Appendix:

- 1- https://learn.extremenetworks.com/Omdia-2020-Cloud-Managed-Networking-Report.html?utm_campaign=Q1-21_Omdia_2020_Cloud_Managed_Networking_Report_CORP&utm_medium=website&utm_source=website&utm_content=&ga=2.112274564.1029738680.1601654712-799504928.1599862361
- 2- <https://investor.extremenetworks.com/news-releases/news-release-details/extreme-networks-provides-update-q1-outlook-expects-deliver>
- 3- <https://www.wsj.com/articles/harry-potter-conjures-comeback-for-universals-parks-1460512158>
- 4- From the book-- *The Genius of Japanese Carpentry: Secrets of Ancient Craft*

Common Terms:

<i>CAGR – Compound Annual Growth Rate</i>	<i>GDP – Gross Domestic Product</i>
<i>DCF – Discounted Cash Flow</i>	<i>IRR – Internal Rate of Return</i>
<i>EBITDA – Earnings Before Interest, Taxes, Depreciation & Amortization</i>	<i>LTM – Last Twelve Months</i>
<i>EPS – Earnings per Share</i>	<i>NTM – Next Twelve Months</i>
<i>EV – Enterprise Value</i>	<i>P/E – Price to Earnings</i>
<i>FCF – Free Cash Flow</i>	<i>YTD – Year to Date</i>

Disclosures and Notices:

Beginning January 1, 2020, all investment activity is conducted by the Voss Value Master Fund, LP (the “Fund”), which has 2 feeder funds, and therefore performance figures from January 1, 2020 onward are calculated based on the Master Fund. All limited partners invest in the Fund through one or more of the following feeder funds: Voss Value Offshore Fund, Ltd. (the “Offshore Fund”) and Voss Value Fund, LP (the “Predecessor Fund”), each a “Feeder Fund”. Performance figures for the Predecessor Fund are contributable to

Travis Cocke as sole portfolio manager. Mr. Cocke maintains the same the position with the Fund and the Fund will employ a similar strategy as the Predecessor Fund. Actual returns are specific to each investor investing through a Feeder Fund. Each Feeder Fund was established at different times and has varying subsets of investors who may have had different fee structures than those currently being offered. As a result of differing fee structures, differing tax impact on onshore and offshore investors, the timing of subscriptions and redemptions, and other factors, the actual performance experienced by an investor may differ materially from the performance reported above. Portfolio statistics shown are inclusive of the Predecessor Fund and the Offshore Fund.

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Past performance does not guarantee future results.