DARDEN
Capital Management

WINTER 2022

The Advisor

DARDEN
Capital Management

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Chief Investment Officer	Charles Patton
Chief Financial Officer	Mary Winston Richardson
Chief Operating Officer	Mark Llanes

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Portfolio Managers	James Nish
	Alexandra Ruark
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Senior Portfolio Manager	Philip Apelles
Portfolio Managers	Evan Berenholtz
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a letter from the CEO

Dear Stakeholders,

We are pleased to bring you the Q4 2021 edition of The Advisor. Within the enclosed pages, please find updates from each of the five fund teams on portfolio activity over the last quarter, featured DCM stock pitches from each of our funds, and a 2022 Market Outlook written by our CIO, Charles Patton.

Q4 2021 was an exciting quarter for the larger DCM team. We sent several First Years on the road to pitch at our peer institutions' stock competitions along the east coast and had our very first all-female team win 1st place at Cornell's event. We continued to develop our understanding of the current ESG investment landscape by hosting Sarah Clark-Hamel from Ceres for a Speaker Series event with the Rotunda Fund. We were also thrilled to host Andrew Brandon, Managing Director and Portfolio Manager with J.P. Morgan Asset Management, for a Q&A session in tandem with the Darden Executive Fund run by our EMBA colleagues. We are excited to develop this relationship further in 2022 and look forward to partnering with the Darden Executive Fund on future speaker and educational events.

We are facing strong triple headwinds to kick off the year, with high starting valuations, less policy support, and strong inflationary pressures here to stay. I write this on the back of the worst week in markets since the outbreak of the pandemic, with tech names bearing the brunt of the selloff amid shaky company earnings and prospects for continued rate hikes by a hawkish Federal Reserve. The volatility that has gripped markets this month has showed little sign of letting up, dragging investors along for what has felt like a nightmare seesaw ride to kick off 2022. At only three weeks into the new year, the S&P 500 has dropped more than 6% and the ten-year has risen to as high as 1.9%, a two-year high. The Shiller price-to-earnings ratio for US equities is hovering close to 39x now, only surpassed once in the last 140 years.

It is becoming clear that inflation will hold the key to markets in 2022. Labor markets across the world are extremely tight. In the US, there are over 10 million vacancies and less than 7 million unemployed workers. Wage inflation is already high, and may increase as the unemployment rate falls further. Moreover, significant longer-term pressures like policies to address climate change and inequality have the potential to keep inflation high. Combine this with high fiscal spending and central banks more tolerant of inflation overshoots and it is no wonder that wages are rising fast and policy rates are lagging inflation.

The Fund has taken a hit during this period and a significant portion of the detraction can be attributed to the growth-tilt of our portfolios. 2 of our 5 funds continue to outperform their respective benchmarks. While we feel confident in the fundamentals of our holdings, we have used this time to explore more defensive positioning and revisit position sizing as we brace for continued market volatility in the months ahead. These structural changes in the economy and markets have forced us to consider new ways of thinking about asset allocation, security selection, and competitive dynamics. We believe now more than ever the benefits of active management will drive returns and have doubled down on our conviction in names with high pricing power. As we peer around the corner towards tomorrow, we will continue to stress a concentrated approach and actively seek cost-pressure driven market dislocations.

One of the key attributes of investment management that initially drew me to the industry is that it is, by nature, a learning business. Both investing successes and failures (and if we're being honest, probably more so the failures than successes) help to build muscle memory and pattern recognition that can alert us to what might unfold next. Taken together, these accumulated learnings can often serve as a point of differentiation as we attempt to predict the direction of future returns in a world of heightened uncertainty. These days as everyone is looking for an edge, I find it helpful to fall back on the realization that sometimes the most valuable advantage is simply staying curious and feeding that insatiable drive to keep noticing and learning while others have stopped. As a team we have kept this close to heart and are excited to capitalize on this market environment as an opportunity to refine our investment theses and portfolio monitoring processes.

As of December 31, 2021, assets under management were $30.177 million, up approximately 6% since September 2021 and 11% since we took over the portfolios in March 2021. The Fund has underperformed our blended benchmark by 2.7% since March 2021. The main driver of this divergence can be attributed to the fund size at the time of portfolio transitions in March 2021. The Cavalier Fund and Darden Fund combined to contribute 45% of assets in March 2021 and are underperforming benchmarks by 6% and 7.5% respectively. Please see the performance table below for more information.

In the pages to come, you will have the opportunity to hear more on fund-specific moves throughout the quarter. We encourage you to reach out with questions or feedback and warmly welcome opportunities to engage with alumni and friends of the program. We are grateful for the exceptional experiential learning platform that Darden Capital Management provides and thank you for your continued support.

All the best,

Samantha R. Richman

Samantha Richman, Chief Executive Officer

Darden Capital Management

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DCM Performance Table

	Market Value	% of Total Portfolio	Since 3/31/2021	1 Year 12/31/20-12/31/21	1 Year 12/31/18-12/31/21
Darden (Small Cap)	6,337,103	21.0%	-5.6%	3.9%	22.6%
Russell 2000			*1.9%*	*14.8%*	*20.0%*
Jefferson (Value)	6,154,697	20.4%	18.1%	23.0%	24.4%
Russell 1000 Value			*12.5%*	*25.1%*	*17.8%*
Cavalier (Long/Short)	6,351,527	21.0%	15.2%	16.6%	24.6%
S&P 500			*21.2%*	*28.7%*	*26.1%*
Monticello (Global)	6,055,586	20.1%	16.6%	22.5%	24.7%
MSCI ACWI			*13.4%*	*18.5%*	*20.4%*
Rotunda (ESG)	5,278,091	17.5%	16.2%	20.7%	18.9%
S&P 500			*21.2%*	*28.7%*	*26.1%*
Total	**30,177,004**	**100.0%**	**11.1%**	**16.7%**	**23.1%**
Weighted Average Benchmark			***13.6%***	***34.5%***	***22.0%***

DCM Market Outlook 2022

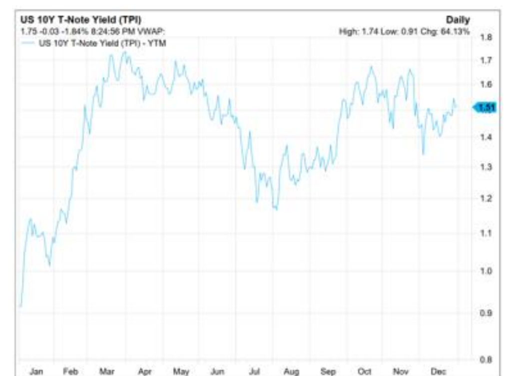
by Charles Patton

Take Nothing On It's Looks; Take Everything on Evidence. There is No Better Rule[1]

When setting out to write a prospective of what 2022 might bring investors, a quick glance through history provides many humbling examples of predictions gone drastically wrong. From the economist Irving Fischer's pronouncement in the New York Times that stocks had reached a "permanently high plateau"[2] just before the stock market crash in 1929 to Jim Cramer's repeated calls to dump HP and BestBuy just before they surged, there is ample room to be overly cautious and overly optimistic.[3] So instead of attempting to forecast the latest breakthrough technologies or geopolitical ructions, I will center this note on explaining what happened in 2021 and what the starting point for equities in 2022 might inform us about the future.

As the chart below suggests, the US market in aggregate as measured by the S&P 500 had a very strong year.[4] Not only did the S&P net a total return of 28.7%, but it did so with surprisingly lower volatility than headline risks around a global pandemic might suggest. While memories of the year in finance may linger on Elon Musk's Tweets, Gamestop's improbable rise, and cryptocurrency valuations bouncing around, the broader stock market spoke softly and carried a big stick. The other indices DCM benchmarks against told a similar though slightly weaker story, with the Russell 2000 (Small Cap) returning 14.8%, Russell 1000 Value returning 25.2%, and the MSCI ACWI coming in at 21.4%. For more details on DCM returns relative to these benchmark's please see this quarter's Advisor coming in a few weeks. No matter where you looked equity return graphs were going up and to the right, as countries emerged from COVID lockdowns, strong fiscal stimulus made its way into surging demand, and extremely easy central bank policy (read low interest rates and lots of asset purchases) continued to make shares look much more attractive compared with paltry bonds yields across the developed world.

US Treasury 10 Year Yields Rise with Inflation



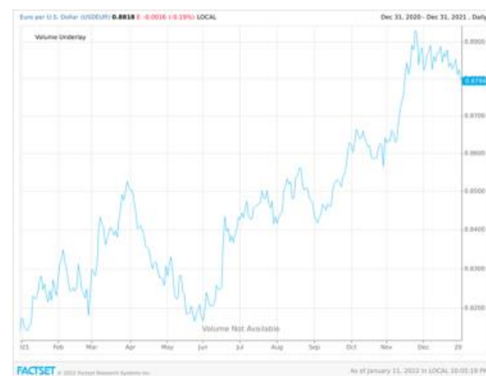
On the "Real Economy" side those returns were driven by strong growth, as the Fed's best guess for 2021 real (i.e. with inflation subtracted out) growth is 5.5%, way above the (2.3%) decline of 2020 and almost double the 2.4% average from 2016-2019.[5] Things get a little trickier on the inflation side, as expected transitory inflation from our economic reopening started to enjoy it's stay and settle in during the second half of 2021. The Fed's preferred

S&P 500 Prices (Blue) and Volume (Green) (1/1/21 – 1/1/22)

barometer is PCE inflation which they peg at 5.3% for 2021, more than triple the 2016-2019 average of 1.7%.[6] To combat this, the Fed has discussed shrinking its balance sheet this year, and now projects the Federal Funds Rate to increase to 0.9% by the end of 2022 and 1.6% by the end of 2023 against 0.1% today.[7] This feeds through into the wider bond market, where the 10 Year Yield (below) almost doubled over 2021.

Those changes to inflation and the Fed's likely response are hugely important for share prices, because as we mentioned above, the Fed's easy money policies have played a large part in the booming market since we first locked down for COVID a short 21 months ago. The prospect of higher rates has driven a significant divergence between value stocks (those less expensive per $ of earnings today) and growth stocks, as growth stocks are usually associated with payoffs further into the future whose worth is more impacted by higher rates. Large cap value delivered returns 5.6% higher than growth while small cap value delivered 20.6% higher returns, reversing a long run of growth dominance.[8] This rise in rates also impacted the dollar, whose strength partially explains the less spectacular performance of international stocks mentioned above (note that graph below shows that a year ago $1 bought you €0.82 while by the end of the year $1 bought €0.88, so each $ buys more €).

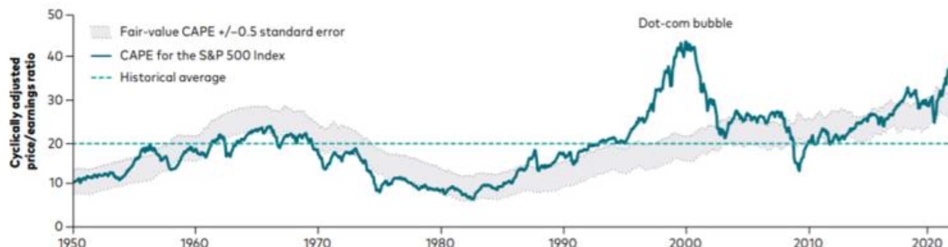
U.S. Dollar Appreciates vs Euro (12/31/20 – 12/31/21)



We Had Everything Before Us, We Had Nothing Before Us[9]

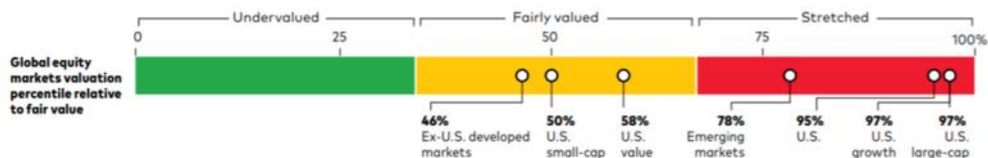
So now that we've broken down how we've gotten here, what does that tell us about the road that lies ahead? For starters, rates continue to matter. The chart from Vanguard below shows the valuation of the S&P 500 measured by the price of each share divided by the earnings attributable to each share.[10] This blue line tends to revert back towards to the grey band, which reflects the underlying interest rate environment. We remain above the grey band, and as rates increase that band will continue to track lower (i.e. our current valuations will look even more stretched). Therefore, the path of rates over the next year really matters for stock return expectations.

Vanguard Historic Cyclically Adjusted Price/Earnings Ratio: S&P 500 Actuals vs. Fair Value[10]



For a second course, we need to be more exacting about valuation assumptions. The graph shared above does not necessarily mean valuations drop without a catalyst, but it should inform us that we need to be very careful in selecting multiples when pitching stocks. Vanguard similarly includes in their report a spectrum of how stretched valuations appear relative to rates that I've pasted in below.[11] It makes a strong case for a comeback of value against growth stocks, with value performing better if rates continue to rise. It also argues for international markets with slightly lower valuations, though those markets could be negatively impacted by continued rate increases and subsequent dollar strength. When translating some of these expectations into DCM pitches, the maxim that improvements to company operating metrics should include an improved multiple remains true. However, care is required when projecting further multiple expansion for firms already the most richly valued among their peers. Similarly when considering international stocks currency exposure should be accounted for, as firms with significant unhedged dollar debt might have difficulty repaying it if the dollar strengthens further.

Vanguard Current Estimate of Market Value vs. Fair Value: Market Subsegments[11]



For dessert, I would end on the higher note that just because we've had a great run doesn't necessarily mean that stocks are going right back down. Many people would be tempted to look at the chart above and project that share prices tumble and fund managers have to part with dear yachts that are practically part of the family at this point. However, this need not be the case. We are still in the early years of expansion following a sharp but short recession. While valuations per $ of earnings might not continue to balloon, the earnings they are based on have plenty of room to improve as the economy continues to grow.

One spur could be American consumers who are currently sitting on $2.5 Trillion with a T of wealth beyond what the pre-COVID trend would suggest, a combination of the pandemic reducing consumers' ability to spend and government stimulus checks bolstering balance sheets.[11] Additionally, though our goods consumption (think that new Peloton you splurged on during lockdown) is 15% above pre-pandemic levels, services (think canceled cycle classes) are still 1.5% below pre-pandemic highs at last measurement.[12] A sharp-eyed hunt for stocks that allow consumers to put some of that cash to work on services they've longed for but have been unable to access may pay dividends. Another option is to look for stocks easily able to pass on inflation to customers, or stocks that benefit from rising rates like financials. The market tear of the past two years may force us to shed past Great Expectations for market returns, but this remains a market with opportunities available for those willing to work to find it.

Charles Patton, Chief Investment Officer

Darden Capital Management

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The Cavalier Fund

Senior Portfolio Manager Michael D'Onofrio

Portfolio Managers James Nish

Alexandra Ruark

Timothy Wilson

To Our Friends and Partners,

A warm greeting from the Cavalier Fund. In the quarter ended December 31 (Q2), we accomplished much of the good work that we had set out to do after taking over the fund. By the beginning of the quarter, we had already rotated out of virtually all of the names that we didn't feel good about inheriting. We saw strong engagement from the first-year class; in most of our meetings, second years were outnumbered! We even had two first years pitch our fund. We continue to have a strong reporting process, reviewing performance every week to ensure we are on top of our names and our progress. We are also attempting to increase short exposure, as Calix (CALX) was pitched as a short.

As a refresher, the mandate of the Cavalier Fund is to make both long and short investments with a primary focus on domestic equities with a net long exposure of 80%. We employ a bottom-up fundamental approach to evaluating securities with our preferred long investments to be made in companies with sustainable competitive advantages priced at attractive levels. We are also looking for companies that are in special situations—spin-offs, binary events, etc. Our preferred short investments focus on the "3 F's"—Fads, Frauds, and Failures—overly optimistic analyst expectations, signs of earnings manipulation, and fundamentally flawed business models/unsustainable capitalization structures.

In the quarter we concentrated on adding quality names to the portfolio. Allie Ruark pitched Dynatrace, a company that operates in the data center services space and is growing at a round 30% per year, trading at an attractive valuation relative to its growth rate. The Company has a more complete product suite than its competitors, who offer point solutions. Moreover, the TAM is huge at around $50B. We initiated a 3.5% position by freeing up capital from our legacy Live Nation position. While Live Nation possesses a near monopoly and closed on the OCESA acquisition in December to enhance Latin American growth, the Company is priced for perfection for a full COVID recovery of its concerts and then some. It is trading at 32x 2023E Free Cash Flow to Equity! AMD performed quite well for the second straight quarter on the back of taking PC market share from Intel via strong manufacturing execution and a strong overall product pipeline in its other segments. As the position was about to grow over 10%, we trimmed the name to maintain compliance. Zillow had also fallen from its high at around $200 and we looked at it as an opportunity to upsize the position at an attractive price. Tim Wilson pitched a compelling case to buy more, citing the Company's strong flywheel around iBuying, IMT, and mortgages and showed that the segments were undervalued on a sum-of-parts basis. However, shortly after upsizing the position, who could have predicted that Zillow would shutter its iBuying segment as competitors like Opendoor thrive in this space. We unfortunately are sitting on paper losses, but are planning to hold until the stock reaches fair value at just over $100.

Moving on to performance. Since our inception as managers of the Cavalier Fund on March 31, 2021, we have experienced a gain of 15.2% versus the benchmark S&P 500 gain of 21.2% as of December 31. Looking at individual stock contribution within the period of Q2, a few names stand out as strong contributors. AMD, Apple, and Costco contributed 3.0%, 2.0%, and 1.8% to portfolio return, respectively. We believe AMD continues to be positioned for success against Intel. Their superior execution in rolling out new production processes and

strong road map in data center and graphics will serve them well against Intel and NVIDIA. Although Intel is slated to catch up to AMD with their new PC processor production process roll-out, AMD will again leap ahead following a new release of their own. Apple took a page from Disney's book and continues to execute on one of the best flywheels. iPhone, MacBook, apple TV, etc. all play very well together. Apple is realizing price increases on their premium phones. The app store continues to print money, although anti-trust concerns loom regarding the 30% take rate—something for us to keep our eyes on. Costco's superior supply chain and scale insulated the Company from much of the supply chain crisis and Costco continues to be a best of breed retailer.

Detractors during Q2 included Zillow, Charter, and Disney at (2.2%), (0.7%), and (0.6%) contribution, respectively. Charter is a legacy holding in which we still have strong conviction. While the Company is spending more on its wireless roll-out and margins might be challenged in the near term, we believe having wireless will reinforce the stickiness and overall value of its internet and cable offerings. Charter also possesses monopoly or near-monopoly positions in most markets. As the world moves on from COVID, we believe Disney will see a strong resurgence in its parks and studios segments. Disney+ continues to be a strength. A divestiture of ESPN could further unlock shareholder value.

In summary, Q2 was an interesting time in the markets. Whereas just after the onset of COVID and up until Q2, it felt like the markets would forever grind upward, signs began to show in Q2 that fundamentals might win out again. Fed tapering, the supply chain crisis, inflation, and rising COVID case counts from Omicron began to take the wind out of some of the high-flying tech names. The cracks were beginning to show. We had identified a list of names that we were prepared to buy more of. However, we were still light on short pitches. While I had personally pitched Calix (CALX) as a short, we did not initiate the position within the quarter due to ongoing diligence requirements after the pitch. These have since been resolved. I am urging the team to continue to look at shorts going forward as a top priority. With the markets are entering a period of volatility in Q3, we are monitoring Spotify and Dynatrace in case they drop further and become attractive candidates to buy more, aligning with the Warren Buffett mentality of "going on sale". We are also doing further diligence on Universal Display Corporation (OLED) after hearing a stellar first-year pitch.

We look forward to a fruitful Q3 in which we can continue to add quality to the portfolio, while taking advantage of the volatile market conditions through upsizing names we like at a discount and initiating more short positions. We are excited to welcome the first years as well toward the end of the quarter!

Michael D'Onofrio

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The Jefferson Fund

Senior Portfolio Manager Philip Apelles

Portfolio Managers Evan Berenholtz

Harrison Clement

Lauren McDermott

To our Friends and Partners,

Overall, the Jefferson Fund has performed well in Q4 2021. We generated a net gain of 8.6% which outperformed the Russell 1000 Value (7.8%), our main benchmark. However, we underperformed against the S&P which generated a 11.0% return over the period. Our positions in Microsoft (+19.5%), O'Reilly Automotive (+15.6%), and Nike (+15.0%) contributed the most to our overall return. We remain bullish on O'Reilly, but have begun scaling back our exposure in both Microsoft and Nike in Q1 2021. Microsoft and Nike currently comprise our two largest holdings and we believe both companies may face increasing headwinds in 2022. In terms of new positions, we added two new names to the portfolio over Q4: Citigroup and Spirit Aerosystems. The investment rationale for both can be found below, but the theses center around increased travel post COVID and the Fed shifting to a more hawkish stance.

From a macro prospective, we have been hyper focused on inflation and navigating a potentially rising interest rate environment. Inflation has climbed to the highest levels in 40 years and has permeated through all corners of the market. From higher input costs to rising wage expenses, inflation can impact businesses across industries. And given how elevated inflation figures have become, the Federal Reserve has now shifted away from describing it as transitory and is now preparing to actively combat it through several rate hikes. Additionally, bond purchases will continue to taper and likely end this year. Effectively, the Federal Reserve is turning off the tap, and market participants will need to tailor their investing styles accordingly.

As a result, the Jefferson Fund team is actively adjusting the portfolio to brace for a more volatile market and will begin creating a more defensive portfolio for the next class of DCM members to inherit. We plan to lessen our exposure to names traditionally characterized as growth and lean more heavily into our value bias. As classically defined as the Value Fund here at Darden, we feel a rotation and into lower multiple names given the changing macroclimate will benefit us and we want to make sure we are well positioned to capture that sentiment shift. With inflation most likely here to stay, names with high pricing power that can easily push costs down to their customers will benefit and better weather the storm by protecting margins. Key holdings in CVS Health, McDonalds, and General Dynamics play well into this theme and represent companies that have the ability to increase prices without suffering dramatic losses in sales. Using McDonald's as an example, comparable sales grew 12.7% last quarter even though the company raised prices by 6% to compensate for higher labor and food costs. This shows that the burger chain has the pricing power to offset inflationary pressures and maintain margins by pushing costs down onto the consumer without disrupting sales growth.

Lastly, we believe that the benefits of active management will shine through in 2022 as being in the right companies becomes paramount. In times of uncertainty and dwindling support from the Fed, being selective will matter and overall index appreciation may be difficult to achieve. We see 2022 as a year to prove the value of active management and as an opportunity to handily beat the market.

Below I highlight our trades for Q4.

PORTFOLIO CHANGES AND HOLDINGS

Sold: Medical Property Trust (MPW), November 2021. -4% Realized Loss: Medical Properties Trust is a REIT that both acquires and develops triple net leased hospital facilities. MPW is currently one of the world's largest owners of hospitals with 385 properties and approximately 42,000 beds mainly in the U.S. and Europe. The investment thesis revolved around two central merits: an attractive dividend yield (5.2%) and exposure to a stable and growing industry (8.8% CAGR since 1960). MPW served as a nice vehicle to park

excess cash which threw off an inflation beating dividend yield, however, with the desire to purchase both Spirit and Citigroup the team needed to find additional sources of capital. We believed Spirit/Citi would be able to outperform the 5% yield in stock appreciation so decided to close our position in MPW and enter both Spirit and Citi.

Bought: Spirit Aerosystems (SPR), November 2021. 10% Up Since Initiation: Spirit AeroSystems, Inc. (SPR) designs and manufactures major aero-structures for large (primarily commercial) aircraft, including fuselages, wing components, and engine casings. Spirit is the largest supplier of aero-structures to Boeing, with contracts for every Boeing commercial aircraft currently in production, as well as one of the largest suppliers of wing systems for Airbus.

As a supplier of airline parts, Spirit is a key beneficiary of the aviation recovery out of Covid-19. We believe the stock continues to be drastically under-valued by the market, having been pummeled from both the 20-month grounding of Boeing's 737 MAX jets and the pandemic-induced blow to airline travel, two of the worst crises in corporate history. Spirit is currently trading at less than half of its pre-pandemic high (when it exceeded $102/share in January 2018). Furthermore, we believe that Spirit's long-term, sole supplier contracts in place with Boeing and Airbus (the world's two largest commercial aircraft manufacturers) give the company a competitive advantage in a market with extremely high barriers to entry.

Bought: Citigroup (C), December 2021. 4% Up Since Initiation: Citigroup stands out among its bulge bracket peers as a unique opportunity to benefit from a rising interest rate environment. While the Fed has maintained rates at zero through easy monetary policy since the beginning of the COVID pandemic, growth equities have been the beneficiary and inflation has silently ballooned to 8%. Other major US banks had a stellar 2021 with returns anywhere from 40% to 60%, while Citi traded down 3%. We believe this underperformance is due to a number of factors, including poor leadership and a drag caused by costly international consumer bank arms. Now under the leadership of CEO Jane Fraser, Citi has put forth a plan to completely revamp the bank. By divesting of unprofitable branches of the international consumer bank, Citi will free up significant capital that will be deployed to strengthen and grow the domestic bank footprint. Additionally, we have a much clearer picture of how the Fed plans to move forward with rate hikes. With the first hike expected in March, Citi and other banks will be a beneficiary of increased rates. While all banks stand to see additional revenue from increased Net Interest Margin, we believe Citi has a chance to reasonably outperform. When seen against their competitors, Citi appears to be fundamentally undervalued. While JP Morgan, Bank of America, and Morgan Stanley trade above 2x Tangible Book Value, and other peers trade well above 1x, Citi trades below 1x Tangible Book Value. In an inflated equity market where true value can be hard to find, Citigroup presents a unique opportunity to maintain outperformance. Already this year, Citi has demonstrated resilience and strong performance in a turbulent market. We expect this performance to continue.

In closing, we at the Jefferson Fund want to again say thank you to Darden, DCM, and our board of trustees for the incredible opportunity to manage a portion of the school's endowment and help give back to the school that has given us so much.

Philip Apelles

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The Monticello Fund

Senior Portfolio Manager Mudit Bothra

Portfolio Managers Stephen Frankiewicz

Tomas Barriga

Sharon Zhou

Hello and a Happy New Year from your Monticello Fund team. First and most importantly, we hope that everyone reading this letter is staying safe and healthy, along with family members and loved ones.

GLOBAL MARKETS Q4 2021 SUMMARY

There is no better way to describe it – 2021 was a historic year for the markets. Stocks overcame numerous headwinds during the past three months, including a resurgence in COVID cases, the Federal Reserve moving aggressively to end the current QE program, and a lack of additional stimulus from Washington, to hit new all-time highs in the fourth quarter and produce very strong returns for 2021. The global economy is ended the year of strong recovery, with real GDP growth estimated at 5.7%, following the sharp 3.5% decline in 2020.

The fourth quarter started with a continuation of the volatility that we saw at the end of the third quarter. In early October there was still little progress in Washington on extending the debt ceiling, avoiding a government shutdown, or providing investors clarity on future tax changes contained in the Build Back Better bill. By the middle of October, Republicans and Democrats had extended the debt ceiling and avoided a government shutdown, while many of the tax increases proposed in the Build Back Better bill were removed, which eased investor anxiety about future tax increases. The positive momentum continued in early November, as the S&P 500 drifted steadily higher, outperforming the MSCI ACWI by 10%given the tailwinds of 1) clarity from Washington, 2) strong earnings from US companies, 3) strong dollar and 4) declining COVID cases. Additionally, while the Federal Reserve announced it would begin to taper its Quantitative Easing (QE) program starting in November, the pace of the reductions met investor expectations and markets continued to rally to new all-time highs in mid-November. Then on Thanksgiving Day, the World Health Organization declared the Omicron variant of COVID-19, which had just been discovered in South Africa, a "variant of concern" and that designation caused a sharp selloff in stocks, partially thanks to very low liquidity, as governments once again closed borders to international travel, and the world wearily braced for another increase in cases.

Markets rebounded in December, however, thanks to less aggressive messaging on rate hikes from the Fed combined with governments not imposing economically crippling lockdowns in response to the surging Omicron outbreak. As the news of lower risk of hospitalizations and deaths due to the new variant made headlines, global equities extended the rally late in December, and the S&P 500 finished the month with a four percent gain.

PERFORMANCE OVERVIEW

As of December 31, 2021, the Monticello Fund had a market value of $6,055,586 deployed across 29 holdings. The fund continues to outperform our benchmark on a risk-adjusted basis, noting that since March 31, 2021, we have delivered a 16.6% total return, which exceeds the MSCI ACWI (13.4%) by 326bps across the same time-period. Approximately 40% of fund's value is invested in Microsoft Corp. (MSFT: ~9%), Apple Inc. (AAPL: ~9%), MSCI ETF (ACWI: ~8%), Deere & Co. (DE: ~7%), and Berkshire Hathway Inc. (BRK.B: ~7%). We intend to reduce the concentration by trimming those positions, including ETF, and invest those funds in other high conviction existing names in the portfolio such as Walt Disney Company, Royal Dutch Shell, and Pfizer, each of

which are ~3% of fund's value currently. We also plan to obtain exposure to sectors which hold potential for high returns against the backdrop of rising interest rates, oil prices, and surge in cloud demand – Financial Institutions (Citigroup, HSBC Holdings Plc and Barclays Plc), Oil Exploration (Conoco Philips) and SaaS/Fintech companies (Palantir Technologies, Cloudflare, Paypal, SoFi Technologies and NU Holdings)

LOOKING AHEAD

Markets have exhibited very impressive resilience since the pandemic began and that remained the case throughout the fourth quarter and all of 2021, as the strength of the U.S. economy and corporate America helped produce another year of substantially positive returns in stocks.. Higher inflation, a shift toward monetary tightening, and new coronavirus variants all pose potential challenges for economic growth and earnings—at a time when valuations appear elevated across global equity markets.   The bearish economic case now centers on monetary and fiscal policy. We believe that as governments and central banks withdraw the massive stimulus applied during the pandemic, economic growth inevitably will slow sharply. But slower growth doesn't necessarily mean low growth. A number of tailwinds should sustain the recovery in 2022:

- Consumers are in a strong cash position, especially in the U.S., where over USD 2 trillion is sitting in checking accounts and other short-term deposits
- Asset appreciation has boosted household wealth both in the U.S. and globally
- Pent-up demand for housing should continue to fuel new home construction
- Corporate balance sheets generally are in strong shape, with high liquidity and debt service capability
- Transportation bottlenecks appeared to ease in late 2021, as seen by a sharp drop in global seaborne shipping costs

Monticello fund is well positioned to capitalize on these macroeconomic tailwinds with significant exposure to exposure to Consumer Discretionary (Nike Inc, Tractor Supply Co. and The Walt Disney Company) and Technology (Microsoft Inc, Apple Inc, and IIVI) sectors.

Unless pandemic conditions deteriorate significantly, improving global supply chains and factory re-openings could ease the upward pressure on prices in 2022. Much of the 2021 inflation surge was concentrated in specific products—such as used cars and gasoline—that were particularly hard hit by supply/demand imbalances. The hefty price hikes in these goods seen in 2021 are unlikely to be repeated in 2022.

In terms of equity valuations, much will depend on the strength of earnings growth in an environment where the spread of coronavirus variants and the potential for rising interest rates both pose significant—if contrary–risks to the global economic recovery.

Regional Snapshot:

- United States - In the U.S., it is expected that moderating demand, coupled with a rebalancing in demand (from goods to services) and a healing supply-side of the economy, should allow inflation

rates to throttle down aggressively in the second half of 2022, as the markets are pricing a 94% chance of at least one rate hike by March 2022 and most likely 3 rate hikes by September 2022

- Eurozone - Europe is expected to head into 2022 with healthy growth momentum, with business surveys showing broad-based gains across countries and sectors, and fiscal policy set to provide persistent support to growth. We believe that the MSCI EMU Index, which reflects the European Economic and Monetary Union, has the potential to outperform the S&P 500 in the coming quarter.

- United Kingdom - In the UK, Brexit has placed constraints on labor supply, putting upward pressure on wages and inflation. The situation is encouraging the Bank of England to begin raising interest rates, with markets priced for liftoff in February. While UK equities have lagged the global rally in 2021, the FTSE 100 Index is the cheapest of the major developed equity markets and offers a dividend yield of close to 3.5% as of November 2021. We believe it has the potential to outperform in a global cyclical rally as fears around inflation and COVID-19 ease.

- China - China's property-market downturn, triggered by the collapse of developers such as Evergrande, is a large drag on economic growth. It's difficult to gauge the exact size of China's residential property sector, but somewhere around 20% of GDP (gross domestic product) seems in the ballpark, according to various estimates. A reasonable assumption is that there will be some stimulus in the first half of 2022, which should see China's growth trajectory improve toward the end of the year

- Latin America - Latin America posted a solid economic recovery in 2021 but may see moderate growth in 2022 as the low base effect dissipates and monetary and fiscal policies are tightened in the face of high inflation. In the case of LATAM, after a contraction of 6.8% in 2020 and a likely rebound of 6.3% in 2021, a 3% expansion in GDP is expected in 2022. Increases in interest rates will continue, while the fiscal policy will likely be focused on reducing fiscal deficits and public debts, which will prove challenging in a context of rising social demands.

More broadly, as we consider all that has occurred in 2021 and look forward to 2022, one of the biggest takeaways from another unpredictable year in the markets is that a well-planned, long-term-focused and diversified financial plan can withstand virtually any market surprise and a related bout of volatility , including multiple COVID waves, inflation reaching 30-year highs, and the Federal Reserve removing historic accommodation. For example, back in May 2021, we obtained exposure to Energy Sector on a belief that oil prices would rise eventually as travel demand picks up. We opportunistically sold the position in December as concerns around new variant made headlines, impacting travel demand and thus oil prices. As portfolio managers of the Monticello Fund, notwithstanding the strong performance of markets in 2021, we seek to continually improve our skillset around security selection and portfolio management. Thank you again to Darden Capital Management for your ongoing confidence and trust in this impactful learning experience.

I would now like to share with you several portfolio updates at the Monticello Fund. Please feel free to share your thoughts and ask any questions that you have after reading.

PORTFOLIO DECISIONS AND ACTIVITY

During the third quarter we initiated three new positions that we believe represent attractively priced opportunities:

Bought: Daimler (DDAIF - $89.69), October 2021

Bought a 3% (of fund's value) position to obtain exposure to the European auto industry. We believe Daimler is uniquely positioned for success in the existential EV race. After the spin-off in Dec'21, the company now trades under two tickers – Daimler AG (DDAIF) and Daimler Truck Holding AG (DTRUY).

Sold: Energy Select Sector ETF (XLE - $54.71), December 2021

Sold the Energy Sector ETF on the belief that the surge in the COVID-19 cases due to the new variant might weigh on oil demand soon as countries worldwide began to reimpose travel restrictions, impacting mobility. The fund realized 2.84% total return (over a 7-month period) from the sale.

Bought: II-VI Inc. (TTE - $62.09), December 2021

IIVI is one of the largest vertically integrated photonics and compound semiconductor companies in the world.

Our investment thesis is based on the fact the company has a robust product portfolio having applications in high growth end markets, successful M&A record, and a bulletproof balance sheet. The stock has performed relatively well, gaining ~15% return to date.

Bought: COPA Holdings S.A (XLE - $79.98), December 2021

Basis our belief in the potential of companies in emerging economies and to diversify the portfolio, we decided to invest ~3% of fund's value in COPA, a Latin American airline company, The stock has shown impressive performance since purchase (~9.9%) owing

to its geographical advantage, single model fleet, and relative cost advantage.

REBALANCING

We rebalanced our position in AAPL from 9.9% to ~7% on 15-Dec-2021 to continue to be compliant with DCM operating guidelines . We realized +1,116.41% return upon rebalancing. We continue to have strong conviction in AAPL against the backdrop of resolving parts shortage, products hitting new revenue records, potential upside from bundling, higher LTV per customer and improving margins.

CLOSING REMARKS

Once again, the team is very excited to manage the fund and looks forward to leaving our mark in the process. While these turbulent times have impacted our lives in unexpected ways, we see it as an unparalleled learning opportunity to further enhance our skills and knowledge in a subject that we are very passionate about. We thank you for the opportunity and encourage you to reach out directly with any questions.

Mudit Bothra

Darden Capital Management

BothraM22@darden.virginia.edu

The Rotunda Fund

Senior Portfolio Manager Wallace Kyle

Portfolio Managers Percy Oliver

Elizabeth Ughetta

Christina Walters

To our Partners and Friends,

I hope everyone had a wonderful holiday season!

PERFORMANCE HIGHLIGHTS

As of December 31, 2021, the Rotunda fund managed $5,278,091 in assets across 24 names. Towards the end of the year, the fund experienced tremendous volatility, specifically in high growth names. Compared to its benchmark, the portfolio was about ~10% overweight in technology services and underweight ~15% electronic technology. Since March 31, 2021, the fund has returned 16.2% compared to 21.2% for the S&P 500 benchmark and a 21.76% return for our unofficial benchmark the MSCI North Large Cap ESG Leaders. Through attribution analysis, we've determined that the negative alpha contributed to some of our high growth names, particularly tech, while our value names have performed well in this environment .

The largest contributors to our performance since March 31, 2021 were Accenture (+51.39%), Alphabet (+39.88%), and CBRE (+37.16%) with an aggregate weight of approximately 23%. The largest detractors were Renewable Energy Group (-35.74%), Paypal (-22.34%), and Twilio (-22.74 %) with an aggregate weight of about 10%. We still have strong conviction in some our worst performing names, although we believe the first quarter of the new year is going to involve cycling and concentrating our names as we further define our theses . Given the recent downturn and macro trends, we are considering repositioning our fund to take advantage of opportunities in undervaluation, especially in ESG-centric themes such as clean energy and alternative fuels.

ACHIEVEMENTS AND GOALS

Our primary initiative and goal this year, with my experience in ESG investing at Calvert Investment Management over the summer, is to further expand our ESG framework and develop something longer lasting for future members of the fund. Going forward, we plan to develop a stringent materiality approach, looking at the industry or sector the company is involved in and understanding the underlying risks thereof. We have made significant progress in further developing this framework and believe although it will take time to fully implement, it's been great to see the comradery around developing a consensus that aligns with Darden values and standards.

Another initiative we are working on is having more ESG-experienced guests visit for fund meetings. Moya Connelly, a part-time professor at Darden who worked as a Portfolio Manager at DWS as the Head of Sustainable Investments, has been crucial in further developing our ESG framework and considerations. As an experienced advisor, we are confident that she can provide additional support throughout the rest of our tenure. Sarah Clark-Hamel, a manager at the Climate Action 100+ group and manager at Ceres, was a great guest to have discuss engagement in the investment community. With over 150 companies now involved in Climate Action 100+, we at Rotunda Fund acknowledge the importance of not only allocating capital but associating with projects we believe are influential in the climate change process. Further, we plan to have more guests including John Wilson, head of engagement at Calvert Investment Management, and Calvert analysts Dan Dorman and Brendan McCarthy, to discuss how to leverage analyst research in the engagement process.

PORTFOLIO UPDATES

Buy, Renewable Energy Group (REGI), October 2021

Percy Oliver re-pitched this name earlier in the quarter which we all agreed was a great name for the Rotunda portfolio. We felt as a pure-play ESG name, it provides overall diversification to our portfolio. We believe with increases in low-carbon programs, REGI will benefit from economic advantages, increased investment in

downstream initiatives to increase margins, and an overall growing TAM. We increased our position in the name to about 4% of the portfolio.

Buy, PayPal Holdings, Inc. (PYPL) November 2021

Christina Walters re-pitched this name at the end of Q4 which we all agreed was a great name for the Rotunda portfolio. We felt as a leading market player in the payments space, PayPal will benefit from tailwinds in online consumer spending and contactless payments, growing global market share, and an increasing TAM. We increased our position in the name to about 3%

Sold, Gilead Sciences, Inc. (GILD), November 2021, 9.73% realized gain

Elizabeth Ughetta re-pitched selling Gilead after Hyder Chowdery also recommended a sell in May 2021. We all agreed to fully divest our stake in the company due to its lack of diversification with 70% of its revenue coming from solely HIV/AIDs products in addition to upcoming HIV/AIDs patent expires. Furthermore, during our tenure holding the stock, we failed to see significant gains thus we chose to reallocate funds from Gilead into other stocks.

CLOSING REMARKS

At this point, we are working through a difficult market as earnings continue to outperform, a market reallocation from riskier assets, and inflationary headwinds persist. The Rotunda fund is excited to take advantage of the environment as we look for pure-play ESG names with strong fundamentals that fit in well with the portfolio for the long term. In particular, we are interested in allocating further to clean tech and environmental services.

We look forward to keeping you updated on our progress, and to those that paved the way before us, we welcome and remain open to any questions or input!

Wallace Kyle Jr.

Darden Capital Management

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The Darden Fund

Senior Portfolio Manager Ryan McCarthy

Portfolio Managers Natalie Azarela

Jonathan Campbell

Brett Johnson

As of December 31st, the fund's assets under management reached $6.3 million, down from the previous quarter of $6.4 million. As of the end of December 2021, our Fund generated returns of 3.9% in the last twelve-month period, below the Russell 2000 benchmark of 14.8% over the same period. For the quarter ended December 31, 2021 the Darden fund returned -0.5% vs. the Russell 2000 benchmark of 2.1%.

Our team continues to evaluate each name in the portfolio, revisiting the original investment thesis and considering which of our positions were oriented to succeed in a post-COVID world. We have utilized the book reports discussed in last quarter's letter to keep track of key performance indicators at each of our portfolio companies. The volatility in broader market, particularly in the small cap landscape has led to a dislocation in asset prices that we believe we are well positioned to capitalize on.

In reviewing our companies, we identified two enterprises we believe remain undervalued in a post-COVID world:

- American Outdoor Brands (AOUT): We have initiated a core position of American Outdoor Brands in the Darden Fund. The Company provides outdoor products and accessories for hunting, fishing, camping, and shooting across a portfolio of 20+ brands. We believe it has one of the most compelling risk / reward profiles in our portfolio at these levels ($16/share) and have outlined the thesis in more detail in the following pages.

- Magnite (MGNI): We added to our position in Magnite, a company that operates an independent sell-side advertising platform. The company's advertising platform enables publishers to monetize various screens and formats, including CTV, desktop display, video, audio, and mobile, as well as allows agencies and brands to access brand-safe ad inventory and execute advertising transactions. We believe the underperformance to date is an example of the market "throwing the baby out with the bath water" and expect outperformance in the years to come.

We plan to have several pitches over the next month as we've returned to Grounds from the holidays and therefore Q1 2022 should see a handful of new names in our portfolio.

During this past quarter, we also made the decision to sell our entire position in Echo Global Logistics (ECHO) when it entered into a Definitive Merger Agreement to be acquired by The Jordan Company, a private equity firm based in New York City, for $48.25 per share in cash. The shares are trading close to the takeover price now and we believe we can reallocate the funds elsewhere in the meantime. We had purchased shares of Echo earlier in the year in February 2021 at an average price of $28.35 and sold in November 2021 at $48.15 representing a 70% increase in just nine months. We have identified a few additional compelling opportunities that we believe represent solid risk-reward profiles to recycle the sale proceeds of Echo.

One of our other goals over the next two quarters is to reallocate a large portion of our funds that are in the Russell 2000 ETF to positions that we believe that will

outperform the underlying index. As a reminder, as of today our position in the Russell 2000 is $955K. By selling down more of our ETF position, it will help us achieve our goal that we discussed in our prior letter where we want to focus on running a more concentrated portfolio than years past and to target great companies that have the potential to grow outside of our fund's mandate. We are looking to own companies that will be exceptional compounders and allocators of capital in the early phases of their life cycle. In discussing the return profile of our investments, the team is looking for investments that have compelling reasons to generate returns above market in the next two to three-year time horizon with a reasonable margin of safety amid market volatility.

We are very excited about many of the names currently being evaluated by our team as future additions to the portfolio, including two that we are pitching in early February. We are looking into some beaten down compounders that have fallen recently amid what we believe are temporary issues. Other companies we are evaluating range from outsourced business service companies, consumer products & ecommerce business, mobile gaming platforms, and housing plays including building products companies which we believe remain undervalued despite being at "peak" profitability.

As always, our team would gladly welcome any feedback or advice from our alumni and endowment sponsors. Also, I would like to thank members of the Darden Class of 2023, our team has appreciated the level of enthusiasm the first-year cohort has brought to our meetings.

We look forward to managing the fund and getting the opportunity to be active participants in the intellectual endeavors of capital markets. While we are active managing portfolio risk and anticipating shocks to the real economy and financial markets, we believe that in the realm of small caps, there are many great investment opportunities to pursue.

Ryan McCarthy

Darden Capital Management

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Featured Investment Ideas

Cavalier Fund

by Michael D'Onofrio

Calix short recommendation

Company Data	
Price (11/14/21)	$74.90
52 Week Low-High	$22.25 - $76.60
Market Cap	$5.3B
Enterprise Value	$3.0B
EV/Revenue	4.5x

Business Description

Calix sells broadband access infrastructure products including operating system platforms and analytics to copper and fiber-based broadband services companies. Calix enables its customers to define transformation strategy, build and implement new technologies, and deploy new services for their residential and business subscribers. The Company enables communication service providers to provide a wide range of revenue-generating services from basic voice and data to advanced broadband services over legacy and next-generation access networks. 78% of sales are from the United States.

Executive Summary

Calix sells network access and monitoring equipment as well as services to internet service providers. It is attempting to position itself to investors as a software and services company, but there is no evidence to support this; brokers peg hardware sales at >75% of revenue. The Company grew 28% in 2020 after ISPs were forced into an upgrade cycle from greater work-from home usage, and the market assumes an elevated growth rate will continue after declining growth the previous two years. Gross margins are under pressure, as Calix is acutely exposed to the supply chain crisis. The company invests heavily into R&D, launching many new products, but disclosure to investors on how well these products are doing and how much they are moving the needle is spotty and confusing.

Investment Thesis

1. The street thinks Calix's sales uptick from COVID will be recurring. This is questionable: COVID pulled forward years of communication provider upgrades due to the increased broadband use from work from home. 80% of revenue is from small customers that lack steady CapEx budgets like their larger counterparts and their CapEx spending is very cyclical historically. Calix won't disclose the % of revenue that is hardware vs software, suggesting the Company is predominantly hardware: Strong hardware revenue will be difficult to replicate repeat without many new customers.
2. Difficult Comps: Analysts expect 10%+ YoY growth for 2022 and 2023 after revenue growth of 28% and 23% from the last two years. Management has guided 5-10% LT growth. Inflection Point: Revenue growth is slowing (+6% in Q3 YoY, flat sequentially) and USA growth is not materially higher than ROW despite the narrative of RDOF and stimulus from Infrastructure Investment and Jobs Act as tailwinds for US revenue. Delay in RDOF rollout will delay customer demand: The market underappreciates that phase 2 of RDOF ($11.2B) is 3 years away or won't happen at all; Phase 1 auctions ($9.2B) occurred in late 2020 but funds still haven't been disbursed.
3. Supply chain issues weigh on the Company's sales and hurt gross margins and are expected to be hardest in the coming quarters: Higher component (semiconductors included) and logistics costs along with elongated lead times for many components are resulting in 50-week lead times in many cases! Management expects this to continue potentially into 2023. The Company is not passing along price increases to customers.
4. Valuation is extremely rich: Trades at 7.5x 2021E revenue while peers trade at 1-2x revenue with similar margin profiles to peers (exception of Clearfield trading at 6.8x revenue). OpEx is ramping to support many new product introductions, including its "All Platform Offerings", adding to margin pressure.
5. Lack of quality value proposition? The 3 largest ISPs (62% of ISP market share) don't use Calix: ATT, Comcast, and Spectrum don't use Calix products. Verizon and Lumen (the next largest two) do, but Lumen has declined from 18% of revenue in 2018 to 11% in 2020.

Risks

1. Outsized growth from Calix Cloud provides recurring revenue to more than make up for hardware unit losses: Calix recently added 3 new software modules (totaling to 7), suggesting innovation, possibly increasing its TAM and higher margin recurring revenue opportunities
2. Calix finds new customers to plug the non-recurring revenue hole
3. Recurring revenue (software/cloud) is larger than anticipated: While not disclosed, Cowen (the only broker to estimate) pegs it at 20% - 25% of revenue
4. Supply chain issues resolve more quickly than late 2022 or 2023: Virtually all other companies in the industry (except for ANET) have indicated that they expect resolution or meaningful improvement or the start of improvement within the next couple of quarters or by the first-half of CY22
5. Supply chain challenges are adversely impacting gross margin by at least 200 to as much as over 300 bps. CALX specifically stated that the impact is greater than 200 but less than 500 bps

Scenario	Price	Downside to 11/14 Price	Description
Bull	$49.04	34.5%	High revenue growth, margin expansion, and lower share dilution.
Base	$34.38	54.1%	Guided revenue growth with moderate share dilution.
Bear	$30.60	59.1%	Low revenue growth with more share dilution.

Cornell WIN Stock Pitch Division Winners

Sukari Brown (MBA ‘23), Mercedes Campbell (MBA ‘23) and Fanny Mei (MBA ‘23)

Featured Investment Ideas

Jefferson Fund

by Harrison Clement

Spirit Aerosystems buy recommendation

Company Data	
Price (01/28/22)	$41.33
52 Week High-Low	$17.60-$53.63
Market Cap	$4.8B
Enterprise Value	$7.3B
P/Sales	0.9x

Business Description

Spirit AeroSystems, Inc. (SPR) designs and manufactures major aerostructures for large (primarily commercial) aircrafts, including fuselages, wing components, and engine casings. Spirit is the largest supplier of aerostructures to Boeing, with contracts for every Boeing commercial aircraft currently in production, as well as one of the largest suppliers of wing systems for Airbus.

Executive Summary

The Jefferson Fund initiated a 2% portfolio position into Spirit AeroSystems (SPR) in October 2021. As a supplier of airline parts, Spirit is a key beneficiary of the aviation recovery out of Covid-19. We believe the stock continues to be drastically under-valued by the market, having been pummeled from both the 20-month grounding of Boeing's 737 MAX jets and the pandemic-induced blow to airline travel, two of the worst crises in corporate history. Spirit is currently trading at less than half of its pre-pandemic high (when it exceeded $102/share in January 2018). Furthermore, we believe that Spirit's long-term, sole supplier contracts in place with Boeing and Airbus (the world's two largest commercial aircraft manufacturers) give the company a competitive advantage in a market with extremely high barriers to entry.

Investment Thesis

1. Direct beneficiary of aviation recovery from Covid-19

Commercial air traffic experienced a nearly 60% decline in 2020, the largest drop ever recorded. Commercial aviation is now positioned to undergo dramatic growth over the next ~3 years. The Jefferson Fund believes SPR offers an extremely inexpensive way of participating in and benefiting from the unprecedented growth in which the airline industry is positioned. SPR is particularly poised to take advantage of the recovery in domestic air travel given 85% of its backlog is associated with production of narrow-body aircrafts, which are most frequently used in domestic air travel. In addition, airplane replacement orders are expected to surge in the coming years (and have already shown early signs of increase), as an estimated 80% of today's passenger fleet will be replaced by 2040, translating into over 43,000 new airplane deliveries by 2040.

2. Spirit has sole-supplier contracts in place with Boeing and Airbus.

Spirit is committed to the Boeing-Airbus duopoly thanks to sole supplier, life-of-program contracts in place for key systems of market-leading aircrafts like Boeing's 737s and Airbus's A320. The contracts call for Spirit to be the sole supplier for the life of the programs, including any derivative models not yet in production. Given extremely high barriers to entry, it is safe to assume the Boeing/ Airbus market dominance will continue and hence Spirit's long-term growth trajectory is on solid footing.

3. Stock has been overly punished from Boeing's 737 20-month groundings and Covid-19's blow to air travel.

Spirit is trading at less than half of its pre-pandemic high at a time when commercial aviation is expected to undergo unprecedented growth over the next 3 years. As of October 1, Spirit's stock is down (-50%) over the last three years vs. +26% and +57% for the Aerospace & Defense Index and the S&P 500 Index, respectively. Additionally, Spirit is trading at lower multiples than many of its peers, including a 1.8x EV/Sales vs. 2.2x for its comp group. The Jefferson Fund believes this presents a truly unique buying opportunity into SPR.

Risks

1. Recovery of commercial air traffic takes longer than anticipated to rebound.

Given Spirit's exposure to fluctuation in aircraft demand, a further disruption to airline travel will directly impact Spirit's business. Additional Covid-variants pose the greatest threat to the airline recovery, and given the unpredictable nature of the disease, the industry is particularly vulnerable to another breakout. A permanent reduction in business travel could also pose a significant headwind to Spirit's production plans.

2. Additional safety design flaws of Boeing's 737 are discovered.

53% of Spirit's overall revenue in 2019 came from Boeing's 737 jet production. While management is actively investing in ways to diversify its revenue sources, any further safety flaws associated with the 737 will meaningfully impact Spirit's business. Boeing and Spirit both insist that the 737s have undergone extensive scrutiny and testing to ensure the utmost safety for its passengers. Still, the 737s are walking a tight rope with regulators and passengers given its history with safety malfunctions.

3. Customer concentration with Boeing and Airbus.

83% of Spirit's sales are derived from Boeing (60%) and Airbus (23%). Though unlikely, a marred relationship with either of these customers would be a significant blow. The company has been intentional in alleviating their reliance on this duo. For example, Spirit recently completed a $275mm acquisition of Bombardier's aerostructures and aftermarket services businesses, which is expected to double the company's aftermarket business and generate $700 million of revenue in 2021. Additionally, beginning next quarter, the company will begin to report their revenue based off 3 new business segments: Commercial, Defense & Space, and Aftermarket services. Management has expressed their long-term vision of revenue breakdown to be roughly 40% / 40% / 20%, respectively (though that will take years to accomplish).

Scenario	Price	Relative to Current Price	Description
Bull	$87.70	+88%	Commercial air-traffic rebounds quicker than forecasted, and SPR directly benefits from top line CAGR of 31% combined with very successful cost reduction programs.
Base	$64.24	+38%	Air travel returns to pre-covid levels by 2024, as expected, while SPR enjoys economies of scale with drastic production ramp up.
Bear	$31.26	-33%	Commercial air traffic takes much longer than anticipated to rebound, not hitting pre-pandemic levels until 2026.

Featured Investment Ideas

Monticello Fund

by Tomas Barriga

Copa Holdings S.A. buy recommendation

Company Data	
Price (09/24/21)	$84.00
52 Week High-Low	$46.67-$94.91
Market Cap	$3.5B
Enterprise Value	$3.8B
EV/FCF	8.19x

Business Description

Copa Holdings operates passenger and cargo services to countries in North, Central and South America as well as the Caribbean. Copa Holdings offers 104 daily flights to 54 destinations in 25 countries (361 daily scheduled flights among 80 destinations in 33 countries pre pandemic). The company was established in 1947 and is based in Panama City, Panama.

Executive Summary

There is an attractive entry point after the COVID19 Delta-variant effect on air travel, as the rollout of the vaccines continue in Latin America and borders start to open again. Among the airline industry, Copa Holdings ("Copa") has one of the strongest balance sheets and is well positioned to sustain operations in case the pandemic continues affecting air travel operations. After a year with limited operations, the airline industry is increasing its operations month by month, and Copa is better positioned than its competitors in Latin America to restore flights in the region given its hub-model and single-fleet operations.

Investment Thesis

1. Geographical Advantage – the Hub of the Americas: Panama's central location allows Copa to use narrow-body aircrafts to link the key cities in South, Central and North America to cities that do not generate enough demand to justify point-to-point service. This location provides a hard to replicate competitive advantage, as it allows Copa to: i) Fly exclusively with narrow-body aircrafts, which are cheaper to operate), ii) Facilitates growth in new markets, as it doesn't need large demand to launch a flight, and iii) Provides flexibility to relocate its assets from low-performing markets.
2. Single-model fleet and cost advantage: Copa operates with a fleet of ~80 aircraft Boeing 737. Having a single fleet simplifies and reduces operating costs. Management expects CASM ex-fuel (Cost per ASM excluding fuel) of less than $6 cents once it recovers 100% of its capacity vs 2019, which compares with Copa's existing $7.2 cents (as of 2Q21) and pre-pandemic CASM ex-fuel of $6.2 cents for Copa ($7 cents from peers in the region).
3. Balance Sheet and Cash Flow: Unlike its competitors in Latin America, Copa has a comfortable liquidity position ($1.3 bn cash + 0.3bn undrawn credit facilities), and a relatively low leverage (2x Net Debt to EBITDA as of June 2021). It also stopped burning cash while still operating at below 50% capacity.
4. Alliance with United Airlines: Joint business agreement (pending approval) with United might unlock additional value. Recent equity acquisitions by Delta and American in Latin American Airlines to secure presence in the region might result in an offer from United to Copa.

Risks

1. Lockdowns prohibiting international travel and vaccination taking longer than expected
2. Aircraft delivery schedule delays and additional scrutiny to the Boeing 737-MAX
3. Slower than anticipated recovery in demand and yields
4. Devaluation of currencies in Latin America à Affecting international travel

Scenario	Price	Relative to Current Price	Description
Bull	$144.05	+71.48%	2019 ASM1 levels in 2022, Yields2: Sustained low single digit increase in due to faster recovery of corporate passenger, Load Factor: Reaching 83% in 2022 and maintaining those levels, CASM3 ex-fuel: Reaching $6 cents in 2022 and maintaining those levels.
Base	$102.59	+22.13%	2019 ASM levels in 2024, Yields Flat yields after recovery due to increasing competition, Load Factor: +1 p.p. increase until 83% and then maintaining those levels, CASM ex-fuel: Reaching $6 cents in 2024 and maintaining those levels.
Bear	$63.91	-23.92%	2019 ASM levels in 2026, Yields: Slow yield recovery due to weaker demand, Load Factor: Reaching 83% only in 2026, CASM ex-fuel: Reaching $6 cents in 2026t

MIT Sloan Investing Series Competition Participants

Pablo Fleitas (MBA ‘23), Christophe Drapanas (MBA ‘23), Nishit Shah (MBA ‘23), Raghav Mathur (MBA ‘23), June Sun (MBA ‘23), Vanisha Goyal (MBA ‘23), Kehinde Abiodun (MBA ‘23) and Mark Llanes (MBA ‘22)

Not Pictured: Manu Gargeya (MBA ‘23) and Roberta Periquet (MBA ‘23)

Featured Investment Ideas

Rotunda Fund

by Percy Oliver

Renewable Energy buy recommendation

Company Data	
Price (12/31/2021)	$42.44
52 Week High-Low	$37.63-$117.00
Market Cap	$2.1B
Enterprise Value	$1.6B
EV/EBITDA	5.8x

Price Target $80

Business Description

Renewable Energy Group, Inc. engages in the production and trade of biofuel and renewable chemicals. It operates through Biomass-based Diesel and Services segments. The Biomass-based Diesel segment processes waste vegetable oils, animal fats, virgin vegetable oils and other feedstocks and methanol into biomass-based diesel. The Services segment offers services for managing construction and ongoing operations. The company was founded in August 2006 and is headquartered in Ames, IA.

Executive Summary

REGI addresses an immediate need for decarbonization from a variety of transportation sectors. The company has leading logistics and supply chain capabilities, with customers in the US and Europe, and long-term contracts for sourcing feedstock across Africa, Asia, and Australia. The company has increasingly diversified its feedstock, decreasing reliance on more expensive soybean oil, while providing versatility in shifting feedstock sourcing. REGI is well positioned to capture additional organic growth driven in part through a downstream facility expansion which will increase capacity and improve margins. The company is also poised to enter new markets and expand relationships with clients as local & federal incentives are adopted or amended.

Investment Thesis

1. Expanding Domestic & Global Low-Carbon Focus à Growing Total Addressable Market: Both in the U.S. - at the local and federal levels- and internationally, governments are focused on building low-carbon programs. REGI stands to benefit both from the economic advantages of these programs, as well as the demand potential for both biodiesel and renewable diesel.

2. Advantage in Low-Cost Feedstock Markets: As one of the first to take advantage of cleaner, lower-cost feedstocks for both its BD and RD production, REGI has the technology and logistical experience to procure inputs for its production.

3. Downstream Initiatives Driving Margin: REGI has instituted a series of initiatives to bring all its products closer to the end-user and drive increased margins, including self blending to reach large fleet customers, low-capital investments to diversify sales & improving the patented BD and RD blend, RD REG Ultra-Clean™ fuel.

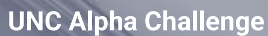
4. Clean balance sheet and low leverage: At the end of 3Q21, REGI had only $572MM of debt against $898MM of cash and marketable securities. REGI completed the sale of a $550MM green bond due in 2028. The bond is expected to fund the majority of the Geismar biorefinery expansion -$950M in total to be spent until 2024. Expecting to see REGI continue to maintain a very clean balance sheet.

Risks

1. Uncertainty around Renewable Fuel Volume Obligations (RVO): The EPA is setting the 2020 and 2021 mandates retroactively. This delay has been attributed to significant challenges and changes in the refining and ethanol industries due to the COVID-19 pandemic. The uncertain circumstances made it difficult for the EPA and relevant agencies to determine the renewable fuel volume obligation for the 2021 compliance year.

2. Government Extension of Blender's Tax Credits: Biofuels Tax Credits ($1/gal) continue to be discussed for extension in Congress, with the House May proposal for extension and phase down plan for fuel tax credits (H.R. 3272 / S. 1806 Biodiesel, Renewable Diesel and Alternative Fuels Extension Act of 2021). The bill would extend the tax credit for biodiesel and renewable diesel through the end of 2025 (vs. end of 2022 in current legislation).

3. Feedstock Supply Constraints: Supply chain issues continue to persist in our post-COVID world. Feedstock supply is a major contributor to costs in the biomass manufacturing process. Management has been forthright on how this contributes to tightening margins in the short-term.



UNC Alpha Challenge

Fixed Income Challenge Finalists

Xinyi Jiang (MBA '23), Vanisha Goyal (MBA '23) and Rachel Hurst (MBA '23)

Not Pictured: Paulina Nunez (MBA '23) and Emily Greene (MBA '23)

Equity Challenge Participants

Nishit Shah (MBA '23), June Sun (MBA '23) and Nicholas Martone (MBA '23)

Not Pictured: Roberta Periquet (MBA '23)

Featured Investment Ideas

Darden Fund

by Jonathan Campbell

American Outdoors buy recommendation

Company Data	
Price	$16.15
52 Week High-Low	$16.15-$36.62
Market Cap	$236M
Enterprise Value	$203M
EV/EBITDA	4.5x

Price Target $33

Business Description

American Outdoor Brands (AOUT) provides outdoor products and accessories for hunting, fishing, camping, and shooting across a portfolio of 20+ brands. AOUT is a buy at $16 with meaningful upside potential ($33 price target) and limited downside risk given current market conditions.

Executive Summary

We believe AOUT valuation is significantly underappreciated relative to its comps in the space. We believe it is misunderstood due to its spinoff origins from Smith & Wesson and low liquidity but there is an opportunity this year to improve the shareholder base.

Pro forma, the stock is trading at ~4x Adj. EBITDA based on its fiscal year ending April 2022. We believe a more reasonable multiple is closer to 8-10x for a fast-growing retailer with significant e-commerce growth. The ~$200 million TEV is the same as it was at the time of the spinoff in August 2020 when the Company guided to $200 million of revenue and $20 million of EBITDA. Now, however, we expect the Company to do $280 million of revenue and nearly $45 million of EBITDA – at the same enterprise value. It is also worth noting that we dug into the SWBI filings and triangulated that they paid ~$360 million to buy the brands that now comprise AOUT.

Investment Thesis

Attractive macroeconomic backdrop:

- New entrants / increased participation in camping, firearm owners, fishing licenses, hunting licenses

- Strong tailwinds for sustainable demand

Leverageable model drives profitability

Established "Dock & Unlock" strategy that allows the Company to plug brands into system with e-commerce channel, marketing and distribution channels

Reasonable Valuation

The business is trading at 4.5x FY2022E Adj. EBITDA (ending in April 2022) which we believe is well below where it should trade and where a private market transaction (i.e. a take private) would take place

We believe the inventory build at AOUT will begin to normalize this quarter (change in net working capital was a $41 million drain on cash flow in the first half of this year that we expect to reverse)

Risks

1. Supply chain issues
2. Reversion to pre-COVID activity levels for outdoor activities
3. Continued heightened working capital levels
4. Increase in COGS leads to margin compression
5. Concentration of retail customers
6. to tightening margins in the short-term.

Scenario	Price	Upside to Current Price	Description
Bull	$40	148%	Outsized revenue growth and margin improvement.
Base	$33	104%	Moderate revenue growth and margin improvement with a multiple re-rating.
Bear	$15	(7%)	Low revenue growth with no margin improvement or multiple expansion.

SAUNDERS
Darden Capital Management 2021-2022

Executive Team

Samantha Richman – Chief Executive Officer

Prior to Darden, Samantha was a Product Specialist at Man Group, a global active investment management firm, covering Alternative Risk Premia and Multi-Strat strategies. In this role, she worked with Portfolio Managers and Relationship Managers to support capital raising, investment strategy, and product development efforts. Samantha graduated from the University of North Carolina at Chapel Hill with a B.A. in Political Science. This summer she interned at KKR in their Client & Partner Group.

Mary Winston Richardson – Chief Financial Officer

Prior to Darden, Mary Winston spent four years at Gerson Lehrman Group (GLG) working as a Senior Associate on the Strategic Projects team. In this role, she conducted consulting engagements to provide private equity clients with strategic insights to inform investment decisions across the deal process for consumer goods, business services, technology, and industrial sectors. Mary Winston graduated from the University of Virginia with a B.A. in Art History and Media Studies with a concentration in Media Policy & Ethics. This past summer, she interned in investment banking in Evercore's M&A Strategic Advisory Practice.

Charles Patton – Chief Investment Officer

Prior to Darden, Charles spent five years at Wells Fargo analyzing credit risk for the Wealth and Investment Management business with a focus on margin and mortgage loans, later transitioning to a role analyzing the impact of changes in economic variables on the bank's Investment Portfolio. Charles graduated from the University of North Carolina at Chapel Hill with a B.S. in Business Administration and a second major in History. He has been a CFA Charterholder since 2019. He interned at the University of Virginia Investment Management Company (UVIMCO) this summer, helping the university with manager due diligence and asset allocation decisions for its endowment and related funds.

Mark Llanes – Chief Operations Officer

Prior to Darden, Mark was an Equity Research Analyst at Credit Suisse Toronto within the Metals and Mining group focusing on North American precious and base metals securities and co-led precious metals commodity forecasts and outlook. He also held roles within KPMG's M&A Advisory group and Deloitte's Assurance group. Mark earned his Bachelor of Business Administration from the Schulich School of Business at York University and holds both a Chartered Professional Accountant and Chartered Accountant designations. During the summer, he interned at Morgan Stanley San Francisco as an Investment Banking Associate.

Cavalier Fund

Michael D'Onofrio – Senior Portfolio Manager

Prior to Darden, Michael worked in healthcare strategy consulting at Vizient, the 3rd largest healthcare management consultant. Prior to that, he founded a health-IT startup, Presage Health, which was a spin out of IP he patented while working as a product manager at Maxim Integrated. Michael graduated from Duke University with a B.A. in Public Policy and Markets & Management. This summer he interned with Credit Suisse Investment Bank.

James Nish – Portfolio Manager

Prior to Darden, James worked at Addepar, a late-stage fintech company, in Strategic Business Development. Before this role, he developed strong financial acumen as a Cash Equity Sales Trader at Citigroup helping clients navigate the capital markets. Before this role, James was a rotational investment analyst at Citigroup where he rotated through Alternative Investment Management Fundraising, Portfolio Management, OTC Derivative Sales, and FX Sales. James graduated from Brigham Young University with a B.S. in Finance. After Darden, he will be joining Morgan Stanley as an Investment Banking Associate in the Technology Coverage group.

Allie Ruark – Portfolio Manager

Prior to Darden, Allie worked at Huron Consulting Group as a Strategy & Operations Associate focused on the higher education sector. Before that role, she worked as a consultant at CrossLead and KPMG, and was also a Fulbright scholar to Sri Lanka. Allie graduated from Claremont McKenna College with a degree in Psychology and a minor in Leadership. After Darden, she will be joining Wells Fargo as an Investment Banking Associate in the Industrials group.

Tim Wilson – Portfolio Manager

Prior to Darden, Tim worked as an engineer on both domestic and international projects for Apache, an independent energy company. He graduated from The University of Texas at Austin with a BS in mechanical engineering. Tim will be interning with Lazard's industrials M&A group this summer.

Jefferson Fund

Philip Apelles – Senior Portfolio Manager

Prior to Darden, Philip worked at his family business, The GTO Group, where he served as both a principal shareholder and a data strategist. Originally from New York, Philip graduated from Vanderbilt University with a BA in Mathematics and Economics. This summer he interned at Fayez Sarofim & Co as an Equity Research Associate.

Evan Berenholtz – Portfolio Manager

Prior to Darden, Evan served eleven years in the United States Navy as a Naval Aviator and Joint Terminal Attack Controller. Evan graduated with distinction from the Virginia Military Institute in 2009. This summer he interned at the DC office of the J.P. Morgan Private Bank as a Banker Associate.

Harrison Clement – Portfolio Manager

Prior to Darden, Harrison spent four years on the investment team at Brown Advisory, an investment management firm, where he helped manage balanced portfolios for private clients. He graduated from the University of Virginia with Bachelors of Arts in Economics and Public Policy. Over the summer, he interned as an Investment Banking Associate with Bank of America's Leveraged Finance team.

Lauren McDermott – Portfolio Manager

Prior to Darden, Lauren worked in Marketing and Business Development at Lyxor Asset Management. She graduated from the University of Virginia in 2016 with a B.A. in Media Studies. Lauren spent this past summer interning at Goldman Sachs.

Rotunda Fund

Mac Kyle – Senior Portfolio Manager

Prior to Darden, Mac worked at Allen & Company, an investment bank in New York, in their Wealth Management group. Mac graduated from the University of Richmond in 2015 majoring in Accounting, Finance, and General Management. He interned at Calvert Investment Management and Research, an ESG investment firm owned by Morgan Stanley.

Percy Oliver – Portfolio Manager

Prior to Darden, Percy served on the transaction banking team at MUFG in New York, focusing on providing working capital solutions to Japanese subsidiaries based in the US. Percy started his career at JP Morgan as a rotational analyst, serving in the New York and Santiago, Chile offices. He graduated with honors from the University of Georgia with a BBA in Finance and International Business and a minor in Chinese. This summer Percy gained experience in real estate acquisitions and asset management through his internship at Beacon Capital Partners.

Elizabeth Ughetta – Portfolio Manager

Prior to Darden, Elizabeth worked as a commercial real estate advisor for Newmark Knight Frank in New York City. She worked directly for a Vice Chairman and her clients primarily included foreign financial institutions. She graduated from Hamilton College with a Bachelor of Arts in Creative Writing and a minor in Anthropology. She was the co-head of the inter-society council, representing all of Greek life at Hamilton, as well as the President and Rush Chair of her sorority. She graduated high school from The Lawrenceville School in Lawrenceville, New Jersey.

Christina Walters – Portfolio Manager

Prior to Darden, Christina served as an executive director at The Yale Club of New York City, the world's largest college clubhouse, where she oversaw investment strategy and operations. Christina graduated magna cum laude with a B.A. in Asian Studies that focused on economics and security policy. While attending Darden, she interned with Barclays as an Investment Banking Summer Associate and with Thomas Park Investments, a real estate private equity firm, as an Acquisitions Associate.

Monticello Fund

Mudit Bothra – Senior Portfolio Manager

Prior to Darden, Mudit worked in various roles with Deloitte, PwC and EY, advising clients across industries and geographies on internal audits and process improvement. In addition to holding a Bachelors in Commerce, Mudit has also cleared all three levels of the CFA program. He interned with Credit Suisse's M&A Group this summer.

Stephen Frankiewicz – Portfolio Manager

Prior to Darden, Stephen spent four years with EDENS, a privately held real estate investment trust, spending time in roles across the development, investments, and capital markets teams. Stephen graduated from the University of South Carolina with a B.S. in International Business and Finance. This summer he interned at Evercore Partners as an investment banking associate.

Tomas Barriga – Portfolio Manager

Prior to Darden, Tomas was Head of Investor Relations at LATAM Airlines Group, managing the communications between the company and the financial community. Tomas graduated summa cum laude from Pontificia Universidad Catolica de Chile with a B.S. in Civil and Industrial Engineering, and a major in Mechanical Engineering. This summer, he was an intern with Amazon.com.

Sharon Zhou – Portfolio Manager

Prior to Darden, Sharon worked in various roles with Cummins, leading processes such as functional annual financial planning and policy implementation post acquisition. Sharon holds a bachelor's degree in Business Administration and a master's degree in Human Resources and Labor Relations. This summer she interned with McKinsey advising a banking client.

Darden Fund

Ryan McCarthy – Senior Portfolio Manager

Prior to Darden, Ryan was an investor at TZP Group, a middle market private equity firm in New York City focused on investments in Technology & Business Services and Consumer Products & Services companies. Prior to TZP Group, Ryan was an Investment Banker at Macquarie Capital in the Leveraged Finance & Financial Sponsors Group. He graduated from Villanova University with a B.S. in Finance.

Natalie Azarela – Portfolio Manager

Prior to Darden, Natalie spent 2 years in corporate strategy at WeWork. Before that, she developed expertise as a management consultant in the consumer, technology, and real estate industries, helping clients achieve operational efficiencies and financial success. Natalie graduated cum laude from Vanderbilt University with a B.A. in Public Policy and Corporate Strategy. This summer, Natalie interned as an Investment Banking Summer Associate at Harris Williams.

Jonathan Campbell – Portfolio Manager

Prior to Darden, Jonathan spent four years in Major League Soccer, playing for the Chicago Fire and Seattle Sounders. He graduated with the highest distinction from the University of North Carolina at Chapel Hill with a B.S. in Business Administration. During the summer, he interned with Bank of America's TMT group.

Brett Johnson – Portfolio Manager

Prior to Darden, Brett was a medicinal chemist in the neuroscience medicinal chemistry group at Amgen in Cambridge, MA. Before Amgen, Brett spent two years working as a medicinal chemist at Eli Lilly and Company in the diabetes drug discovery group. Originally from Missouri, Brett graduated from the University of Missouri – Columbia with a Bachelor of Science in chemistry in 2013 and holds a Master of Science in organic chemistry obtained at Boston College in 2015. This past summer, he interned at Lazard in the Healthcare Investment Banking Group as a Summer Associate.

Citations

[1] Charles Dickens' Great Expectations
[2] https://www.federalreservehistory.org/essays/stock-market-crash-of-1929#footnote1
[3] https://www.inquirer.com/philly/business/The_6_Most_Embarrassing_Stock_Predictions_of_All_Time.html
[4] Source for all charts, graphs, and performance figures is FactSet
[5] December 15th Fed Minutes, Figure 4.A https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20211215.htm
[6] December 15th Fed Minutes, Figure 4.C https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20211215.htm
[7] December 15th Fed Minutes, Table 1 https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20211215.htm
[8] https://www.morningstar.com/articles/1074136/value-vs-growth-funds-values-revival-is-uneven
[9] Introduction to Charles Dickens' Tale of Two Cities
[10] Vanguard Economic and Market Update, Figure II-5 https://institutional.vanguard.com/VGApp/iip/site/institutional/researchcommentary/article/InvComVEMO2022StrikingABalance
Notes: The U.S. fair-value CAPE is based on a statistical model that corrects CAPE measures for the level of inflation and interest rates. The statistical model specification is a three-variable vector error correction, including equity-earnings yields, 10-year trailing inflation, and 10-year U.S. Treasury yields estimated over the period January 1940 to September 2021. Details were published in the 2017 Vanguard research paper Global Macro Matters: As U.S. Stock Prices Rise, the Risk-Return Trade-Off Gets Tricky (Davis, 2017). A declining fair-value CAPE suggests that higher equity risk premium (ERP) compensation is required, while a rising fair-value CAPE suggests that the ERP is compressing.
Sources: Vanguard calculations, based on data from Robert Shiller's website, at aida.wss.yale.edu/~shiller/data.htm, the U.S. Bureau of Labor Statistics, the Federal Reserve Board, Refinitiv, and Global Financial Data, as of September 30, 2021.
[11] Vanguard Economic and Market Update, Figure II-4.b https://institutional.vanguard.com/VGApp/iip/site/institutional/researchcommentary/article/InvComVEMO2022StrikingABalance
Notes: Developed-market equity valuation measures are the current CAPE percentile relative to the fair-value CAPE for the local MSCI index. The U.S. valuation measure is the current CAPE percentile relative to fair-value CAPE for the S&P 500 Index from January 1940 to September 2021. The ex-U.S. developed markets valuation measure is the weighted average of each region's (Australia, U.K., euro area, Japan, and Canada) valuation percentile. The emerging markets, U.S. value, and U.S. small-cap relative valuations are based on the relative percentile rank to fair value estimated in Figures II-6 and II-8. The U.S. growth and large-cap valuations are composite valuation measures of the style factor to U.S. relative valuations and the current U.S. CAPE percentile relative to its fair-value CAPE. The relative valuation is the current ratio of the style factor to U.S. price/book metrics relative to its historical average from January 1979 through September 2021. For corresponding indexes for the four style factor valuation measures, see the Appendix section "Indexes for VCMM simulations." The estimates cover the period beginning from January 1940 for the U.S., January 1970 for Australia and the U.K., January 1980 for other developed markets, and September 1998 for emerging markets, and ended September 30, 2021.
Sources: Vanguard calculations, based on Robert Shiller's website, at aida.wss.yale.edu/~shiller/data.htm, the U.S. Bureau of Labor Statistics, the Federal Reserve Board, and Refinitiv, as of September 30, 2021.
[12] The Economist, Will Household Savings Keep The Economy Afloat https://www.economist.com/finance-and-economics/will-households-excess-savings-keep-the-american-economy-afloat/21807127

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