

**UConn** | **STAMFORD**

**STUDENT MANAGED FUND**



**Portfolio Report Fall 2020**

<b>Contents</b>	
Introduction	4
Investment Managers	4
Fall Officer Positions	4
PORTFOLIO OVERVIEW	5
Investment Philosophy	5
Investment Strategy	5
Risk Management	6
Investment Process	6
Sector Assignments	7
Portfolio Allocation	7
Portfolio Performance	8
Portfolio Performance vs S&P 500	9
ECONOMIC OUTLOOK	11
US GDP and Macroeconomy	11
Global Economy Outlook	12
US Inflation	14
US Unemployment	15
SECTOR OUTLOOK	17
Communication Services	17
Consumer Discretionary	18
Information Technology	19
Utilities	19
Energy	20
Financials	21
Materials	22
Real Estate	23
Industrials	24
Consumer Staples	25
Healthcare	26
CURRENT HOLDINGS	28
T-Mobile USA (NASDAQ: TMUS)	28

Amazon.com Inc. (NASDAQ: AMZN)	29
UnitedHealth group (NYSE: UNH)	31
Lockheed Martin (NYSE: LMT)	32
Baker Hughes Company. (NYSE:BKR)	33
BlackRock (NYSE: BLK)	34
Microsoft Corporation (NASDAQ: MSFT )	36
LESSONS LEARNED	38

# Introduction

## Investment Managers



Carmen Sanz



Daniel Fontes



Jose Netto



Konrad  
Piszczatowski



Liam  
McNichols



Gavin  
Vandervoort-  
Levy



Mitchell Roy



Sophia Ma



Stephane  
Guillaume

## Fall Officer Positions

**Co-Lead Manager:** Liam McNichols

**Co-Lead Manager:** Gavin Vandervoort-Levy

**Communications Manager:** Sophia Ma

**Portfolio Manager:** Gavin Vandervoort-Levy

# PORTFOLIO OVERVIEW

## Investment Philosophy

The UConn Student Managed Fund follows the investment philosophies of Benjamin Graham and Warren Buffet. While investing, the team keeps in mind the words of Warren Buffett, “It's far better to buy a wonderful company at a fair price than a fair company at a wonderful price.” Our team evaluates investment opportunities based on both qualitative and quantitative measures. Our qualitative research focuses on understanding the business model, management quality, ESG rating, industry outlook and potential risks that could impact the business in the future. Our quantitative research aims to find the intrinsic value of a business by understanding the firm’s market performance, financial condition, and performance when compared to peers. We look at several different ratios for our quantitative analysis and conduct valuation including a discounted free cash flow model and multiple valuation model for each investment. In order to eliminate sector weighting risk, our portfolio mirrors the weighting of each S&P 500 sector. Our benchmark is the S&P 500 and to outperform this we identify 1-2 companies per sector that we believe will outperform that specific sector in the long run. So by outperforming each individual sector we will outperform the S&P 500 as a whole.

## Investment Strategy

Our Investment strategy is to have analysts research their sectors and identify companies trading below their intrinsic value with key competitive advantages that will add long term value to our portfolio. We choose to invest long-term in companies with a wide economic moat, high margin of safety and strong financials. Amongst other factors, a business is deemed ideal to invest in when it has healthy financials, strong management, high potential for growth, and a competitive advantage compared to its peers.

We consider the following factors when evaluating investment opportunities:

<u>Qualitative</u>	<u>Quantitative</u>
<ul style="list-style-type: none"><li>● Industry Outlook</li><li>● SWOT Analysis</li><li>● Porter’s Five Forces</li><li>● Management Quality</li><li>● ESG</li><li>● Merger and Acquisition considerations</li></ul>	<ul style="list-style-type: none"><li>● Enterprise Value to EBITDA</li><li>● Discounted Free Cash Flow Model</li><li>● Return on Invested Capital</li><li>● EPS Growth Rate</li><li>● Dividend Yield</li><li>● Price to Earnings Ratio</li></ul>

## **Risk Management**

Research analysts are expected to have a thorough understanding of various business and financial risks associated with their investments, meaning we are responsible to conduct due diligence for each investment. For individual holdings, risk metrics such as margin of safety, beta, volatility are considered to measure the soundness of each investment, along with qualitative analysis for business risks. We also place a stop-loss order for each investment based on their past year's volatility. Once an investment is made, analysts are responsible for following up on any new information or economic developments and assessing the impact on their investments within 24 hours.

From a portfolio perspective, we diversify our portfolio by investing across all sectors and avoid sector tilt by matching sector weightings relative to the S&P 500 sector weights. For quantitative approach, we calculate VaR and ES for the portfolio. We implement this process using google sheet, which will help us automatically renew the data every day after market close. By doing this, we are able to track our portfolio risk on a daily basis.

## **Investment Process**

Each analyst covers at least two sectors of the S&P 500. Each sector is covered by a team of analysts who conduct thorough research and use both quantitative and qualitative criteria to identify attractive value investment opportunities within their sectors.

Margin of safety in our investments is achieved when securities are purchased at prices below their intrinsic value. Since valuation is an imprecise art and the future is unpredictable, an MOS reduces our investment risk and shows how much the underlying value of the security can decrease before the investment becomes unprofitable..

After conducting a valuation analysis and estimating the intrinsic value for a company, it comes down to the price we pay. Our goal is to invest in a company that is trading below its intrinsic value by a minimum 10-15% to have a sufficiently large cushion against vulnerabilities.

Teams pitch their investment opportunities to the Student Managed Fund at weekly meetings, and are required to circulate their short report, slide deck, and any other relevant material to the SMF team 48 hours prior to presenting.

At least 6/9 team members must vote in favor of an investment in order for it to pass. Furthermore, position size is discounted by 10% for each negative vote;

- For an investment with 9/9 favorable votes, 100% of the proposed position size will be allocated
- For 8/9 favorable votes, 90% of the proposed position size will be allocated
- For 7/9 favorable votes, 80% of the proposed position size will be allocated

If an investment is not passed, the team may be allowed to pitch again at a later date or pitch a different company within the sector.

After each investment, analysts are responsible for following up on any news events or economic developments and assessing the impact on their investments. If there are changes in the valuation assumptions or if the stock reaches its intrinsic value, analysts will re-evaluate their valuation model or present a "sell pitch" and the team will discuss and vote on the proposal. The required vote for approval is 5/9 (a team majority) to exit the position.

## **Sector Assignments**

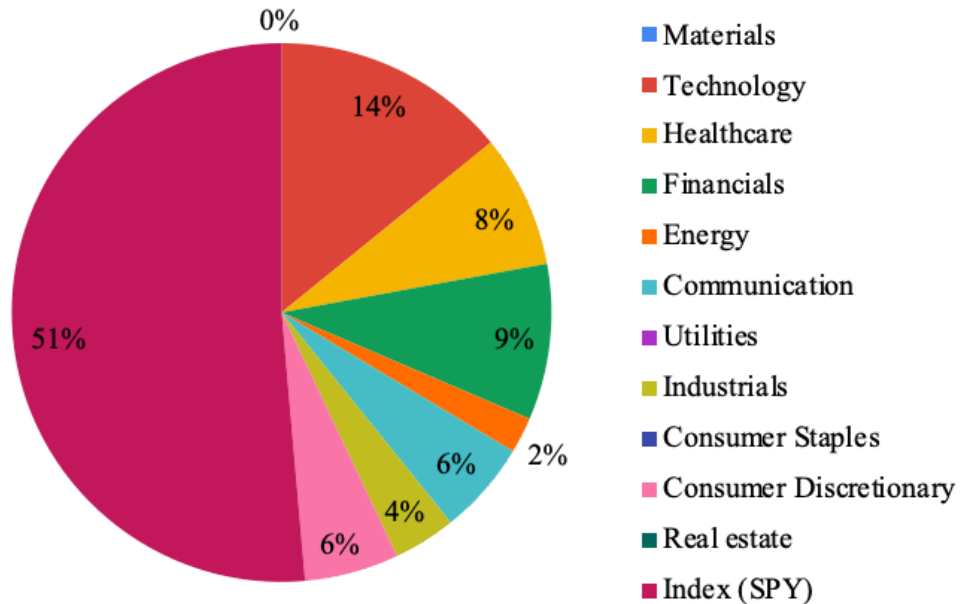
- **Energy:** Jose Netto, Konrad Piszczatowski
- **Healthcare:** Sophia Ma, Daniel Fontes
- **Financials:** Carmen Sanz, Stephane Guillaume
- **Industrials:** Jose Netto, Konrad Piszczatowski
- **Basic Materials:** Carmen Sanz, Gavin Vandervoort-Levy
- **Consumer Discretionary:** Liam McNichols, Gavin Vandervoort-Levy
- **Consumer Staples:** Sophia Ma, Konrad Piszczatowski
- **Information Technology:** Mitchell Roy, Daniel Fontes
- **Real Estate:** Liam McNichols
- **Communications:** Liam McNichols, Gavin Vandervoort-Levy
- **Utilities:** Mitchell Roy, Stephane Guillaume

## **Portfolio Allocation**

The chart below illustrates the portfolio allocation based on the market value of the securities as of November 25, 2020.

<b>Sector</b>	<b>% Of Invested Portfolio</b>	<b>S&amp;P Sector Weight</b>	<b>Overall Exposure</b>	<b>Investment Amount</b>
Index (SPY)	51.39%			\$ 347,790.94
Communication	5.61%	11.16%	11.35%	\$ 37,978.30
Industrials	3.75%	8.75%	8.24%	\$ 25,348.78
Healthcare	7.98%	14.16%	15.25%	\$ 53,976.78
Financials	9.36%	12.79%	15.93%	\$ 63,324.90
Consumer Discretionary	5.65%	11.34%	11.47%	\$ 38,220.84
Technology	14.13%	24.20%	26.56%	\$ 95,599.89
Energy	2.16%	2.01%	3.19%	\$ 14,597.64
Consumer Staples	0.00%	7.48%	3.84%	\$ -
Utilities	0.00%	3.19%	1.64%	\$ -
Real Estate	0.00%	2.62%	1.35%	\$ -
Materials	0.00%	2.30%	1.18%	\$ -
<b><i>Total</i></b>	<b><i>100.0%</i></b>	<b><i>100.0%</i></b>	<b><i>100.0%</i></b>	<b><i>\$ 676,789.04</i></b>

## SMF Portfolio Sector Holdings



### Portfolio Performance

The table below depicts our portfolio performance from Sept 21, 2020 to Nov 25, 2020:

Total Portfolio Unrealized Gains/(Losses)

	S&P 500 ETF (SPY)	SMF Portfolio
Beginning Value	\$ 324.95	\$ 607,982.25
Current Value	\$ 362.66	\$ 676,789.04
Absolute Change	\$ 37.71	\$ 68,806.79
% Change	11.60%	11.32%

Our portfolio has slightly underperformed the S&P 500 during this period. Our focus is on analyzing and investing in companies that are selling at a discount to their intrinsic value. This “unlocking” of value is anticipated to occur over our investment horizon; 10 years.



Company	Ticker Name	Buy Price	Recent price	% Change
SPDR S&P 500 ETF Trust	SPY	\$324.95	\$362.66	11.60%
T-Mobile Us Inc	TMUS	\$111.06	\$128.74	15.92%
Lockheed Martin Corporation	LMT	\$381.53	\$378.34	-0.84%
UnitedHealth Group Inc	UNH	\$326.35	\$333.19	2.10%
BlackRock, Inc.	BLK	\$640.21	\$703.61	9.90%
Amazon.com, Inc.	AMZN	\$3,288.59	\$3,185.07	-3.15%
Microsoft Corporation	MSFT	\$217.48	\$213.87	-1.66%
Baker Hughes Co	BKR	\$18.29	\$19.78	8.12%

## Portfolio Performance vs S&P 500

Cumulative Portfolio Performance Vs S&P 500



Our account was funded on Sept 21, 2020 and we bought our first investments T-Mobile (TMUS) and Lockheed Martin (LMT) on Sept 25, 2020. Our initial position was \$607,982.45 in SPY. Below is the table of transactions for perusal.

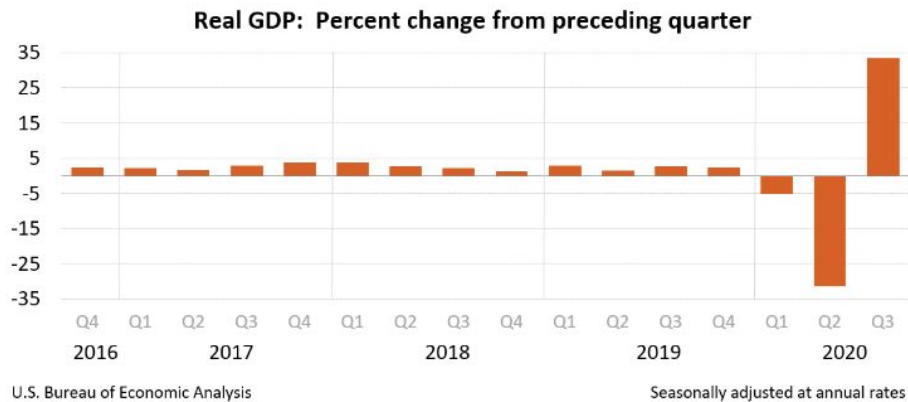
Trade Date	Ticker	Shares	Price	Amount	Trade Type
9/21/20	SPY	1871	\$ 324.95	\$ 607,981.45	Buy
9/25/20	TMUS	285	\$ 111.05	\$ 31,649.25	Buy
9/25/20	TMUS	10	\$ 111.30	\$ 1,113.00	Buy
9/25/20	LMT	67	\$ 381.53	\$ 25,562.51	Buy
9/25/20	SPY	185	\$ 325.55	(\$60,226.75)	Sell
10/7/20	UNH	107	\$ 324.25	\$ 34,694.75	Buy
10/7/20	SPY	105	\$ 341.06	(\$35,811.30)	Sell
10/16/20	UNH	55	\$ 330.44	\$ 18,174.20	Buy
10/16/20	SPY	35	\$ 350.03	(\$12,251.05)	Sell
10/21/20	BLK	90	\$ 640.21	\$ 57,618.90	Buy
10/21/20	SPY	168	\$ 342.82	(\$57,593.76)	Sell
10/27/20	AMZN	12	\$ 3,288.59	\$ 39,463.08	Buy
10/27/20	SPY	116	\$ 339.14	(\$39,340.24)	Sell
11/11/20	MSFT	447	\$ 217.48	\$ 97,213.56	Buy
11/11/20	SPY	272	\$ 356.87	(\$97,068.64)	Sell
11/19/20	BKR	738	\$ 18.29	\$ 13,501.34	Buy
11/19/20	SPY	31	\$ 357.54	(\$11,083.74)	Sell

	SPY	TMUS	LMT	UNH	BLK	AMZN	MSFT	BKR
SPY	1.000	0.634	0.601	0.614	0.732	0.686	0.825	0.418
TMUS	0.634	1.000	0.301	0.472	0.389	0.700	0.745	-0.007
LMT	0.601	0.301	1.000	0.532	0.439	0.358	0.380	0.187
UNH	0.614	0.472	0.532	1.000	0.625	0.410	0.570	0.051
BLK	0.732	0.389	0.439	0.625	1.000	0.414	0.613	0.300
AMZN	0.686	0.700	0.358	0.410	0.414	1.000	0.872	-0.126
MSFT	0.825	0.745	0.380	0.570	0.613	0.872	1.000	0.059
BKR	0.418	-0.007	0.187	0.051	0.300	-0.126	0.059	1.000

# Economic Outlook

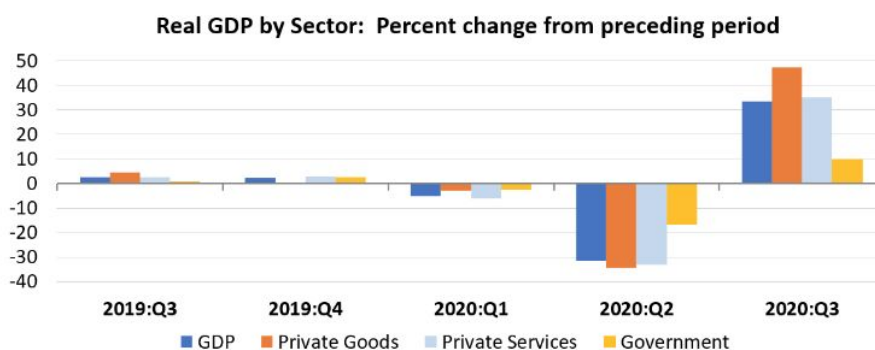
## U.S. GDP & Macroeconomy

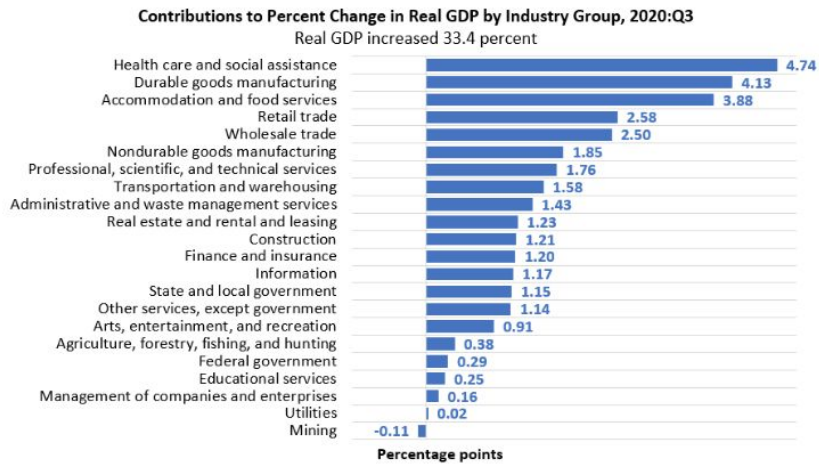
Despite Covid-19 headwinds, we saw a significant recovery in third quarter real GDP, increasing 7.4 percent over the prior quarter and at a 33.1 percent annual rate. We have now recovered two-thirds of the loss we experienced at the height of the pandemic. This is mainly due in part to pent-up consumer demand as well as a more than \$3 trillion government stimulus effort that supported and encouraged spending. The economy, however, still remains 3.5 percent smaller than that of the end of last year.



The majority of real GDP growth this quarter was seen in PCE, which increased at a 40.7 percent annual rate. Growth was also seen in private inventory investment, exports, nonresidential fixed investment, and residential fixed investment, which in turn were slightly offset by decreases in federal government spending, via fewer fees paid to administer the PPP loans, and state and local government spending. Imports also experienced an increase. Lastly, the PCE price index increased 3.7 percent, versus a decrease of 1.4 percent seen in the second quarter.

Private goods-producing industries increased 47.2 percent, private services-producing industries increased 35.1 percent, and government increased 10.1 percent. 21 of 22 industry groups contributed to third-quarter real GDP growth with a decrease only seen in mining.





U.S. Bureau of Economic Analysis

Seasonally adjusted at annual rates

Real gross output, a measurement of an industry’s sales or receipts, increased 28.7 percent in the third quarter with private goods-producing industries increasing 33.6 percent, private services-producing industries increased 32.3 percent, and government increased 2.0 percent. 19 of 22 industry groups contributed to real gross output growth with a decrease only seen in mining, federal government, and utilities.

## Our Outlook

We do anticipate a slowing of economic expansion in the fourth-quarter due largely in part to a diminishing impact of government stimulus and economic reopenings as well as a resurgence of Covid-19 and subsequent lockdowns. Until the pandemic is brought under control and vaccine availability is expanded, further economic expansion will remain hampered. We do believe, however, that broad dissemination of the Covid-19 vaccine by the spring of 2021, coupled with additional government stimulus and the acceleration of consumer spending in the summer months, will lead to economic output returning to pre-pandemic levels in the fall of 2021. This scenario would result in an annual expansion of 3.6 percent in 2021.

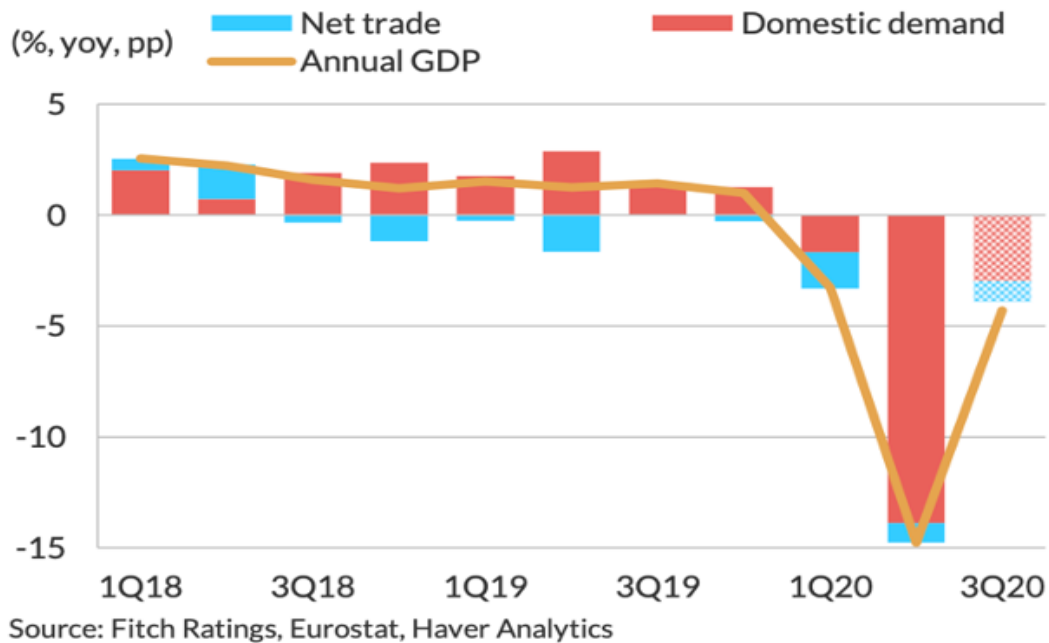
## Global Economy

Given the negative impact of Covid-19 and the restrictions announced by governments, the consensus forecast global GDP in 2020 will contract from 3.5-4.5%.

Second Wave, Second Downturn in Europe. The recent tightening of restrictions in Europe in the face of the surge in new virus cases is delivering a severe setback to the service sector, as bars and restaurants are forced to close, sports and entertainment events are cancelled, and domestic travel and tourism is curtailed. France and the UK imposed second nationwide lockdowns in November 2020, while Germany, Spain and Italy have also tightened restrictions. We expect GDP to decline in 4Q20 in all of these countries. As the following chart shows

that the economy grew in 3Q20, increasing 12.6% qoq. Despite the rapid growth, output remains 4.4% below its pre-pandemic level. However, we project that the tightening of restrictions will be unwound only gradually over the winter months. Two factors drive our forecasts: the prospects for mass inoculation and the significant fiscal boost provided by the NGEU fund. The latest vaccine development news raises hope that the worst of the crisis may be over in the near future and with it a corresponding decline in uncertainty.

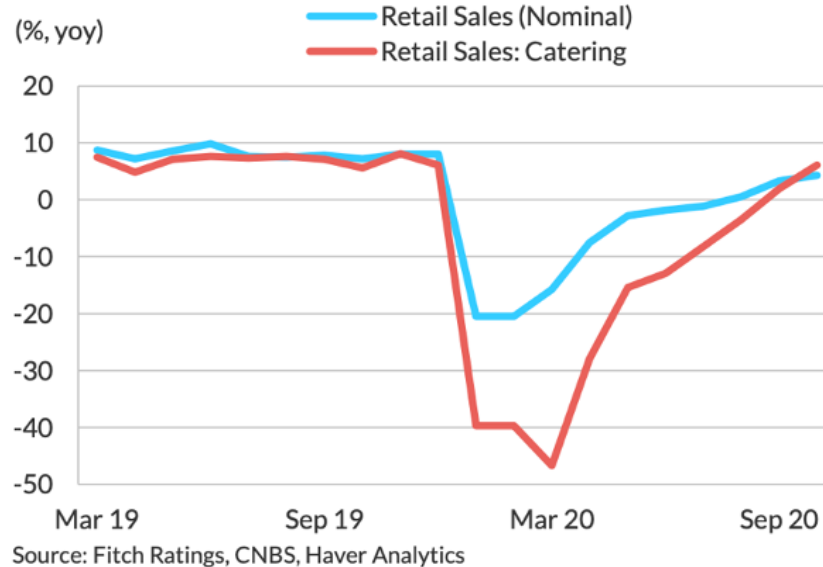
### Eurozone - GDP and Components



**Emerging Markets Lead the Rebound.** Emerging markets, excluding China, have faced numerous cyclical challenges in recent years. Now, with more favorable COVID-19 dynamics in many developing nations, emerging markets could set the pace for global growth. At the same time, emerging markets should benefit from widening U.S. current account deficits, low U.S. real interest rates, a weaker dollar, and accommodative macroeconomic policies. That adds up to 7.4% GDP growth for emerging markets in 2021, led by a forecast 9%-10% improvement in India.

**China Shows that Virus Containment Is Key.** China is one of the few countries to expect a significantly positive GDP growth rate in 2020 with the recovery is becoming fully fledged, and with consumer spending picking up and an improved global outlook. There has been a notable acceleration in consumer spending as the following chart shows, with retail sales growth turning positive from August and reaching more than 4% in October. This partly reflects the success in taming the virus.

## China - Retail Sales



## Our Outlook

After a year of chaos, the 2021 investment outlook is refreshingly normal, the social and economic uncertainties stemming from the COVID-19 pandemic won't suddenly subside with the end of the 2020. The coronavirus pandemic still dominates the global economic outlook heading into 2021, with the second wave of the virus prompting renewed national lockdowns in Europe and tighter restrictions in the US. However, from an investment perspective, 2021 could offer a welcome change in the narrative—a return to normal, growth is expected to resume as economies reopen.

With ongoing policy support, the initial rebound should turn into a robust recovery in Europe. One notable exception is the UK, where Brexit could slow the pace of recovery. The consensus forecast 4.5%-5.5% GDP growth in 2021. Meanwhile, China, the first to impose COVID-19 closures, has quickly regained ground, as consumption roars back. The consensus project that its economy will expand 8%-9% in 2021.

## US Inflation

The annual inflation rate for the United States is 1.2% for the 12 months ended November 2020. Prices for all items less food and energy rose 1.6% over the last 12 months, also the same increase as the period ending October 2020. Food prices rose 3.7% from November 2019 to November 2020, while energy prices fell 9.4%. The rate of inflation remains well below 2.3%, the rate in February before the coronavirus pandemic hit.

The breakeven inflation rate, the difference between the yield of a nominal bond and an inflation-linked bond (TIPS) of the same maturity, is a market-based measure of expected inflation. 10 Year TIPS/Treasury

Breakeven Rate is at 1.92%, compared to 1.77% last year. This is lower than the long term average of 2.03%. The 30 Year TIPS/Treasury Breakeven Rate is 1.88% as of November 2020. We expect inflation to average 1.2% in 2020, unchanged from the trailing 12 months rate. In 2021, we forecast inflation to average 1.9%.

## **US Unemployment**

*Source: Bureau of Labor Statistics*

The unemployment rate edged down to 6.7 percent in November. The rate is down by 8.0 percentage points from its recent high in April but is 3.2 percentage points higher than its historical lows experienced prior to Covid-19. The unemployment rate in the US was strongly impacted due to Covid-19 headwinds. While many industries were severely impacted by store closures and a significant drop in demand, businesses across most sectors have taken actions to cut unnecessary costs. In addition, as the oil and gas industry provides about 5% of jobs in the US, the collapse of oil prices in mid-April significantly contributed to the unemployment increase experienced in 2020. With a positive economic outlook for 2021 driven by the development of a coronavirus vaccine alongside with a second fiscal stimulus, the team expects a further reduction in the rate moving forward. A lower unemployment rate will positively impact our portfolio.

## **Overall Outlook**

The global pandemic took the world by storm and the global economy arguably experienced its deepest, sharpest and fastest recession in years. The pandemic dominated markets, as well as our lives throughout the year. The federal reserve and policy makers were very aggressive in helping the financial markets and the economy. As the economy looks to recover as we enter into a new year, the outlook for the global economy relies on health outcomes. The path to recovery should vary across different sectors and industries with a new vaccine rollout.

As we look beyond the pandemic, an effective vaccine rollout and other Covid-19 treatments should allow for a gradual easing of government restrictions on social activities and an increase in consumer spending. We believe it could take some time before the economy bounces back to pre-covid levels of employment and GDP. Both monetary and fiscal policy should continue to provide support for the economy in 2021 and we believe the biggest risk factor is the pandemic's impact.

As we look forward, the long shadow of the pandemic should have some impacts on the economy, markets, and policy. Social activities and traveling will increase as consumer fears of contracting the virus will diminish due to vaccinations. We are monitoring fiscal and monetary support to decrease the pandemic effects on permanent job losses. Additionally, trends such as work automation and digitization of economies have increased by the impact of Covid-19. This lays out the potential future of virtual

work and what the broader macroeconomic effects may ultimately lead to. The pandemic crisis has also shifted the expectations of the federal reserve to further drive inflation by spending aggressively in the middle of economic headwinds. We could see inflation rise as the recovery continues. Increasing debt loads and fiscal spending, and quantitative easing monetary policy could potentially feed inflation mindset and psychology, but this would have to more than counteract the high levels of unemployment and deflationary impact that we saw-pre pandemic.



# Sector Outlook

## Communication Services

As of November 25 2020, the total market cap of the communication sector occupied 11.16% of the S&P 500 and was the fifth largest sector among the index.

According to Fidelity's classification, the communication service sector includes the following subsectors: Diversified Telecommunication Services, Entertainment, Interactive Media & Services, Media and Wireless Communication Services, where Interactive Media & Services takes up the largest proportion (>50%).

According to the data in S&P Net Advantage, the communication service sector's P/E(ltm) ratio is 32.84x, lower than the market's while the forward P/E ratios are 24.36x and 24.26x for the sector and the market respectively.

## Outlook

The communication sector is a highly competitive arena where traditional companies that specialize in distribution of communications are finding themselves playing defense against content providers and interactive services such as Facebook & Google who are looking to broaden their reach over their customer base. Over the last several years there has been significant M&A consolidation within the industry as telecommunication services, entertainment and media companies compete in an attempt to provide additional value to subscribers.

The telecommunication industry within this sector has evolved from fixed connections to wireless transmissions as the result of technological advancements and public adoption of new technologies. The wireless industry in the United States has become an extremely profitable and competitive environment for companies with the funds and infrastructure to establish themselves. Over time consumer preferences have changed from traditional voice communications to SMS text-based messages towards data transmissions on their devices with trends towards increased speeds, reliability and function. Each transformation of communication has required a technological advancement as well as large capital expenditures to provide the network functionality. It is important to note that each phase has roughly a 10-year historical lifespan and is eventually phased out as a new generation evolves.

The wireless telecommunications industry has entered into the maturity life cycle phase and is positioning to rely on 5G for future growth opportunities. 5G will enable faster upload/download speeds for wireless communication devices and in turn unlocking new business opportunities. While there has been significant hype for 5G, the investment required in network enhancements, physical infrastructure and contractual agreements needs to be carefully considered by wireless carriers to ensure maximum profit opportunities. Some of the most exciting business opportunities from 5G are broadband internet which can replace traditional home internet, increased adoption of IoT (Internet of Things) as well as advancements in manufacturing, health care, retail, transportation and education. Individual revenues from connected devices will be lower than traditional postpaid revenues yet outnumber current subscribers in the future.

Trends within the communications sector which we anticipate to have a significant hold into the future include video communications and conferences (i.e Zoom, Webex etc.), asset tracking, and conversion of data transmission towards homes from office buildings as individuals increasingly conduct work from home.

*Current Holding: T-Mobile (TMUS)*

### **Consumer Discretionary**

As of November 25, 2020, the market weight of the consumer discretionary sector in S&P 500 was 11.34%, ranking as the fourth largest industry within the S&P 500 index. It contains four subsectors: Automobiles & Components, Consumer Durables & Apparel, Consumer Services, and Retailing. The Internet & Direct Marketing Retail is the largest subsector, accounting for 38% of the consumer discretionary industry in terms of market capitalization.

The forward Price-to-earnings ratio of consumer discretionary, based on the consensus forward 12-month operating EPS estimate, is 41.04x, which is higher than 24.26x, the forward P/E ratio of S&P 500. The dividend yield of this industry is 0.6%, lower than 1.51% of S&P 500.

### *Outlook*

The Consumer Discretionary Sector covers the industries which are most sensitive to economic cycles as they make up for consumer discretionary spending which typically corresponds to booms and busts within the economy. Given the past year's economical ups and downs regarding Covid-19 it is important to understand how individual companies fare in both environments.

Not all industries have recovered equally from the 2020 lockdown and Consumer Discretionary was one of the hardest hit sectors. Companies exposed to brick and mortar business models were some of the hardest hit as technological adoption advanced over the several month lockdown period forcing consumers to alter purchasing behaviors. As a result, numerous bankruptcies in 2020 occurred, while other companies who were poised to gain from the transition to E-commerce thrived. According to the US Census Bureau, E-commerce represented 14.3% of total Q3 2020 retail sales in the United States w/ a growth rate of 36.7% over Q3 2019 while retail sales grew 7% over the same time period. In 2020 several years worth of anticipated technological adoption occurred in the span of several months. Online shopping platforms like Amazon and Walmart have benefited disproportionately given the current climate.

*Current Holding: Amazon (AMZN)*

## **Information Technology**

As of November 21, 2020, Information Technology accounted for 27.3% of the S&P 500 index. The Technology sector comprises six sub-sectors: IT Services, Software, Communications Equipment, Technology Hardware, Storage and Peripherals, Electronic Equipment, Instruments and Components, and Semiconductors and Semiconductor Equipment. Among all the sub-sectors, Software is the largest sub-sector, representing approximately 51.4% of the sector's market value.

The Information Technology sector's forward PE of 27.21x is above the S&P 500's forward multiple of 22.68x. This sector has a dividend yield of 1.03%, as compared with the yield of 1.51% for the S&P 500.

### **Outlook**

The primary drivers of the IT sector over the next decade will be a combination of cloud technologies, automation, and analytics. As a consequence of COVID-19, the acceleration towards a fully digitized economy will become more permanent leading to expansive opportunities for the IT sector going forward. As enterprises reshape how they conduct business by modernizing their IT infrastructure via widespread hybrid and public cloud adoption and "as-a-service" engagement models, they are paving a path to a more immersive environment with extensive value opportunity involved. Additionally, the concept of cognition will become more fully adopted leading the charge to the creation and implementation of new emerging technologies. All of these opportunities ahead carry strong revenue growth as well as overall margin expansion resulting in increased profitability and value generation for the IT sector going forward.

*Current Holding: Microsoft Corporation (MSFT)*

## **Utilities**

The Utilities sector consists of companies that provide electric, gas or water. As of November 20, 2020 the market cap of the Utilities industry is \$890.67 billion, and it accounts for 3.01% of S&P 500.

The Utilities sector contains five sub-sectors: Electric Utilities, Gas Utilities, Independent Power and Renewable Electricity Producers, Multi Utilities and Water Utilities. Within the five sub-sectors, Electric Utilities has the largest market share representing 62.82% of the Utilities Industry, and Water Utilities has the smallest market share representing 3.18% of the industry. The sector is highly regulated with little to no competition.

The forward P/E ratio for the Utilities industry is 19.03x, which is lower than the P/E ratio of 22.68x for the S&P 500. The dividend yield for the Utility industry is 3.23%, which is higher than the dividend yield of 1.26% for the S&P 500.

### **Outlook**

The Utilities sector is expected to have moderate to flat earnings growth in 2020 due to headwinds associated with the global pandemic and lower power consumption from the commercial environment, resulting in a neutral outlook. While we expect relatively mixed earnings in 2020, driven by macroeconomic headwinds underpinning the global pandemic, we do believe utilities offer a logical defensive play. We expect near-term revenues to be impacted by lower commercial and industrial demand and less favorable weather. High and growing capital expenditure levels over the last few years have driven the rate base higher leading to growth in customer rates. We see that trend continuing as we move forward. We also expect slower dividend growth due to less near-term cash generation, which will eventually lead to a stabilization of the payout ratio over time. Additionally, changes in the climate as well as interest rate movements will have an adverse impact on the sector going forward. The growing transition to renewable energy remains a tailwind for the sector paving the way for increased subsidies, grants, and other governmental incentives, as well as lower overall CAPEX requirements given the lower power system costs associated.

*Current Holding: N/A*

## **Energy**

As of November 25, 2020, the energy sector accounted for 2.01% of the S&P 500 index with a total market cap of \$2.02 Trillion. The energy sector consists of two industries: “energy equipment and services” and “oil, gas, and consumable fuels,” weighted 9.87% and 90.13% respectively. There are various sub-industries encompassed in each industry, including: drilling, equipment service, exploration production, refining marketing, and consumable fuels. The Energy sector was highly affected by COVID-19 shutdown. The overall energy sector has decreased by 41.45% YTD, with Oil, Gas & Consumable fuels down 41% and Energy Equipment & Services down 45.17% compared to S&P 500’s gain of 10.11% YTD.

According to the data in S&P Net Advantage, the Energy sector’s P/E(ltm) ratio is 74.96x, higher than the market’s while the forward P/E ratios are 41.04x and 24.26x for the sector and the market respectively.

## **Outlook**

Typically, oil demand increases by 1 to 1.5 MMb/d (Million barrels per day) each year. With COVID-19 pandemic shutdown and restrictions, oil demand is expected to decline globally by 10 MMb/d in 2020. Therefore, producers in the upstream are lowering crude production. (Refinery utilization has been hovering between 70% and 80%) This lower production also affects the midstream players, with pipelines transporting lower volumes. Some midstream contracts are “take-or-pay” so the amount transported is not as important. Although, with lower demand, midstream players are more likely to not expand capacity, lowering their growth potential. In addition, environmental activism is pushing for regulations against pipeline expansions. (e.g. Dakota Access Pipeline and Atlantic Coast Pipeline) Increasing costs and prolonging time to completion, further decreasing growth potential.

Lower production activity in the upstream translates to lower capital expenditures, which directly affects the energy equipment & service industry. Without a demand for new services, companies are seeking alternative ways to earn a profit. Such as improving efficiency and lowering costs with the help of new technology and artificial intelligence. Improving with technology also helps large integrated oil and upstream businesses in a world of low oil prices. New drilling techniques and more efficient systems will lead to production growth, but not until the COVID-19 pandemic is under control. Positive vaccine news from various pharmaceutical companies indicates a return to normal in the second half of 2021.

President-elect Joe Biden's energy plan includes \$2 trillion in clean energy initiatives. In his website, [joebiden.com](http://joebiden.com), he details his plan to require "aggressive methane pollution limits for new and existing oil and gas operations" and "banning new oil and gas permitting on public lands and waters." These policies could severely affect the energy sector, with an expected decrease of 2 MMb/d by 2025. Large and integrated oil companies with expiring contracts in federal land and waters have the largest exposures to these policies. He also plans to promote renewable energy by increasing compliance cost with credits, known as "Renewable Identification Numbers." (RINs) If a company does not produce a certain percentage of renewable energy, they will have to purchase an equivalent amount of credit. (RINs) Driving refiner's costs up and eroding margins.

*Current Holding: Baker Hughes Company (BKR)*

## **Financials**

As of November 20, 2020, the financial sector makes up about 12.78% of the S&P 500 index representing the third largest sector within the index. There are 7 sub-sectors which include: banks, capital markets, Insurance, diversified financial services, consumer finance, mortgage real estate trust, and thrift and mortgage finance, with banks being the largest by market capitalization. The financial sector is currently trading at 17x PE (ltm), while the SPY is currently trading at a 36.46x PE (ltm). The estimated forward PE of the sector is 14.25x (ntm) while the forward PE of the SPY is 22.68x (ntm). The current dividend yield of the financial sector is 2.16% which is slightly higher than the dividend yield of the SPY of 1.62%. The financial sector is highly exposed to regulatory risks and fed policy.

### **Outlook:**

The industry outlook for the Financial sector is negative due to the Covid-19 recession. We see revenue headwinds from slower loan growth and a low interest rate environment. At the bottom line, banks will be negatively impacted by rising loan loss provisions and higher regulatory costs. As income from lending will be negatively impacted by low interest rates and rising loan losses, we think banks with higher exposure to investment banking and/or asset management activities will outperform. We see a rise in non-performing loans as borrowers' ability to pay their debt obligation will be hurt by the economic slowdown. In Asset Management,

the industry has shifted dramatically in terms of the investment styles. Passive funds have increased in popularity and have outperformed active funds on average over the past 10 years. We expect the shift to passive funds to continue. The industry is also experiencing a deceleration of the rate in AUM as the economy is moving through a recession due to Covid-19. We expect this decline in AUM to continue until 2021. Our outlook for consumer finance is negative, this is driven by contracting or stagnant loans, given the unfolding recession and a debt saturated consumer. Stimulus checks and unemployment benefits are not likely to be enough for many households. The insurance sub industry has been amplified and accelerated by the surge in Covid-19-related claims. A Covid-19 induced economic crisis and historically low interest rates are offsetting the positive impact from the resolution of regulatory uncertainty and favorable demographic trends and pressuring most life insurers.

*Current Holding: BlackRock (BLK)*

## **Materials**

As of November 25th, 2020, Materials account for 2.3% of the S&P 500 index. The materials sector contains a total of 28 companies, 4 industries and 11 sub sectors. The four industries are Chemicals (16 members), Construction Materials (2 members), Containers and Packaging (7 members), and Metals and Mining (3 members). The largest industry by weight being Chemicals, accounting for approximately 71.24% of the sector and the smallest being Construction Materials, accounting for approximately 4.11%. The three largest sub-industries are Specialty Chemicals (~30.70%), Industrial Gases (~25.25%), and Paper Packaging (~9.50%); the first two belong to the Chemicals Industry. As of 11/17/2020, Materials EV/Ebitda multiple is 17.68, in line with the S&P 500 index EV/Ebitda, which is 17.51x. The forward EV/Ebitda for the Materials Sector and SPY respectively 11.73x and 14.67x. Materials sector ttm P/E is 29.44x vs SPY ttm P/E of 28.32. Furthermore, the forward P/E for the SPY is 22.86x vs. Material's forward P/E of 21.25x. The Materials sector 5 year return is 7.56%, significantly lower than the SPY return of 12.05%. The Materials sector has a dividend yield of 1.84%, which is higher than the SPY dividend yield of 1.65% (Bloomberg). In terms of revenue exposure, Materials companies typically source a relatively high proportion of their revenues from outside the U.S. As of year end 2019, the sales-weighted average U.S revenue of the Materials sector was 47%, compared to 69% in the S&P 500 index. Hence, materials companies are less insulated from regions outside the U.S and more likely to be affected by foreign policies. (S&P Dow Jones Indices). The materials sector is least correlated with Utilities, at 0.20 correlation, and most correlated with Industrials, at 0.88 correlation.

## **Outlook:**

We have a neutral outlook for the materials sector reflecting improvements in demand as economies reopen across the globe and companies recover from the economic shutdowns in important industries like manufacturing, transportation, and industrial markets. Chemical companies with large exposure to the

transportation and industrial markets have seen large declines in demand because of Covid-19 and will likely not recover until a Covid-19 vaccine appears. On the other hand, packaging (food and beverage, consumer-driven) and health care (medical equipment, pharma) markets have thrived due to Covid-19 shock and will likely outperform if there are more government mandated shutdowns. Chemical companies are facing significantly lower demand for automobiles, construction, textile products, adhesives, and many other end market products. On the other hand, Covid-19 accelerated growth in demand for e-commerce, helping offset weakness in industrial packaging. Paper is winning market share as a packaging substitute (especially vs. plastics), as sustainability is increasingly important. In response to Covid-19, China announced a 4 trillion-yuan (\$550 billion) stimulus package, which is driving higher demand for steel and copper. If the U.S. government can agree on an infrastructure package (of around \$1 trillion), it would provide a strong demand tailwind. However, ongoing trade disputes between the U.S. and China could decrease the potential global GDP growth. The U.S. and China continue to clash on several fronts and the backdrop is not ideal for additional trade negotiations. Furthermore, the Covid-19 pandemic has disrupted both the demand and supply side of industrial metals. Diminishing demand coupled with declining prices for industrial metals will significantly impact the revenue growth of the materials industry. On the other hand, a surge in the price of gold benefited gold mining companies should partially offset steep revenue declines for industrial metal producers. The construction industry is expected to continue to grow in the United States, thus, fueling the construction material industry. The growth in Asia's market is expected to be one of the most significant in the world. This growth is especially prominent in China where an increase in urbanization has been one of the main drivers behind the government's proliferation of infrastructure and housing project investments.

*Current Holding: Martin Marietta (MLM)*

**Real Estate**

As of November 25, 2020, the current market capitalization for the Real Estate sector was \$1.40T and accounted for 2.53% of the S&P 500 index. It contains two industries Real Estate Management & Development making up 2.8% of the sector, and Equity Real Estate Investment Trusts (REITs) with the majority holding 97.2%. The equity largest sub industry within the equity REITs is the specialized REITs making up 51.85% of the industry, followed by industrial and residential REITs both with about 11%.

According to the report of Standard and Poor's Net Advantage the sector is projected to record an 1% revenue growth in 2020 versus the S&P 500's projected rise of 5%. Moreover, the sector's price-to-earnings ratio of 52.22x for the next 12-month is well above the S&P 500's forward P/E of 23.66x. Finally, this sector pays a dividend yield of 3.06%, as compared with the yield of 1.55% for the S&P 500.

*Outlook*

In the macroeconomic view, rates will most likely remain low for the foreseeable future. With the changes of COVID-19 there will be shifts from certain commercial real estate sub industries such as office and retail, fueling the growth in others such as specialized, healthcare, and residential. Fundamental changes from increased numbers working from home may permanently impact these sub industries and require new expectations going forward. Some of these changes will increase demand for data centers and storage properties. As well as a more short-term increase in demand for healthcare related properties until the pandemic is more under control. Additionally, there has been de-urbanization across many major cities which is also expected to be more of a short term event.

*Current Holding: N/A*

## **Industrials**

The Industrials sector is composed of corporations involved in the general manufacturing of capital goods, providing commercial services and supplies, or transportation services. It is a vastly diverse industry with fourteen sub-sectors. Air Freight & Logistics, Airlines, Building Products, Commercial Services & Suppliers, Construction & Engineering, Electrical Equipment, Industrial Conglomerates, Machinery, Marine, Professional Services, Road & Rail, Trading Companies & Distributors, and Transportation Infrastructure are classified as Industrials, along with the largest component of the industry, Aerospace & Defense (A&D).

As of November, 25th, 2020, the market cap of the Industrials industry is \$2.6 Trillion, and it is approximately 8.75% of the S&P 500. The forward P/E ratio for the entire industry is 27.62x and the dividend yield for Industrials is 1.58%. It has a consensus long-term EPS growth estimate of 31.26%.

## *Outlook*

The wide array of varying businesses within the Industrials sector gives us a mixed outlook, but overall, our future outlook for Industrials is fairly positive. The near future presents major problems for the global population that Industrials should benefit from. COVID-19 has only accelerated certain trends; mainly, the US is faced with a crumbling infrastructure that is in need of massive upgrades and consumers that are quickly transforming their habits/ routines into more isolated ones. This can be most clearly seen in comparing the Air Freight & Logistics subsector to Airlines.

While Air Freight & Logistics corporations are struggling to expand their capacity and run their business efficiently, the Airlines subsector has been one of the hardest hit subsectors in 2020. Airlines have been faced with extreme declines in passenger demand. Revenues are expected to decline from \$612 billion in 2019 to \$190 billion in 2020 mainly due to the approximately 70% decline in passenger demand. Airlines are forced to hold out hope for successful vaccination efforts worldwide. There is no denying that this will positively help



demand, however we do not expect a rapid return to 2019 revenue levels. The one positive in airlines is demand for cargo, something the Air Freight and Logistics subsector has a major foothold on. COVID-19 restrictions have increased the overall demand for sales made digitally, seeing a rise in demand for the means of which the product reaches the consumer's doorstep.

Within the A&D subsector, there are many positives that point towards continued growth in the future. The US Department of Defense (DoD) is expected to continue its increase in spending. Historically, defense spending has grown through recessions and economic downturn, and has only decreased when the US retreats from military engagement, something that currently is not possible. Moreover, in the prior administration that President-elect Biden was heavily involved in, defense companies grew earnings by 8%, while the DoD's budget was annually cut by 4%. This along with an overall focus on increasing advanced military technology yields a positive outlook.

### *Current Holding: Lockheed Martin Corporation*

## **Consumer Staples**

Products and services that are labeled as Consumer Staples are generally inelastic and see consumers unable or unwilling to cut out their use regardless of their financial situation. Therefore, the Consumer Staples sector is considered to be non-cyclical. This sector consists of six sub-sectors: Beverages, Food Staples Retailing, Food Products, Household Products, Personal Products, and Tobacco. Consumer Staples stocks are a good option for investors seeking steady growth, dividends and low volatility. Big names in this sector include Procter & Gamble, Kimberly-Clark and Phillip Morris.

As of November 25, 2020, the market weight of the consumer staples sector in S&P 500 was 7.48%, ranking as the seventh largest industry within the S&P 500 index. The forward P/E ratio for the entire industry is 20.6x and the dividend yield for the sector is 2.54% as compared with the yield of 1.51% for the S&P 500.

## *Outlook*

We have an overall positive outlook for the Consumer Staples industry especially during the times of a global recessionary period. We believe that the elevated levels of demand in Food, Household, and Personal Products seen through 2020, driven by pandemic-induced fear, will continue to remain in the near future. In Food Products, there has been an unprecedented increase in demand amid the COVID-19 outbreak as consumers stock up on all types of products even resulting in supply issues in certain cases. Specifically regarding Beverages, we believe the increase in retail demand will offset the weaker on-premise sales seen in restaurants, theaters, and other social venues. The Tobacco industry has seen overall downward trends, but has shifted focus to the more lucrative industry of Cannabis. We project that given continued legalization efforts, global sales will

significantly expand over the next decade. Federal legalization (versus state by state) will be the largest catalyst going forward in our view.

On the other hand, the COVID-19 pandemic has accelerated e-commerce adoption rates. As the virus continues to infect people and disrupt businesses around the world, the Consumer Staples sector has had to rapidly adapt to an unprecedented shift in consumer demand. Consumer shopping behavior is changing faster than ever before due to widespread health concerns, travel restrictions, and local stay-at-home orders. Therefore, many companies have already invested heavily in e-commerce and will continue to do so. We believe 2021 will see crucial changes in the industry and will outperform markets.

*Current Holding: N/A*

## **Healthcare**

The healthcare sector consists of businesses that provide medical services, manufacture medical equipment or drugs, provide medical insurance, or otherwise facilitate the provision of healthcare to patients, which contains a diverse array of industries with six sub-sectors: Health Care Providers & Services, Pharmaceuticals, Health Care Equipment & Supplies, Biotechnology, Life Sciences Tools & Services and Health Care Technology.

As of November 20, 2020, the market cap of the healthcare industry is \$4.4 Trillion, and it is approximately 14.16% of the S&P 500. The forward P/E ratio for the entire industry is 17.65x and the dividend yield for the sector is 1.61%.

## **Outlook**

Overall, the team has a neutral outlook on the healthcare sector given a mix of positive and negative trends unfolding. While our team believes the worst impacts from Covid-19 are behind us, there are still some uncertainties in the near future. For example, a slower than expected economic recovery could have a further impact in a few sub-industries, including the managed care, Life Sciences tools, and the healthcare equipment industry. Although healthcare is considered a non cyclical sector, the progression of labor conditions can dictate the evolution of employer sponsored and medical coverage going forward. In addition, a depressed economic outlook could reduce R&D spend impacting the development of the industry and causing lower capital equipment sales.

Now, the team views the development of digital medical consultations and other technological innovations as a positive trend that will drive lower costs and higher efficiency for the industry. The team also view the managed care sub-industry benefiting from a higher price transparency, a change in patient demographics, and the proliferation of off-brand drugs. Although, “Medicare for All” has gained traction, it is believed to be hard to materialize. Finally, with the 2020 election results, the team feels confident that the health care sector can

benefit from the plans of an expansion in the Affordable Care Act.

The development and distribution of a vaccine to fight Covid-19 can be a game changer for the world's economy. Also, the team believes that a pharmaceutical company that can develop and successfully get a vaccine approved will have the opportunity to capitalize in the sale of such medication.

*Current Holding: UnitedHealth Group (UNH)*

# Current Holdings

## T-Mobile USA (NASDAQ: TMUS)

On September 25<sup>th</sup>, we purchased 295 shares of T-Mobile.

T-Mobile is the second largest wireless telecommunications provider in the United States and is solely focused on wireless communications. This concentration strategy has worked well for the company as its competition has struggled to diversify while leveraging differentiating business strategies. The company provides wireless communications services to 98.3 million postpaid, prepaid and wholesale customers, as well as a selection of wireless devices and accessories.

The telecommunication industry has evolved from fixed connections to wireless transmissions as the result of technological advancements and public adoption of new technologies. The wireless industry in the United States has become an extremely profitable and competitive environment for companies with the funds and infrastructure to establish themselves. Over time consumer preferences have changed from traditional voice communications to SMS text-based messages towards data transmissions on their devices with trends towards increased speeds, reliability and function. Each transformation of communication has required a technological advancement as well as large capital expenditures to provide the network functionality. It is important to note that each phase has roughly a 10-year historical lifespan and is eventually phased out as a new generation evolves. The wireless telecommunications industry has entered into the maturity life cycle phase and is positioning to rely on 5G for future growth opportunities. 5G will enable faster upload/download speeds for wireless communication devices and in turn unlocking new business opportunities. While there has been significant hype for 5G, the investment required in network enhancements, physical infrastructure and contractual agreements needs to be carefully considered by wireless carriers to ensure maximum profit opportunities. Some of the most exciting business opportunities from 5G are broadband internet which can replace traditional home internet, increased adoption of IoT (Internet of Things) as well as advancements in manufacturing, health care, retail, transportation and education. Individual revenues from connected devices will be lower than traditional postpaid revenues yet outnumber current subscribers in the future.

Path to 5G – T-Mobile is positioned to be a leader in 5G, with more Mid-Band Spectrum than VZW & ATT combined.

Sprint Acquisition – on April 1, 2020 T-Mobile completed its acquisition of Sprint. This brought over 54.17 million wireless subscribers and positioned T-Mobile to become the number two largest wireless provider (Postpaid & Prepaid excl. wholesale) after Verizon. With the newly formed company, T-Mobile is expected to have considerable revenue growth into the future while increasing margins due to cost efficiencies. We estimate a 45.7% increase in revenues in 2020 as a result of the combined company which was completed in April leaving 3 months of sales performance unaccounted for.

Disruptive Consumer Marketing – The Un-carrier marketing campaign launched in 2013 which drops contracts, subsidized phones, coverage fees for data and early termination fees has proved largely successful in innovating the wireless industry forcing competitors to become reactionary. Another success story for T-Mobile is their customer satisfaction index scores. They have consistently won JD Power awards for customer experience and on average have higher customer satisfaction than the competition. This is an impressive turnaround from the early 2010's in which T-Mobile lagged behind the competition quite significantly. Higher customer satisfaction equates into lower churn and longer customer relationships. This means customers are more likely to add on incremental lines or devices onto their accounts and is why Postpaid accounts are such a large focus for the company. Branded postpaid revenues amount for the bulk of revenues since they have larger ARPU and a stickier customer base.

Consistent Growth – T-Mobile is the only major wireless company to have consistent subscriber and revenue growth. T-Mobile has improved its wireless churn year after year and has lower churn rates than AT&T in 2019. T-Mobile is the most consistent carrier in terms of subscriber and revenue growth from 2012-2020. While AT&T & VZW saw considerable growth earlier on, they suffered from capacity issues as 3G and later 4G networks were unable to keep up with consumer demand as smartphone and data intensive applications caused capacity issues. Future revenue growth will come from higher data intensive plans as well as gaining market share from competition. T-Mobile is in a position to spend aggressively on their network buildout which historically capital expenditures lagged behind the competitors. Now, T-Mobile has the opportunity to reinvest a larger amount of profits back into the company as they are not faced with the challenges of maintaining dividend payments similar to AT&T & VZW. AT&T & VZW pay out greater than 50% of cash flows.

Our investment comes with the following potential risks:

- Strategic Risk- Significant capital expenditures are required to build out the 5G network and maintain the existing network. A failure to receive ROI on this investment is a reality if customers do not migrate nor see value in 5G.
- Operational Risk- Sprint has a history of failed acquisitions and merging of cultures. It is possible T-Mobile management is unable to successfully merge the two companies into a single efficient entity and unable to unlock forecasted synergies.

**Unrealized gain on the investment: 15.92% (As of November 25<sup>th</sup>, 2020)**

**Amazon.com Inc. (NASDAQ: AMZN)**

On October 27<sup>th</sup>, we purchased 12 shares of Amazon.

Amazon.com, Inc. engages in the retail sale of consumer products and subscriptions in North America and internationally. The company operates through three segments: North America, International, and Amazon Web Services (AWS). It sells merchandise and content purchased for resale from third-party sellers through physical and online stores. The company also manufactures and sells electronic devices and develops and produces media content. In addition, it offers programs that enable sellers to sell their products on its Websites and others to publish and sell content. Further, the company provides computer, storage, database, and other AWS services, as well as fulfillment, advertising, publishing, and digital content subscriptions. Additionally, it offers Amazon Prime, a membership program, which provides free shipping of various items; access to streaming of movies and TV episodes; and other services. It serves consumers, sellers, developers, enterprises, and content creators. The company also has utility-scale solar projects in China, Australia, and the United States.

The eCommerce market encompasses the sale of physical goods via a digital channel to a private end user (B2C). Incorporated in this definition are purchases via desktop computer (including notebooks and laptops) as well as purchases via mobile devices such as smartphones and tablets. The following are not included in the eCommerce market: digitally distributed services, digital media downloads or streams, digitally distributed goods in B2B markets nor digital purchase or resale of used, defective or repaired.

Amazon Prime – Members receive benefits which include FREE fast shipping for eligible purchases, streaming of movies, TV shows and music, exclusive shopping deals and selection, unlimited reading, and more. Prime creates stickier customers w/ a 95% annual renewal rate. 10% growth consistent YOY w/ Amazon Prime Day annual event.

Advertising Growth / AWS – AWS creates 12.8% of revenue however 65.4% of operating profit w/ growth of 30% annually. Advertising revenue is larger than the next 10 providers combined creating the 3rd biggest ad seller in the US (behind FB and GOOG). Direct sales provide clear ROI w/ High profit margins for advertisers.

Network Effects – Low prices, an expansive breadth of products, and user-friendly interface attract customers thus attracting merchants, including third-party sellers (which represented 53% of total units sold in 2019) as well as wholesalers/manufacturers selling directly to Amazon. Amazon has become the starting point for online purchases (equivalent of an anchor tenant in a mall). Customer reviews, product recommendations, and wish lists increase in relevance as more customers and products are added to the platform, enhancing the network effect.

Our investment comes with the following potential risks.

- Execution Risk
- Must maintain value proposition and logistics efficiency to drive site traffic
- Managing Prime churn rate, through fees fulfillment capabilities, expanded digital content offerings, and new subscription and streaming offerings
- Expansion into peripheral business lines and physical stores (including Whole Foods), which could

distract management or lead to poor capital-allocation decisions

- Regulatory Risk
  - Regulatory risk, threat of increased shipping fees from the U.S. Postal Service or other regulated carriers, higher taxes, restrictions regarding simultaneously operating a first and third-party marketplace, and antitrust investigation by Justice Department
  - International growth brings regulatory challenges, as foreign governing bodies are constantly amending online commerce laws often to benefit local incumbents
- Reputational Risk
  - Intangible asset impairment, including data breaches, concerns over inappropriate data usage, or consumer fatigue

**Unrealized gain on the investment: (-3.15)% (As of November 25<sup>th</sup>, 2020)**

### **UnitedHealth Group (NYSE:UNH)**

As of October 16th, the team owned 162 shares at a price of \$326.35.

UnitedHealth Group is a leading US health insurer offering a variety of plans and services for group and individual customers nationwide. The company operates through two segments: UnitedHealthcare and Optum segment. UnitedHealthcare focuses on health maintenance organization (HMO), preferred provider organization (PPO), and point-of-service (POS) plans, as well as Medicare, Medicaid, state-funded, and supplemental vision, and dental options. UnitedHealth's Optum segment includes OptumHealth, OptumInsight and OptumRx, all of which provide wellness and care management programs, financial services, information technology solutions, and pharmacy benefit management (PBM) services to individuals and the healthcare industry.

According to 2020 Q3 final financial results, UNH generated \$65.1B in revenues, an increase of 8%, compared to the company's 2019 Q3. This growth was led by a 21% growth in the Optum segment and a 4.8% growth in the UnitedHealthcare segment. The company's operating margin decreased by 100bps for the period due to Covid-19 related costs partially offset by lower utilization rates. UNH beat GAAP EPS by \$0.46 during Q3 and raised its 2020 guidance GAAP EPS to \$15.65 from \$15.45.

Our investment thesis is based on the following factors:

Wide Economic Moat: UnitedHealthcare has the largest operating margin and market share in its industry. The company has consistently improved margin and acquired market share overtime demonstrating the strong

competitive advantage of the business.

**Change in Demographics:** UnitedHealthcare has the largest and fastest-growing share of the Medicare Advantage insurance program, which puts the company in a strong position to take advantage of the aging U.S. population.

**Health Care Information Technology (HCIT):** Technological advancements and the digitalization of medical records will increasingly allow for more informed, faster, and safer decisions, which will all lead to lower costs. The utilization of Telehealth during Covid-19 is an example of a disruptive product that has a strong potential to drive costs down.

**Mergers & Acquisitions:** UnitedHealthcare has successfully integrated into the PBM segment and different medical services, allowing the company to increase its scale and have a greater influence on its customers and suppliers. We view M&A as a strong contributor to growth in the future.

Our investment comes with the following risks:

- **Policy Risk:** There is a significant risk of change in policies that could result in a negative impact for the business and our valuation, including an increase in corporate tax rate.
- **Business Risk:** Higher unemployment rate will lead to a decline of membership enrollees in the commercial and global segment.
- **Model Risk:** A failure to properly estimate the utilization of insurance plans could have a significant impact on profitability given the industry's shift from a fee-based to a risk-based model

**Unrealized Gain on the Investment: 2.1% (As of November 25<sup>th</sup>, 2020)**

### **Lockheed Martin (NYSE: LMT)**

On September 25<sup>th</sup> we purchased 67 shares of LMT for a total of \$25,562.51.

Lockheed Martin (LMT) is the world's largest developer and producer of defense, security, and intelligence products, primarily serving U.S. and allied militaries and other government agencies. In 2019, the company derived 71% of its revenue from the U.S. government, including 61% from the Department of Defense (DoD), an estimated 28% from foreign governments, and an estimated 1% from commercial customers. LMT conducts business through four operating segments: Aeronautics, Missiles & Fire Control, Rotary and Mission Systems, and Space.



LMT is in a unique position as the Department of Defense largest contractor. In FY'19, LMT accounted for roughly 9% of the entire defense budget. LMT's largest revenue generator is their F-35 plane. The F-35 is the world's only 5th Generation Multirole Stealth Fighter. The U.S. Government's current inventory objective is for 2,456 F-35 aircraft, while approximately only 450 have been delivered thus far. LMT is also seeing demand for F-35 aircraft abroad, with Poland and the United Arab Emirates being the latest country to sign an agreement. The aircraft is currently still in initial production stages and is expected to be in service until 2070. Along with this, LMT is also involved in numerous projects involving helicopters, missiles, satellites, and hypersonics. LMT is the U.S leader in hypersonics, which is projected to grow to a \$5BN industry by 2025.

Our investment comes with the following potential risks.

- Business Risk – A large portion of revenue (71%) depends on the U.S. Government and more specifically it's budget. There already have been times in recent history involving a shutdown due to congressional disputes. This along with any overall budget cuts may have a negative impact on LMT's revenue. Additionally, any foreign sale requires U.S. approval due to potential national security threats.
- Operational Risk – Due to COVID-19, LMT has already faced some adversity in their manufacturing lines. Any disruption in the supply chain can further any negative impact on revenue. Along with this, LMT is involved in numerous joint venture projects. Any failure by a partner to meet its obligations also can negatively impact LMT.
- Political Risk – LMT nature of business includes having to be involved in geopolitical disputes. For example, Turkey was initially one of the partner countries within the F-35 program but was removed due to engaging in another business obligation with Russia. This removal affected a large portion of the sales and supply chain of the F-35.

**Unrealized Gain on the Investment: (-0.84)% (As of November 25th, 2020)**

### **Baker Hughes Company (NYSE:BKR)**

On November 19<sup>th</sup> we purchased 738 shares of BKR for a total of \$13,501.34.

Baker Hughes Company provides a portfolio of technologies and services worldwide. The company operates through four segments: Oilfield Services (OFS), Oilfield Equipment (OFE), Turbomachinery & Process Solutions (TPS), and Digital Solutions (DS).

Our investment thesis is based on:

A.I. Integration – Baker Hughes is well positioned to benefit from emerging demand in Artificial Intelligence (AI) based solutions as part of customers’ digital transformation initiatives.

Diversified portfolio of products and services – Baker Hughes has a global presence with a diversified portfolio. Products and services range from upstream, midstream/LNG, downstream and broader chemical and industrial segments.

Transition of energy – Ability to reduce customer’s carbon footprint with a range of emissions-reducing products with more efficient power generation and compression technology. As well as a range of inspection and sensor technology that can monitor and help reduce flaring and emission.

Technology – Differentiated technology to improve efficiency and productivity gains for customers. Committed to investing in products and services to maintain leadership position across offerings. Continuing R&D resulted in 2,700 patents granted in 2019.

Our investment comes with the following potential risks.

- Oil price volatility – OPEC+ price wars can have a negative impact in oil prices and production, lowering orders and services provided by Baker Hughes. Additionally, lower energy demand from epidemic related shutdown can continue to impact oil prices.
- FX Risk – Approximately 70% of Baker Hughes revenues comes from outside of the United States. Such high exposure to international markets and related currency risk could negatively impact cash flows.
- Political Risk – Geopolitical uncertainty and civil unrest in areas that Baker Hughes operates could impact their business and investments. Changes in tax laws, tax rates and tariffs could impact operating results.

**Unrealized Gain on the Investment: 8.15% (As of November 25th, 2020)**

**BlackRock (NYSE: BLK):**

On October 21st, 2020, we bought 90 shares of BlackRock priced at \$640.21.

BlackRock is the largest asset management company with \$7.8 trillion AUM. Majority (70% Q3’20) of the revenue is driven from base fees, which are fees from assets under management. BlackRock also provides technology services including the iShares ETF, and Aladdin, its risk analytics platform. The technology services represent 6% of BlackRock overall revenue. Another major driver to the revenue is the performance fees which

represents 12% of the revenue. BlackRock offers a variety of advisory services including capital market, portfolio construction and balance sheet solutions, data analytics, enterprise risk and regulatory advisory.

BlackRock is in the Financial sectors, which has a market capitalization of \$6.57 Trillion and 10.19% of market weight in the S&P 500 index. Within the Financials Sector, BlackRock is in the Asset Management sub industry. The Financials Sector is sensitive to changes in economic condition, Fed's monetary policy and Government's regulatory policy.

BlackRock's Revenue for Q3 of 2020 was \$4.3 B (+18.3% from Q3'19), and adjusted EPS of \$9.22, (+29% from Q3'19 \$7.15). The increase from investment advisory, administration fees and securities lending revenue increased by organic growth and the positive impact of market beta and foreign exchange movements on average AUM. Performance fees increased reflecting strong performance from a single hedge fund. Technology revenue increased by 9% reflecting Aladdin's growth. Advisory and other revenue decreased primarily due to the charitable contribution of 20% stake in PennyMac Financial Services in 1Q'20. – Philanthropic investments on social impacts including promoting sustainability and economic mobility. However, the charitable contribution will be offset by non-operating pre-tax financial gain on the contributed shares and a tax benefit of approximately \$241 million.

BlackRock is a leader in ESG ratings with a MSCI AA rating among 34 companies in the asset management and custody bank industry (the average among the industry being a BBB rating). According to MSCI, BlackRock is a leader in Responsible Investment and Privacy and Data Security; average in Corporate Governance, Human Capital Development, and Carbon Emissions; and is not a laggard on any of the key issues that are evaluated in the industry. With the continued focus on ESG investing and the incorporation of ESG data in the Aladdin platform, we anticipate that BlackRock will continue to be a leader in ESG and differentiate itself from the competition.

Our investment thesis is based on the following factors:

**New Wholly Owned Mutual Fund in China:** In August 2020, BlackRock got approval from regulators to start a wholly owned mutual fund business in China. China's asset management industry is projected to grow to \$13 Trillion by 2023, and BlackRock will capture the growth as the first foreign asset management firm to establish itself in China.

**Continued Growth through Exchange Traded Funds:** BlackRock's IShares have grown from \$494 Billion AUM in 2009 to \$2.2 Trillion AUM in 2019. As passive and low-fee investments continue to grow, BlackRock will capture this growth as the largest U.S ETF provider (38.3% of the total ETF market is managed by BlackRock). The bond ETF market makes up 1% and we predict that fixed income ETFs will grow due to the increased uncertainty of the markets since Covid-19. BlackRock will capture the fixed income ETF demand as well as ESG ETF demand by launching new ETF ESG funds that are suitable for investor's demands.

Continued Growth through Illiquid Alternatives: BlackRock's Illiquid Alternatives has grown at a rate of 12% year over year. Because of the current low interest rate environment, we predict that institutional investors will diversify their portfolio to generate larger returns, therefore investing in illiquid alternatives. BlackRock will benefit from the Illiquid Alternative demand because of an increase in net inflows and because the company charges a higher fee from Illiquid Alternatives investments which will be beneficial for the company's future revenue growth.

Continued Growth through Aladdin: The risk management data analytics and portfolio management platform covers all asset classes including alternatives since the EFront acquisition in 2019. Because of the extensive capabilities that Aladdin offers and the increased demand in risk and portfolio management powered through technology, the Aladdin platform will continue to grow in the years to come and BlackRock will benefit from the continued innovation that Aladdin offers to clients.

Our investment comes with the following risks:

- Covid-19: Covid-19 has significantly harmed the global economy and may adversely affect the business including the operation and financial conditions, and may cause assets under management, revenue and earnings to decline
- Regulatory Risk: Blackrock faces regulatory, reputational and political risks many of which are outside the US and may expose the firm to increased compliance risks, as well as higher compliance costs.
- Market Risk: BlackRock has large exposure to the financial markets and the volatility of the markets due to Covid-19 and the US election are a great risk that could affect the overall performance of BlackRock.

### **Unrealized Gain on the Investment: 9.9% (as of November 25th, 2020)**

#### **Microsoft (NASDAQ: MSFT)**

On November 11, 2020 we purchased 447 shares of Microsoft at \$217.48 per share.

Microsoft Corporation is a technology company. The Company develops, licenses, and supports a range of software products, services and devices. The Company's segments include Productivity and Business Processes, Intelligent Cloud and More Personal Computing.

The Company's products include operating systems; cross-device productivity applications; server applications; business solution applications; desktop and server management tools; software development tools; video games, and training and certification of computer system integrators and developers. It also designs, manufactures, and sells devices, including personal computers (PCs), tablets, gaming and entertainment consoles, phones, other intelligent devices, and related accessories, that integrate with its cloud-based offerings. It offers an array of services, including cloud-based solutions that provide customers with software, services, platforms, and content, as well as solution support and consulting services.

Our investment thesis is based on the following factors:

**Wide Economic Moat:** Microsoft's diverse business portfolio presents a wide range of moats that we expect to directly impact the company's margins. The firm experiences both a network effect and high switching costs for its Windows OS, Windows Server, and database management systems (DBMS). The company also has a scalability advantage in the cloud service segment (Azure) serving 95% of the Fortune 500 companies. Microsoft experiences pricing power for its Office 365 offerings as it is a standardized productivity solution for most of corporate America.

**Continued Growth of Cloud Services:** Microsoft is well positioned to capture additional cloud market share. The IaaS segment of the cloud industry is expected to grow at a CAGR of 27% through 2022 according to a study completed by Gartner. Microsoft currently has 18% of the IaaS cloud services market share and we expect it to grow given the company's competitive advantage in both scalability and its presence in major corporations' IT infrastructure. Many of the largest companies in the world have their IT infrastructure built using Microsoft's Windows server and DBMS, which we view as an advantage for organizations to leverage during their migration to the Azure cloud.

Our investment comes with the following potential risks:

- **COVID-19:** As a result of the coronavirus lockdowns, Microsoft experienced a sharp decline in foot traffic to their brick and mortar stores, resulting in the closure of 83 of their 87 retail locations. Additionally, with ad spending reduced, Microsoft's LinkedIn and search engines business has been adversely affected. COVID-19 remains a headwind for growth in consumer-related endeavors.
- **Cybersecurity:** Microsoft remains a main target of cybercrime given its broad exposure and involvement to and within IT infrastructure across the world. This poses immense brand reputation as well as potential loss and harm related to technical infrastructure.
- **M&A Execution:** With several high-profile flops such as Nokia and aQuantive, Microsoft has a reputation of embarking on unsuccessful ventures that have a direct impact on their bottom line. This requires increased scrutiny of Microsoft's judgement associated with future acquisitions.

**Unrealized Gain on the Investment: (-1.66)% (as of November 25th, 2020)**

## **LESSONS LEARNED**

The year 2020 has been unique, and the same could be said for our involvement with the University of Connecticut Student Managed Fund. It is truly a privilege to represent the University and manage on behalf of the Stamford Student fund. We faced many internal challenges, in addition to the overall external challenge of COVID-19, that were perfect examples of the valuable hands-on learning experience that is the Student Managed Fund. Being confined to virtual means of communication has proven the lasting dedication and effort our team has put forward. We will forever be grateful for the many “Lessons Learned” accumulated thus far within our process.

Our team is constructed of students from diverse backgrounds, in various stages of their academic careers, and distinct financial opinions. This has only amplified our overall skill set and value that we bring to each discussion. Through our vigorous discussions about our investments, we have learned the values of teamwork and written/ verbal communication. We expect each manager to have a high performing standard and expect to hold each other accountable. We all believe that we have developed the skills to thoroughly develop and justify a thesis. Moreover, as the presentations have continued throughout the semester, our financial modeling and valuation skills have only improved. In addition to this, our advanced Bloomberg and accounting expertise has also expanded with each pitch we develop. It is because of this experience that we believe that we are all much more knowledgeable about markets and much more sophisticated investors. We have learned to accept data and our research with an open mind, in order to build our own individual, justifiable assumptions. We have built a research process that we believe puts us in the best position possible to serve the Endowment’s needs.

This program has given us an experience of fiduciary management that is unlike any other student experience available. We are forever indebted to our advisor Blake Mather. Thank you for teaching us the proper frameworks to create commercial outcomes and for constantly guiding us throughout the semester. We also would like to extend a thank you to Dr. Chinmoy Ghosh, Dr. Rakatomavo, Marlys, Laurel and the entire Endowment.